

Preliminary Environmental Assessment  
Equivalent Report

49<sup>th</sup> Street Elementary School –  
Major Modernization Project

750 East 49<sup>th</sup> Street

Los Angeles, California 90011

Office of Environmental Health and Safety

Los Angeles Unified School District

333 South Beaudry Avenue, 21<sup>st</sup> Floor | Los Angeles, California 90017

July 19, 2023 | Project No. 211936010



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

**Ninyo & Moore**  
Geotechnical & Environmental Sciences Consultants

Preliminary Environmental Assessment  
Equivalent Report  
49<sup>th</sup> Street Elementary School –  
Major Modernization Project  
750 East 49<sup>th</sup> Street  
Los Angeles, California 90011

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July 19, 2023 | Project No. 211936010

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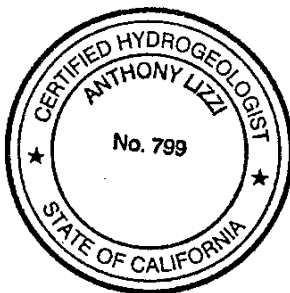
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# 1 INTRODUCTION AND SUMMARY

This report presents a summary of the Preliminary Environmental Assessment (PEA) Equivalent work conducted for the 49<sup>th</sup> Street Elementary School Major Modernization Project. The PEA was conducted within the boundaries of the 49<sup>th</sup> Street Elementary School at 750 E. 49<sup>th</sup> Street in Los Angeles, California (site; Figure 1), under the oversight of the Los Angeles Unified School District (LAUSD) Office of Environmental Health and Safety (OEHS).

A Phase I Environmental Site Assessment (ESA) of the 49<sup>th</sup> Street Elementary School was prepared by Tetra Tech in 2022 (Tetra Tech, 2022). Based on the findings of the Phase I ESA, Tetra Tech recommended that a PEA be conducted at the site to characterize potential environmental conditions that may be present in the site's soil and soil vapor.

In response to this, LAUSD released a Request for Proposals (RFP) to address the recognized environmental conditions and potential environmental concerns outlined in Tetra Tech's Phase I ESA (LAUSD, 2022). The PEA was conducted in general accordance with the Los Angeles Unified School District RFP Scope of Services, dated November 14, 2022 (LAUSD, 2022); proposal for PEA Equivalent, dated December 2, 2022 (Ninyo & Moore, 2022); and Amendment 1, dated March 15, 2023 (Ninyo & Moore, 2023). Additionally, Ninyo & Moore prepared a PEA Equivalent Work Plan that consisted of a sampling rationale table and figure showing the proposed sampling locations. The table and figure presented proposed sampling locations and target contaminants of concern, which were based on the review of the Phase I ESA conducted by Tetra Tech (Tetra Tech, 2022) and other site background documents provided by LAUSD, which are discussed further in Section 4.3.

## 2 SITE DESCRIPTION

The following discusses site information in more detail.

### 2.1 Site Name

The site is identified by LAUSD as the 49<sup>th</sup> Street Elementary School.

### 2.2 Site Address

The current site address is:

750 E. 49<sup>th</sup> Street  
Los Angeles, California 90011

## 2.3 Designated Contact Person

The designated LAUSD contact person for this project is Mr. Filmon Tesfaslasie, Site Assessment Project Manager.

## 2.4 Mailing Address

The mailing address designated for this project is:

Office of Environmental Health and Safety  
Los Angeles Unified School District  
333 South Beaudry Avenue, 21st Floor  
Los Angeles, California 90017  
Attention: Mr. Tony Espinoza

## 2.5 Site Location

The site is located within the property boundaries of 49<sup>th</sup> Street Elementary School at 750 E. 49<sup>th</sup> Street, in Los Angeles, California (Figure 1). According to the United States Geological Survey (USGS) Inglewood Quadrangle Map, dated 2015, the site is at an elevation of approximately 180 feet above mean sea level. The site slopes gently to the southwest (USGS, 2015). According to the Los Angeles County Assessor's office, the site consists of parcels that are assigned Assessor's Parcel Numbers 5108-011-909 and 5108-011-910.

## 2.6 Proposed Project

LAUSD is undertaking a major modernization project at the 49<sup>th</sup> Street Elementary School.

# 3 PRELIMINARY ENVIRONMENTAL ASSESSMENT OBJECTIVES

The overall objectives of the PEA included:

- Evaluating historical information for indications of the past use, storage, disposal, or release of hazardous wastes/substances at the site.
- Assessing whether historic or current uses have resulted in releases of chemicals of potential concern (COPCs) to the site.
- Establishing, through a field sampling and analysis program, the nature of COPCs that may be present in soil at the site, their concentrations, and general extent.
- Estimating the potential threat to public health and the environment posed by COPCs at the site.

The following regulatory agency screening criteria were used to evaluate the laboratory soil and soil vapor sampling results.

- United States Environmental Protection Agency's (EPA's) Regional Screening Levels (RSLs) for residential soils (EPA, 2023).
- The Department of Toxic Substances Control's (DTSC's) background concentration for arsenic in Southern California (DTSC, 2008a).
- The Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note Number: 3, DTSC-modified Screening Levels (DTSC SLs) (DTSC, 2020).

## 4 BACKGROUND RESEARCH FOR THE SITE

### 4.1 Site Information

The site is located on 5.73 acres at the southwest corner of the intersection of East 49<sup>th</sup> Street and McKinley Avenue in Los Angeles, California. The western portion of the site was developed and occupied by single-family residences starting in 1900 while the eastern part was undeveloped. Around 1922, the eastern portion of the site was developed and occupied by the 49th Street Elementary School. The existing main building (Building ID # 14040) was the only building at the site during this time. Between 1962 and 1970, most of the single-family residences were demolished and the site was developed to the existing site configuration. The current site includes one administration/classroom building (Building ID # 14036), four classroom buildings (classroom building [Building ID # 13718], the west building [Building ID # 13933], main building [Building ID # 14040], south building [Building ID #13583]), an auditorium building (Building ID # 14196), and a cafeteria building (Building ID # 13566). The remainder of the site (the western portion) is paved with asphalt and is used as a playground and parking area.

### 4.2 Surrounding Land Use

The site vicinity consists primarily of residential properties with some dispersed commercial properties. The site is bordered by East 49<sup>th</sup> Street to the north, McKinley Avenue to the east, East 50<sup>th</sup> Street to the south, and 49<sup>th</sup> Street Park and residential properties in the west (Figure 1).

### 4.3 Previous Site Investigations

Ninyo & Moore reviewed the Phase I ESA Report prepared by Tetra Tech, dated March 22, 2022 (Tetra Tech, 2022). Based on the findings of the Phase I ESA, several Recognized Environmental Conditions (REC) were identified for the site. These are:

- The potential presence of lead-contaminated soils associated with the potential use of lead-based paint in the buildings,
- The potential presence of organochlorine pesticide (OCP)-contaminated soils associated with the potential application of OCPs,

- The potential presence of polychlorinated biphenyl (PCB)-contaminated soils due to the potential use of PCB-containing caulking and paints in the buildings,
- The Potential presence of arsenic-contaminated soils due to LAUSD's former standard practice of applying herbicides containing arsenic prior to paving,
- The historical presence of a concrete incinerator,
- The presence of an oil tank between the main building and the west building,
- The presence of a second oil tank south of the southwest corner of the existing west building (unknown if the oil tanks are aboveground storage tanks [ASTs] or underground storage tanks [USTs]),
- The presence of two boiler rooms.

RECs and other potential environmental concerns identified in Tetra Tech's Phase I ESA were used to create our sampling rationale table (Table 1) and location of soil/soil vapor borings (Figure 2). Other site-specific documents that were provided by LAUSD, reviewed by Ninyo & Moore, and incorporated into our rationale table and selection of boring locations included the following:

- Asbestos/asphalt survey of Modification Development Zone
- July 27, 2009, Converse Consultants, Export Soil Sampling Report
- October 15, 2007, Lindmark Engineering, Soil Certification Report
- October 30, 2008, Baader Env Services, Soil Certification Report
- Board of Education Map, Historic Central Avenue Community of Schools, Local District Central, Board District 7
- Vault drawings of incinerator Oil Tank (Grading Plan & Piping Plan), 1934 & 1935
- Two plot plans showing locations of the Oil Tank, 1934 & 1948
- Stantec Survey Topographic & Utility Map (July, 2022) 11 individual maps
- GPI Preliminary Geotechnical Investigation, Proposed Major Modernization Project (revised January 2022)
- Auto CADD Files of Site Survey maps

## 5 GEOLOGY AND HYDROLOGY

The following sections provide a description of the site geology and hydrology.



## 5.1 Geologic and Soil Conditions

Based on a review of the California Department of Conservation 2010 Geologic Map online, the site is mapped with generalized soil types primarily comprised of Holocene alluvial gravel, sand, and clay, derived mostly from Santa Monica mountains (Dibblee & Minch, 2007).

Soils encountered during this PEA Equivalent consisted of fill material and native alluvium to the maximum depth explored of 15 feet below ground surface (bgs). The fill material was primarily a brown, loose silty sand and fine-grained sand, which was encountered from surface or directly below pavement until total depth of native alluvium was encountered. Fill was encountered up to the maximum depth explored of 15 feet bgs in borings located near the former suspected UST pit in the eastern portion of the site. The alluvium encountered during this PEA consisted primarily of light brown poorly graded sand and well-graded sand. Native alluvium was encountered at 3.5 to 4 feet bgs in the western portion of the site, and generally increased in depth encountered eastward as the age of site development increased (see Figure 2 for different periods of development).

## 5.2 Site Hydrology

The following sections discuss the site hydrology in terms of both surface waters and groundwater.

### 5.2.1 Surface Waters

There are no natural surface water bodies, such as streams, rivers, ponds, and lakes, at the site.

### 5.2.2 Groundwater

According to information reviewed on State Water Resources Control Board's (SWRCB's) GeoTracker website related to the closed leaking underground storage tank case associated with the Winall Oil Company Station No. 9 (4442 Avalon Boulevard), located approximately 0.3 miles to the north-northwest of the site, groundwater was measured in May 2013 at depths ranging from approximately 189.45 to 190.61 feet bgs. The approximate groundwater flow direction was reported to be toward the east. Groundwater levels can fluctuate due to seasonal variations, groundwater withdrawal or injection, and other factors.

## 6 PUBLIC PARTICIPATION

Prior to the start of field activities, a notice of fieldwork was prepared and posted on the site perimeter fences. The field notices were prepared on LAUSD's letterhead printed double-sided with both English and Spanish languages, and delivered to residences and businesses within line-

of-sight of the school. In addition, field notices were provided to the school students, faculty, and parents to keep them informed about the PEA work. Copies of the English and Spanish versions of the field notices are included in Appendix A.

## **7 CONCEPTUAL SITE MODEL**

A Conceptual Site Model (CSM) was developed to achieve a preliminary understanding of the potential risks to human health and the environment at the site and to assist in developing the sampling plan. The CSM accounts for site-specific conditions and potential impact receptors, and illustrates possible contaminant transport mechanisms and exposure pathways assuming the proposed site condition for the 49<sup>th</sup> Street Elementary School Major Modernization Project. The CSM presented within this report may be updated as necessary as new information is obtained. Currently, the CSM is informed by review of readily available information and is presented as Figure 3. Given the redevelopment plan for the Site, outside of the potential for direct exposure to site soil during intermittent subsurface maintenance work, direct exposure to subsurface soil is expected to be limited for most site users and residents. However, given all of these factors, the exposure pathways within the CSM are as followed:

- School staff and students are assumed have a limited potential to come into direct contact with surface soils, including through accidental ingestion, inhalation, and dermal contact.
- School staff and students are assumed have a limited potential for inhalation of volatilized soil gas in indoor air.
- Site construction workers for the 49<sup>th</sup> Street Elementary School Major Modernization Project will, in the course of their work, have the potential to intermittently come into contact with surface and subsurface soils during site redevelopment, excavation, paving, grading, or other earthmoving activities.

Potential impacts related to stormwater runoff or surface water are expected to be nominal for this project, as related media (e.g. shallow soil) and exposure pathways will be mitigated during site construction activities, and will be nominal following project completion.

## **8 RATIONALE FOR SAMPLING STRATEGY**

Prior to initiating field sampling, Ninyo & Moore developed a work plan, in coordination with LAUSD, with the purpose of recognizing COPCs and corresponding Areas of Concern (AOCs) at the site that were identified during our background research (Section 4). The rationale for the sampling strategy implemented for this PEA and the COPCs for each AOC are provided in Table 1 and are summarized below:

- **AOC1** – AOC1, which consists of shallow soil surrounding buildings planned for demolition (West Building, Auditorium, Cafeteria) was assessed for the presence of lead-based paint, arsenic-containing termiticides and chlorinated pesticides around building footprints, and PCBs in caulking of building materials. COPCs include lead, arsenic, OCPs, and PCBs. Title 22 Metals, Hexavalent chromium, asbestos, and polycyclic aromatic hydrocarbons (PAHs) were also assessed for SCAQMD Rule 1466 requirements.
- **AOC2** – AOC2, which consists of shallow soil underlying paved areas throughout the site, was assessed for the potential historical application of arsenic-containing herbicides and lead, PCBs, and asbestos from historical buildings that were demolished. Title 22 Metals, hexavalent chromium, and PAHs were also assessed for SCAQMD Rule 1466 requirements.
- **AOC3** – AOC3, which consists of shallow soil around an electrical transformer at the southern portion of the site, was assessed for the potential use and spillage of PCB-containing oil. COPCs include PCBs.
- **AOC4** – AOC4, which consists of four discrete locations placed adjacent to GPI geotechnical borings B-2 through B-5, was sampled to assess uncertified fill against native soil conditions in portions of the site that represents different time periods of site development. COPCs include Title 22 Metals, volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), and OCPs.
- **AOC5** – AOC5, which consists of the former location of a concrete incinerator south of the West Building, was assessed for potential contaminants associated with the historical use of a concrete gas-fired incinerator. COPCs include Title 22 metals, VOCs, TPH, PAHs, dioxins & furans, and hexavalent chromium
- **AOC6** – AOC6, which consists of the area around a potential former oil tank used for storing petroleum products (likely heating oil) and associated product pipeline identified in historical vault drawings, was assessed for potential spills and leaks associated with its use. COPCs include Title 22 Metals, VOCs in soil and soil vapor, TPH, and PCBs.
- **AOC7** – AOC7, located between the Main Building and the West Building, consists of a former oil tank and the associated product pipeline, the presence of which was indicated in historical vault drawings and the geophysical survey. AOC7 was assessed for potential impacts from leaks or spills associated with a former operation of heating oil tank. COPCs include Title 22 Metals, VOCs in soil and soil vapor, TPH, and PCBs.
- **AOC8** – AOC8, which consists of the area of a historical boiler room that was backfilled to the west of the Main Building, was assessed for contamination associated with the use of boiler room, including heating oils, gases, and other petroleum products. COPCs include Title 22 Metals, VOCs in soil and soil vapor, TPH, and PCBs.
- **AOC9** – AOC9, located near a hazardous materials storage shed in the southern portion of the site, was assessed for the historical use and potential spillage of hazardous materials including gasoline and motor oils. COPCs include Title 22 Metals, VOCs, and TPH.
- **AOC10** – AOC10, located in the asphalt-paved parking lot in the northwest portion of the site, was assessed for vehicle oil leaks and associated subsurface impacts. COPCs include Title 22 Metals, VOCs in soil and soil vapor, and TPH.

## 9 SAMPLING AND ANALYSIS

Field sampling activities were performed in general accordance with the PEA Equivalent Scope of Services, dated November 14, 2022 (LAUSD, 2022); proposal for PEA Equivalent, dated December 2, 2022 (Ninyo & Moore, 2022); and Amendment 1, dated March 15, 2023 (Ninyo & Moore, 2023). The boring locations, sample depths, rationale, and analyses for each sampling location are provided in Table 1. Photographs of the PEA activities are included in Appendix B. The approximate locations of the soil borings are presented in Figure 2. Boring logs are presented in Appendix C.

### 9.1 Health and Safety Plan

Ninyo & Moore prepared a site-specific Health and Safety Plan (HSP) in anticipation of field activities at the site. The HSP included requirements, policies and procedures adequate to protect site workers, the public, and the environment from potential site hazards. Contractors involved in this evaluation were required to abide by these requirements. The HSP also provided site-specific scopes of work and indicated COPCs. Prior to the start of field activities, a site safety briefing was conducted to review the HSP, identify potential physical and chemical hazards, and outline measures to be taken in the event of an emergency. On-site personnel were required to sign the safety briefing form.

### 9.2 Underground Service Alert (USA)

Underground Service Alert (USA) of Southern California (Dig Alert) was notified of the intent to conduct subsurface vertical drilling and sampling activities at least 48 hours prior to the initiation of field tasks. Ninyo & Moore obtained inquiry identification number B230390488 from USA and responded to inquiries from local entities that have active lines in the area. The presence of potential subsurface utilities or obstructions was also checked against utility maps and drawings provided by the LAUSD.

### 9.3 Utility Clearance and Full-Scan Geophysical Survey

An initial geophysical survey was performed at each proposed sampling location, with the intent to locate utilities and other subsurface structures that could impede the proposed sampling locations. Few borings were moved slightly from their original location to avoid impacts with utilities.

After the initial scan and clearance for utilities at each boring location, a full-scan geophysical survey was conducted in the southern, eastern, and western perimeter of the West Building (highlighted area of Figure 2). The purpose of the full-scan geophysical survey was to identify

subsurface structures and anomalies, namely those identified in the Tetra Tech Phase I ESA (Tetra Tech, 2022) and LAUSD-provided historical drawings and plans. These suspected historical structures included:

- A concrete incinerator
- A heating oil tank between the main building and the west building and associated pipeline and filler box
- A second oil tank south of the southwest corner of the existing west building
- Former boiler room, demolished and backfilled (located west of the main building)

On February 18<sup>th</sup> and 20<sup>th</sup>, Subsurface Surveys & Associated, Inc. (SSS) of Carlsbad, California performed the full-scan geophysical survey of the area around the West Building in the northeast portion of the site. Findings of the geophysical survey included the following:

- No evidence of a former incinerator was detected in the area indicated from historical drawings and plans
- In the area of the heating oil tank identified from historical drawings located between the main building and west building, a deep soil disturbance was detected measuring approximately 11 feet 9 inches by 11 feet 6 inches. This coincides well with the location and extent of the former heating oil tank identified during background research. Due to the presence of an access concrete ramp, some of the surrounding areas could not be properly assessed.
- An abandoned fuel line was detected leading to the former heating oil tank area from an oil filler box along East 49<sup>th</sup> Street and associated sidewalk to the north.
- No evidence of a second oil tank was detected in the area indicated from historical drawings and plans
- In the area of the former boiler room to the west of the Main Building, a shallow soil disturbance was detected measuring approximately 10 feet 8 inches by 6 feet 6 inches, and coincides well with the approximate location and extent of the former boiler room in this area.

Geophysical investigative methods employed for both the utility clearance and full-scan geophysical survey included a combination of electromagnetic induction (EM) and ground penetrating radar (GPR). The geophysical survey report is presented in Appendix D.

## 9.4 Soil Sampling Activities

On February 18 and February 20, 2023, 36 soil boring locations were advanced to depths ranging between 2.5 to 10 feet bgs to assess COPCs outlined in Table 1. Based on the findings of this first phase of work, and to complete additional borings not previously advanced, 28 additional soil borings were advanced on April 3 and April 5, 2023. These included a number of borings around



the West Building and Cafeteria and from the planter boxes in the northern perimeter of the site to delineate elevated arsenic (Section 10.1.1). Multi-depth soil vapor probes were installed in six borings during this second phase at depths of approximately 5 and 15 feet bgs.

On May 6, 2023, six additional step-out borings were advanced around B34 to define the extents of lead impacts detected at approximately 2.5-feet in boring B34 and two co-located borings were advanced around B40 (B40A) and B41 (B41A) to further delineate the extent of arsenic at the east side of West Building. The locations of the soil borings advanced between February 18 and May 6 are displayed in Figure 2. Sampling protocol, observed site conditions, and observations during this PEA include the following:

- Most of the soil borings advanced for this PEA Equivalent were located in paved areas. Borings located within asphalt or concrete were cored to expose the underlying soil for sampling.
- Borings were advanced up to approximately 5 feet bgs using a stainless-steel hand auger.
- A Geoprobe 6620DT was used to advance below 5 feet bgs in borings scheduled for deeper sampling to a maximum depth of approximately 15 feet bgs.
- Interphase Environmental (Interphase) of Commerce, California, provided coring, auguring, and drilling services.
- Soil samples scheduled for VOC analyses were screened in the field for VOCs using a photo-ionization detector (PID). The PID readings detected at the site ranged from 0.0 to 5.5 ppm.
- Soils encountered during this PEA consisted of fill material and native alluvium to the maximum depth explored of 15 feet below ground surface (bgs) and were logged in accordance with standard USGS classification. See Section 5.1 for a description of encountered soils and Appendix C for boring logs.
- Groundwater was not encountered during PEA field sampling activities.

## 9.5 Sample Handling

Samples collected were labeled with the sample identification, collection date and time, and sampler's initials. Project number, sampling information, time, date of sample collection, sample matrix type, turn-around-time, container type, requested analysis, and other information were recorded on the chain-of-custody (COC) form. Soil samples were stored in a cooler containing ice and transported under COC protocol to Orange Coast Analytical, Inc. (OCA) in Tustin, California, a State-certified environmental fixed laboratory for various analytical constituents (see Table 1 for details). Soil vapor sampling was conducted on-site using a mobile laboratory administered by Jones Environmental, Inc. (Jones) of Santa Fe Springs, California. Soil vapor samples were

collected in accordance with DTSC protocol (DTSC, 2023) and analyzed at a mobile laboratory for VOCs by EPA Method 8260B.

## 9.6 Decontamination

A clean and decontaminated hand auger sampler was used for each borehole location. Sampling equipment was decontaminated between sampling intervals and borehole locations using standard industry practices (3-stage rinse of DI Water, Alconox Wash, and DI Water again) to avoid introduction of foreign materials and cross contamination between sampling locations.

## 9.7 Investigation Derived Wastes

Soil cuttings and decontamination water were stored in three Department of Transportation-approved 55-gallon drums and were staged adjacent to the west boundary of the cafeteria building in co-ordination with the LAUSD representative. The drums were labeled with generator information including: Site name and address, generator name and phone number, contents, date of accumulation, and designated 'pending analysis' for the waste classification. The drums were characterized as non-hazardous waste and removed from the site on June 13, 2023 for disposal at Soil Safe in Adelanto, California. The signed non-hazardous waste manifest is included in Appendix E.

# 10 ANALYTICAL RESULTS

The following presents the results of PEA sampling activities. Analytical results are presented in Tables 2, 3, 4, 5, and 6. Laboratory reports are presented in Appendix F.

## 10.1 Soil Sampling for Metals

Concentrations of metals other than arsenic and lead were not detected above the laboratory reporting limits and/or above the residential screening levels. Analytical results for Title 22 metals analyzed are summarized in Table 2.

### 10.1.1 Arsenic

Arsenic were reported in of the soil samples analyzed. Eighteen (18) soil samples were reported as having arsenic concentrations above the DTSC Acceptable Clean Up Level of 12 milligrams per kilogram (mg/kg). Soluble threshold limit concentration (STLC) and toxicity characteristic leaching procedure (TCLP) concentrations were analyzed in all samples that exceeded the 20 times TCLP value and/or 10 STLC value. Four soil samples (B4-0.5, B4-2.5, B4-W2-0.5, and B41A-0.5) were reported exceeding the STLC level of 5.0 milligrams per liter (mg/l), and one soil sample (B4-0.5) exceeding TCLP waste level of 5.0 mg/l.

Elevated arsenic concentrations (above 12 mg/kg) were encountered in the northern portion of the site (north of the West Building, Administration/Library Building, Classroom Buildings) and in the southern portion of the Site (south of Cafeteria Building). The extent of the elevated arsenic is defined in the northern portion of the site by borings B20 to the west and B40 to the east. The maximum arsenic concentration (720 mg/kg) was reported along the northeastern perimeter of the West Building (sample collected from boring B4). The soluble arsenic (STLC) and leaching (TCLP) concentrations exceeded their respective values. Therefore, soil excavated from this area should be characterized as Federal (Resources Conservation and Recovery Act [RCRA]) hazardous waste upon excavation. Elevated concentrations of arsenic are shown in Figure 4.

### **10.1.2 Lead**

Three near-surface (0 to 0.5 feet bgs) soil samples collected from primary borings (B10, B16, and B45) during this PEA contained lead at concentrations of 91 mg/kg, 92 mg/kg, and 200 mg/kg, respectively. These concentrations exceed the DTSC residential SL of 80 mg/kg. Additionally, soil samples from B34 and step-out boring B34-NE, collected from approximately 2 to 2.5 feet bgs, contained reported concentrations of lead at 230 and 360 mg/kg, respectively. Additionally, soil sample B34-2.5 exceeded the STLC level of 5.0 mg/l, characterizing the soil as California hazardous. California hazardous soil in this area was delineated to the northeast by sample B34-NE2-2.5. No samples reported exceedances of the lead TCLP of 5 mg/l. Elevated lead concentrations from this PEA are displayed in Figure 4.

Based on the results of lead above 80 mg/kg discovered in certain locations, the 95 Percent Upper Confidence Limit (95% UCL) for lead in soil (excluding B34 and associated step out borings) was calculated in ProUCL to assess whether lead detected at the site represents an unacceptable risk to site occupants. The 95% UCL for lead in soils at the site was calculated as 36.8 mg/kg, which is below the DTSC SL of 80 mg/kg. The 95% UCL calculation for lead is provided in Appendix G. Based on this result, lead is not considered an environmental concern at the site, with the exception of the “hot spot” located around B34 at approximately 2.5 feet bgs.

## **10.2 Soil Sampling for TPHs**

TPH as gasoline, diesel, and motor oil range organics was analyzed in 44 samples collected throughout the site. Diesel range organics (DROs) were detected in three of the samples analyzed, ranging from 12 to 490 mg/kg. One sample (B45-0.5) collected in the parking lot area

in the northwest portion of the site, had a reported concentration of DRO of 490 mg/kg, which exceeds EPA's RSL of 97 mg/kg. The motor oil range organic (MRO) concentration in this sample was also detected at 1,900 mg/kg in the surface sample. These elevated concentrations are likely the result of oil and fuel leaks associated with the use of the parking lot. It should be noted that the surrogate recovery for this sample was above laboratory acceptance limits.

Concentrations of MROs and gasoline range organics (GROs) were not detected above the EPA RSLs in any of the samples analyzed. Analytical results are presented in Table 3.

### **10.3 Soil Sampling for VOCs**

Concentrations of VOCs were not detected above the laboratory reporting limits in the 38 soil samples analyzed. Analytical results are summarized in Table 3.

### **10.4 Soil Sampling for PAHs**

Concentrations of PAHs were not detected above the laboratory reporting limits in the 15 samples analyzed. Analytical results are presented in Table 3.

### **10.5 Soil Sampling for Asbestos**

Asbestos was initially estimated via polarized light microscopy (PLM) in soil sample B20-0.5 but was not detected in the soil samples B20-0.5 and B20-2.5 when using 1,000-point count analysis. This soil is not considered a regulated waste on the federal, state, or local level and therefore no additional action is required with respect to asbestos. Asbestos was not detected in any other sample analyzed. Analytical results are presented in Table 3.

### **10.6 Soil Sampling for OCPs**

Concentrations of OCPs were not detected above the laboratory reporting limits in the nine discrete or 12 composite samples analyzed. Analytical results are presented in Table 4.

### **10.7 Soil Sampling for PCBs**

One sample (B19-0.5) reported an Aroclor 1254 concentration of 250 µg/kg, which exceeds EPA's RSL of 240 µg/kg. Concentrations of other PCBs were either not detected above the laboratory reporting limits or above associated residential screening levels. Analytical results are summarized in Table 4.

Based upon these results, the 95% UCL for PCB-Aroclor 1254 in soils was assessed in ProUCL. The 95% UCL for PCB-Aroclor 1254 in soils at the site was calculated as 46.59 µg/kg, which is

below the EPA RSL of 240 µg/kg. The 95% UCL calculation for PCB-Aroclor 1254 is provided in Appendix G.

## 10.8 Soil Sampling for Dioxins and Furans

One sample collected at the surface near the former extent of the concrete incinerator (B36-0.5) was analyzed for dioxin and furans by EPA Method 8290A. Dioxin and furan compounds 1,2,3,7,8,9-HxCDF, 1,2,3,4,6,7,8-HpCDD, 1,2,3,4,6,7,8-HpCDF, OCDD, and OCDF were reported in this sample ranging between 0.13 to 2.3 picograms per gram (pg/g). The remaining dioxins and furans compounds were not detected above the laboratory detection limits. The five dioxins and furans with reported results were below the reporting limit and are considered estimated concentrations (detected between the reporting limit and detection limit). Additionally, these compounds were reported below EPA RSLs for dioxin-like compounds, using EPA-recommended Toxic Equivalency Factors (TEFs).

All analytes yielding results were also found in the method blank. Method 8290A is an ultra-low sensitive method and it is a common occurrence to see low level detections in samples and method blanks. It also is possible that the detections in this sample are a “false positive” and were also a result of residuals from prior samples, but these instances cannot be confirmed. Analytical results are summarized in Table 5.

## 10.9 Soil Vapor Sampling for VOCs

Soil vapor samples were collected from six (6) borings with dual-nested probes at 5 and 15 feet bgs (12 primary samples plus one replicate sample). The analytical results of the VOCs in soil vapor were compared to the modified EPA RSLs for residential air and the modified DTSC HERO SLs for residential air calculated, with vapor intrusion attenuation factor of 0.03. Analytical results for VOCs at the site are summarized in Table 6. The results of soil vapor sampling are summarized as followed:

- Tetrachloroethene (PCE) was reported in the 12 samples ranging from 16 to 91 micrograms per cubic meter (µg/m<sup>3</sup>). All reported PCE concentrations exceed the modified DTSC SL of 15.3 µg/m<sup>3</sup> (using an attenuation factor of 0.03).
- Other VOCs detected included 1,2,4-trimethylbenzene, ethylbenzene, Freon 112, Toluene, and Xylenes. These VOCs were detected at levels below applicable screening levels using an attenuation factor of 0.03.

Due to the detection of PCE at the site at levels exceeding the modified DTSC SL, a Human Health Screening Risk Evaluation was performed to calculate and assess risks to human health from vapor intrusion, which is presented in the following section.



## 11 HUMAN HEALTH SCREENING RISK EVALUATION

Ninyo & Moore conducted a Vapor Intrusion Risk Evaluation (VIRE) for the site, with the purpose to assess whether the VOCs detected in soil gas under the property are likely to exceed levels considered acceptable to California health and environmental protection agencies. The risk evaluation was based on soil gas analytical data collected at the site on April 6, 2023 for the PEA. A summary of soil gas analytical data is provided in Table 6. Vapor intrusion risk calculation tables referenced throughout this section are provided in Appendix H.

Environmental investigations conducted at the site revealed that traces of VOCs exist in soil gas at the site. The potential for VOC vapor intrusion into one of the onsite buildings was evaluated in this VIRE. Based on current land use, a school exposure scenario was evaluated. The school-based land-use scenario was developed to reflect actual occupancy rates for staff and students at the elementary school site. Therefore, a set of receptor-specific exposure assumptions were used for each type of individual.

The 49th Street Elementary School operates on a two-semester school schedule. Exposure parameters used to characterize school staff and students were taken directly from the Cal-EPA's *Guidance for School Site Risk Assessment Pursuant to Health and Safety Code Section 901(f): Guidance for Assessing Exposures and Health Risks at Existing and Proposed School Sites (Cal-EPA 2003)*. Exposure parameters used to characterize school staff and students are presented in Table G1.

### 11.1 Vapor Intrusion Risk Evaluation Methodology

Risk characterization involves estimating the magnitude of the potential adverse health effects that could occur due to chronic, long-term exposure to chemicals identified in soil gas at the site. The risk characterization is based on the results of the dose-response (toxicity) and exposure assessment.

It is known that chemicals may migrate through environmental media from their source to a point where human receptors may be exposed. Therefore, it was necessary to determine if the detected VOCs – given their residual concentrations, locations, soil physical characteristics, weather conditions, etc. – could potentially migrate up to the surface (where human receptors may be exposed).

Screening-level models were used to predict indoor air concentrations that may result from the chemical vapors potentially released from soil gas under the site. The estimated vapor flux and indoor air concentrations were then used to estimate potential health risks that may result from

onsite exposures. For purposes of this evaluation, it was assumed that the land use is a middle school campus. The only exposure pathway that was considered complete was the volatilization of VOCs from soil gas and the subsequent emission to indoor air.

In this evaluation, maximum detected chemical concentrations (Table 6) were considered representative of chemical concentrations present in soil gas under the site. A copy of the soil gas laboratory analytical report is included in Appendix F.

The DTSC guidance recommends that multiple lines of evidence be used when evaluating the potential risk and hazards posed by vapor intrusion. DTSC recommends that the indoor air chemical concentrations that can result from vapor intrusion be estimated using the following equation:

$$AF = \frac{C_{indoor}}{C_{soil\ gas}}$$

Where:

AF = Attenuation factor (unitless)

C<sub>indoor</sub> = Indoor air concentration (micrograms per cubic meter [ug/m<sup>3</sup>])

C<sub>soil gas</sub> = Soil gas concentration (ug/m<sup>3</sup>)

Using the above equation, the indoor air chemical concentration can be estimated by multiplying the known soil gas concentration by the default attenuation factor (AF).

In accordance with DTSC (2011) guidance, the default AF for residential buildings (0.001) was used in this VIRE along with the maximum subsurface concentrations (Table 6). The DTSC default AF reflects reasonably protective assumptions for conditions in California for the contamination of indoor air due to vapor intrusion (DTSC, 2011). However, DTSC (2023) also recommends that risk assessments evaluate vapor intrusion using the United States Environmental Protection Agency (USEPA) default AF of 0.03 (USEPA, 2015).

The AF of 0.03 was developed by the USEPA for the evaluation of sub-slab soil gas data (<https://www.epa.gov/vaporintrusion/visl-users-guide>). The AF of 0.03 assumes the source of contamination is located directly under the floor slab of the building. It is well known that soils have the capacity to reduce vapor flow in the subsurface. The vapor flow mitigating capacity of soils is directly proportional to the depth of the soil layer that separates the building from the source of VOCs. Specifically, the soil's combined physical, chemical and/or lithological properties

act to reduce or limit the migration of VOCs through the soil's pore spaces (Little, Daisey and Nazaroff, 1992). The natural ability of soils to reduce vapor migration is not taken into consideration when the AF of 0.03 is assumed. Indoor air VOC concentrations estimated using the AFs of 0.001 and 0.03 are presented in Tables G2 and G3, respectively.

The vapor intrusion model assumes that the concentrations in indoor air are proportional to the flux throughout the soil column, and that a gas infiltrating into the building through the foundation floor is uniformly and instantaneously mixed within the air space above the lowest occupied floor of the building. Because this model ignores a number of possible mitigating factors, it is likely that it over-predicts the chemical flux to indoor air. However, because of its simplicity, this approach provides a simple method to estimate the likely maximum rate at which chemicals would be transported to the surface soils and into a building.

The indoor air chemical concentrations estimated to result from the volatilization of VOCs could be considered to represent a “worst-case” estimate. In the calculations, it was assumed that single chemical compounds are volatilizing, traveling alone through the vadose zone and escaping to ambient air. In reality, all chemicals detected at the site are competing with each other for available soil-pore space. It is well known that chemical volatilization and migration is limited by the vapor saturation in the vadose zone. Indoor air VOC concentrations estimated using the AFs of 0.001 and 0.03 are presented in Tables G2 and G3, respectively.

## 11.2 Toxicity Values

The toxicity assessment characterizes the relationship between the magnitude of exposure to a COPC and the nature and magnitude of adverse health effects that may result from such exposure. For the purposes of calculating exposure criteria to be used in risk assessments, adverse health effects are classified into two broad categories – carcinogens and non-carcinogens. Toxicity values/exposure criteria are generally developed based on the threshold approach for non-carcinogenic effects and the non-threshold approach for carcinogenic effects. Toxicity values may be based on epidemiological studies, short-term human studies, and sub-chronic or chronic animal data.

A reference concentration (RfC) is an exposure concentration in air that is not expected to cause adverse health effects over a lifetime of daily exposure in the most sensitive population. All RfCs used in this evaluation to estimate non-carcinogenic chronic health hazards are presented in Table G4.

Health risks for exposures to carcinogens are defined in terms of probabilities. The probabilities quantify the likelihood of a carcinogenic response in an individual that receives a given dose of a

particular compound. These probabilities are calculated based on the potential exposure concentration and the inhalation unit risk (IUR) for a chemical.

The IUR, which is expressed in units of inverse micrograms per cubic meter ( $\text{ug}/\text{m}^3$ )<sup>-1</sup>, is the 95% Upper Confidence Limit (UCL) of the probability of carcinogenic response per unit daily exposure to a given chemical concentration over a lifetime. The IUR multiplied by the lifetime exposure concentration of the chemical provides an estimate of the 95% UCL of the theoretical cancer risk for the specific chemical. The IURs used in this evaluation to estimate carcinogenic dose-assessment risks are presented in Table G4.

In this assessment, chronic toxicity criteria were selected in accordance with the DTSC Regulation “Toxicity Criteria for Human Health Risk Assessment” (effective September 2018) (<https://dtsc.ca.gov/LawsRegsPolicies/Regs/Toxicity-Criteria-for-Human-Health-Risk-Assessment>). Toxicity information was obtained from the DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 10, Toxicity Criteria (DTSC, 2019b).

### 11.3 Risk Characterization

This section discusses the methods used to quantify the exposure concentration (EC) for potential receptors at the site. The estimated ECs for each VOC were used to estimate the potential for carcinogenic health risks and non-carcinogenic adverse health effects. The potential inhalation exposures were calculated using the following equation (USEPA, 2009):

$$EC = \frac{CA \cdot ET \cdot EF \cdot ED}{AT}$$

Where:

EC	=	Exposure concentration, $\text{ug}/\text{m}^3$
CA	=	Chemical concentration in air, $\text{ug}/\text{m}^3$
ET	=	Exposure time, hours/day
EF	=	Exposure frequency, days/year
ED	=	Exposure duration, years
AT	=	Averaging time, hours (used the equivalent of 70 years for carcinogens and same value as ED for non-carcinogens).

Inhalation intake factors were combined with estimated indoor air chemical concentrations (CA) to obtain the exposure concentration for onsite school staff. Exposure parameters used to

characterize onsite school staff (workers) are presented in Table G1. Students were not evaluated here as their exposure is expected to be lower than those assumed for school staff.

### 11.3.1 Non-Carcinogenic Health Hazard Evaluation

The evaluation of non-carcinogenic health hazards began with a calculation of the hazard quotient or HQ for each chemical. The HQ is defined as the ratio of the exposure concentration (EC) to the reference concentration (RfC). The HQ can be expressed according to the following equation:

$$HQ = \frac{EC}{RfC}$$

Where:

HQ	=	Hazard quotient, unitless
EC	=	Exposure concentration, ug/m <sup>3</sup>
RfC	=	Reference concentration, ug/m <sup>3</sup>

The estimated HQs are compared to an acceptable hazard level. Implicit in the HQ is the assumption of a threshold level of exposure below which no adverse effects are expected to occur. For example, if the HQ exceeds unity (because site-specific exposure exceeds the RfC), then the potential for non-cancer adverse effects may exist. In general, the greater the value above 1.0, the greater the potential hazard. In contrast, HQs of less than 1.0 indicate that no adverse health effects are expected to occur from exposure to chemicals at the site.

According to the USEPA (1989), if the HQ for a combination of chemicals is less than unity (1.0), there is no concern for potential chronic adverse health effects from the chemical exposures. The HQs estimated for school receptors are:

#### Students

- 0.0008 using an AF of 0.001 (Table 6).
- 0.02 using an AF of 0.03 (Table 7).

#### School Staff

- 0.001 using an AF of 0.001 (Table 8).
- 0.03 using an AF of 0.03 (Table 9).



The HQs estimated for both school staff and students are below the DTSC (2015) benchmark value of 1. All estimated HQs are within levels considered acceptable to California health and environmental protection agencies.

### 11.3.2 Cancer Risk Estimates

Cancer risks were estimated as the incremental probability of an individual developing cancer over a lifetime as a result of exposure to a potential carcinogen (i.e., incremental or excess individual lifetime cancer risk; USEPA, 1989). Cancer risks were calculated in accordance with DTSC (2015) and USEPA (1989) guidelines.

$$Risk = EC \cdot IUR$$

Where:

- Risk = Upper bound incremental lifetime carcinogenic risk, unitless
- EC = Exposure concentration, ug/m<sup>3</sup>
- IUR = Inhalation unit risk, (ug/m<sup>3</sup>)<sup>-1</sup>

The excess cancer risk was compared to the risk level considered acceptable by federal and state regulatory agencies. The target cancer risk level identified by the DTSC in the Preliminary Endangerment Assessment (PEA) Guidance Manual is 1 in 1 million (1.0E-06). However, the USEPA has established acceptable incremental cancer risk levels to be within the risk range of 1 in 10,000 (1.0E-04) and 1.0E-06; risks greater than 1.0E-04 are generally considered unacceptable. Cal-EPA has defined a risk of 1 in 100,000 (1.0E-05) as the “no significant level” for carcinogens under California Proposition 65. Further, most California air districts use the 1.0E-05 risk level as the notification trigger level under California’s AB2588 Toxic Hot Spots Program.

Using the maximum detected VOC concentrations (Table 1), the cancer risk estimated for the school receptors are:

#### Students

- 9E-09 using an AF of 0.001 (Table 10).
- 3E-07 using an AF of 0.03 (Table 11).

### School Staff

- 5E-08 using an AF of 0.001 (Table 12).
- 2E-06 using an AF of 0.03 (Table 13).

The cancer risks estimated for students are below the DTSC (2015) benchmark value of 1E-06). The cancer risks estimated for school staff are below the “significant risk level” established by California Proposition 65. All estimated cancer risks are within levels considered acceptable to California health and environmental protection agencies.

## 11.4 VIRE Conclusions and Recommendations

Environmental investigations conducted at the site by N&M and others revealed that traces of VOCs exist at the site. The potential for VOC vapor intrusion into an onsite building was evaluated in this VIRE. Results of the VIRE indicate that the probability of developing cancer as a result of exposures to indoor air at the site is less than 3E-07 for students and 2E-06 for school staff. These estimated cancer risks are well below the known cancer risk for the United States population and are deemed acceptable by the DTSC. Similarly, the estimated Hazard Quotients are below the hazard quotient of 1.0, which is considered acceptable to the California Environmental Protection Agency. In other words, no significant cancer risks or health hazards are anticipated to occur as a result of exposures to chemicals detected in soil gas under the site.

It should be noted that the VIRE was based on conservative (health-protective) assumptions, estimates, models, and parameters. Therefore, the results are not absolute estimates of health risks at the site but are health-protective estimates.

The conclusions and recommendations presented in this report are professional opinions based solely upon the data described in this report. They are intended exclusively for the purpose outlined herein and the property’s location and project indicated. The scope of services performed in execution of this investigation may not be appropriate to satisfy the needs of users other than LAUSD. Any use or reuse of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

Given that the scope of services for this investigation was limited, and that conditions may vary between the points explored, it is possible that currently unrecognized subsurface contamination might be present at the site. Should site use or conditions change, the information and conclusions in this report may no longer apply. Opinions relating to environmental and public health conditions are based on limited data and actual conditions may vary from those encountered at the times and locations where data were obtained. No express or implied representation or warranty is

included or intended in this report except that the work was performed within the limits prescribed by the Client with the customary thoroughness and competence of professionals working in the same area on similar projects.

## 12 FINDINGS AND CONCLUSIONS

Based on the results of this evaluation, Ninyo & Moore provides the following findings and conclusions:

### 12.1 Soil

- The full-scan geophysical survey conducted between the Main Building and West Building revealed the presence of a deep soil disturbance that coincides with the likely location of a heating oil tank. The deep borings advanced to 15 feet bgs in the vicinity of the likely location of the tank did not encounter the tank or any contamination that could have result from a release. It is most likely the disturbed soil identified during the geophysical survey is the former location of the tank.
- DROs were detected in three of the samples analyzed, ranging from 12 to 490 mg/kg. One sample (B45-0.5) collected in the parking lot area in the northwest portion of the site, contained a reported concentration of DRO of 490 mg/kg, which exceeds EPA's RSL of 97 mg/kg. The MRO concentration in this sample was also detected at 1,900 mg/kg in the surface sample only. Elevated TPH concentrations at B45 are likely the result of oil and fuel leaks associated with the use of the parking lot.
- VOCs, PAHs, OCPs, and asbestos were not detected above the laboratory reporting limits in the soil samples collected at the site for this PEA.
- One sample (B19-0.5) had a reported concentration of PCB Aroclor 1254 of 250 µg/kg, which exceeds EPA's RSL of 240 µg/kg. Concentrations of other PCBs were either not detected above the laboratory reporting limits or above associated residential screening levels. Based on the results of a 95% UCL calculation, PCBs are not considered a concern at the site.
- Dioxins and furans concentrations ranged between 0.13 and 2.3 pg/g below the EPA RSLs using EPA-recommended TEFs.
- Arsenic was detected above the DTSC-established background concentration of 12 mg/kg in eighteen (18) soil samples up to a maximum concentration of 720 mg/kg. Elevated arsenic was found primarily in the northern portion of the site. Select samples around the West Building in the northeast portion of the site contained arsenic concentrations above the STLC of 5 mg/l and/or TCLP of 5 mg/l, which should be characterized and disposed as hazardous material.
- Lead was detected above the DTSC SL of 80 mg/kg in six soil samples collected at the site, up to a maximum concentration of 360 mg/kg. The results of a 95% UCL calculation indicate that lead is not an environmental concern at the site, with the exception of the "hot spot" identified at B34 approximately 2.5 feet bgs which should be characterized and disposed as hazardous material.

- Except for lead and arsenic, constituents listed under SCAQMD Rule 1466 were not reported above the laboratory reporting limit or their respective screening level for residential scenarios.

## 12.2 Soil Vapor

- PCE was reported in the soil vapor samples collected during this PEA ranging from 16 to 91  $\mu\text{g}/\text{m}^3$  and collected throughout various areas the site. Reported PCE concentrations exceeded the modified DTSC SL of 15.3  $\mu\text{g}/\text{m}^3$  (applying an attenuation factor of 0.03).
- Due to the exceedance of modified DTSC SLs, Ninyo & Moore conducted a VIRE to assess vapor intrusion health risks to site occupants. Results of the VIRE indicate that the probability of developing cancer as a result of exposures to indoor air at the site is less than 3E-07 for students and 2E-06 for school staff. These estimated cancer risks are well below the known cancer risk for the United States population and are deemed acceptable by the DTSC.
- Other VOCs were detected at levels below applicable DTSC screening levels using an attenuation factor of 0.03 or were not detected above laboratory reporting limits.

## 13 RECOMMENDATIONS

Based on the findings of this investigation, Ninyo & Moore provides the following recommendations:

- A Removal Action Workplan (RAW) be prepared detailing the proper management, characterization, and disposal requirements for subsurface structures and impacted soil in the following areas identified during this PEA:
  - The abandoned fuel line identified leading from East 49<sup>th</sup> Street to the former suspected heating oil tank located between the West and Main Buildings
  - TPH DRO-impacted soil around in the northern parking area (approximately 500 cubic yards [ $\text{yd}^3$ ])
  - Lead impacted soil in the vicinity of boring B34 (approximately 10  $\text{yd}^3$ )
  - Arsenic impacted soil in the northern portion of the site delineated by B20 to the west and B40 to the east-southeast; and arsenic-impacted soil south of the Cafeteria Building (approximately 1,400  $\text{yd}^3$ )
- SCAQMD Rule 1466 is not applicable for the remaining areas within the Major Modernization Project limits that are outside the areas subject to the RAW described above.

## 14 LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in Site conditions may exist and conditions not observed or described in this report may be encountered during

subsequent activities. Please also note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analysis. Further assessment of potential adverse environmental impacts from past on-Site and/or nearby use of hazardous materials may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between sampling locations. Variations in soil and/or groundwater conditions will exist beyond the points explored in this evaluation.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject Site. The testing and analyses have been conducted by an independent laboratory which is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our conclusions, recommendations, and opinions are based on an analysis of the observed Site conditions. It should be understood that the conditions of a Site could change with time as a result of natural processes or the activities of man at the subject Site or nearby Sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

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# TABLES



Table 1 – Preliminary Environmental Assessment Sampling Rationale Matrix for Soil and Soil Vapor - First and Second Phase of Work

Area of Concern	# of Borings	Boring ID	Location	Sampling Rationale	Matrix	Sample Depths (ft, bgs)	# of Samples Analyzed	Proposed Chemical Analysis
AOC1	6	B1-B6	West Building	Lead-based paint, use of termiticides and herbicides around building footprint, PCBs in caulking of building materials	Soil	0.5, 2.5	18 (18 on hold) 12 composites	Lead and arsenic by EPA Method 6010B in surface, hold 2.5-foot samples, OCPs* composited and analyzed by EPA Method 8081A, PCBs analyzed in 10% of samples collected by EPA Method 8082. Title 22 Metals by 6010B/7471A, hexavalent chromium by EPA Method 7199, Asbestos by PLM, PAHs by EPA Method 8270-SIM in 50% of samples (for SCAQMD Rule 1466)
	6	B7-B12	Auditorium					
	6	B13-B18	Cafeteria					
	7	B4-5W, -10W, -5N, -10N, -5E, -10E ; B2-10N	West Building	5 to 10-foot lateral step-out borings to asses extent of arsenic impacts >12 mg/kg	Soil	0.5, 2.5, 5	7 (14 on hold)	Arsenic by EPA Method 6010B
	1	B4-V	West Building	Co-located boring to assess vertical extents of arsenic impacts >12 mg/kg	Soil	0.5, 2.5, 5, 7.5	2 (2 on hold)	Arsenic by EPA Method 6010B
	2	B4-W3, W4	West Building	Additional step-out borings to asses extent of arsenic impacts >12 mg/kg	Soil	0.5, 2.5	2 (2 on hold)	Arsenic by EPA Method 6010B
	2	B14-20S, -20E	Cafeteria	20-foot lateral step-out borings to asses extent of arsenic impacts >12 mg/kg	Soil	0.5, 2.5	2 (2 on hold)	Arsenic by EPA Method 6010B
AOC2	12	B19-B30	Paved/Landscaped Areas	Application of arsenic-containing herbicides	Soil	0.5, 2.5, 5	12 (24 on hold)	Lead and arsenic by EPA Method 6010B in subsurface, hold 2.5-foot and 5-foot samples, PCBs analyzed in 10% of samples collected by EPA Method 8082. Title 22 Metals by 6010B/7471A, hexavalent chromium by EPA Method 7199, Asbestos by PLM, PAHs by EPA Method 8270-SIM in 30% of samples (for SCAQMD Rule 1466)
	3	B21-50W, B20-50E, B20-50W	Paved/Landscaped Areas	Step-out borings 50 feet west to asses extent of arsenic impacts >12 mg/kg	Soil	0.5, 2.5	1 (1 on hold)	Arsenic by EPA Method 6010B
	5	S-1 - S-5	Planter Boxes at Northern Perimeter	Application of arsenic-containing herbicides, assess extents of arsenic impacts >12 mg/kg	Soil	0.5	5	Arsenic by EPA Method 6010B
AOC3	1	B31	Electrical Transformer	PCB-containing oil used adjacent to Electrical Transformer	Soil	0.5, 2.5	1 (1 on hold)	PCBs by EPA Method 8082 in subsurface, hold 2.5-foot sample
AOC4	2	B32-B33	Co-located adjacent to Geotechnical Borings	Assess uncertified fill vs. native soil conditions in GPI geotechnical borings B-2 - B-5 representing different time periods of site development	Soil	2.5, 5, 10	4 (2 on hold)	Title 22 Metals by 6010B/7471A, VOCs by EPA Method 8260B, TPH-g/d/o by EPA Method 8015B, OCPs by EPA Method 8081A
	2	B34-B35	Co-located adjacent to Geotechnical Borings	Assess uncertified fill vs. native soil conditions in GPI geotechnical borings B-2 - B-5 representing different time periods of site development	Soil	2.5, 5, 10	4 (2 on hold)	Title 22 Metals by 6010B/7471A, VOCs by EPA Method 8260B, TPH-g/d/o by EPA Method 8015B, OCPs by EPA Method 8081A
		SV5	Probes Installed in B34	Spatial distribution of vapor probes around the site	Soil Vapor	5, 15	2	VOCs by EPA Method 8260B (using a mobile lab)
	6	B34-NE, -NE2, -NW, -NW2, -SW, SW2	Paved Area in Central Portion of Site	Step-out boring to assess extent of lead impacts with STLC>5 mg/l	Soil	0.5, 2.5	6 (6 on hold)	Lead by EPA Method 6010B
AOC5	1	B36	Former Incinerator	Historical use of gas-fired incinerator	Soil	0.5, 2.5, 5, 10	2 (2 on hold)	Title 22 Metals by 6010B/7471A, VOCs by EPA Method 8260B, TPH-g/d/o by EPA Method 8015B, PAHs by EPA Method 8270-SIM, Dioxins & Furans by EPA Method 8290A (surface only), Hexavalent chromium by EPA Method 7199 (surface only). Hold 5 and 10-foot samples
AOC6	1	B37	Former Oil Tank #1	Historical use of oil tank for storing petroleum products and potential spills or leaks	Soil	0.5, 2.5, 5, 10, 15	5	Title 22 Metals by 6010B/7471A, VOCs by EPA Method 8260B (not analyzed at surface), TPH-g/d/o by EPA Method 8015B, PCBs by EPA Method 8082
		SV1			Soil Vapor	5, 15	2	VOCs by EPA Method 8260B (using a mobile lab)
AOC7	2	B38-B39	Former Oil Tank #2 (Potential heating oil tank)	Historical use of 1,000-gallon UST for storing petroleum products and potential spills or leaks	Soil	0.5, 2.5, 5, 10, 15	10	Title 22 Metals by 6010B/7471A, VOCs by EPA Method 8260B (not analyzed at surface), TPH-g/d/o by EPA Method 8015B, PCBs by EPA Method 8082
		SV2-SV3			Soil Vapor	5, 15	4	VOCs by EPA Method 8260B (using a mobile lab)
	3	B40-B42	Associated product pipeline to 1,000-gallon UST	Historical use of 6-inch diameter oil pipeline leading from oil filler box to 1,000-gallon UST	Soil	2.5, 5	3 (3 on hold)	VOCs by EPA Method 8260B, TPH-g/d/o by EPA Method 8015B (2.5-foot sample, hold 5-foot)
	1	B46	Former UST	Assess impacts directly within and underneath former tank pit area where subsurface anomalies were found	Soil	0.5, 2.5, 5, 10	2 (2 on hold)	Title 22 Metals by 6010B/7471A, VOCs by EPA Method 8260B (not analyzed at surface), TPH-g/d/o by EPA Method 8015B
AOC8	1	B43	Former Boiler Room	Historical use of boiler room, heating using oils, gases, and other petroleum products	Soil	0.5, 2.5, 5, 10, 15	5	Title 22 Metals by 6010B/7471A, VOCs by EPA Method 8260B (not analyzed at surface), TPH-g/d/o by EPA Method 8015B, PCBs by EPA Method 8082
		SV4			Soil Vapor	5, 15	2	VOCs by EPA Method 8260B (using a mobile lab)
AOC9	1	B44	Hazardous Materials Storage Container	Use of hazardous materials such as gasoline and motor oils and potential leaks or spills	Soil	0.5, 2.5, 5	2 (1 on hold)	Title 22 Metals by 6010B/7471A, VOCs by EPA Method 8260B, TPH-g/d/o by EPA Method 8015B. Analysis will be conducted based on 2 highest PID readings, and if all zero, then 2 shallowest.

Table 1 – Preliminary Environmental Assessment Sampling Rationale Matrix for Soil and Soil Vapor - First and Second Phase of Work								
Area of Concern	# of Borings	Boring ID	Location	Sampling Rationale	Matrix	Sample Depths (ft, bgs)	# of Samples Analyzed	Proposed Chemical Analysis
AOC10	1	B45	Parking Lot	Surface staining from vehicle oil leaks in asphalt-paved parking lot. Spatial distribution of probes	Soil	0.5, 2.5, 5, 10, 15	2 (3 on hold)	Title 22 Metals by 6010B/7471A, VOCs by EPA Method 8260B, TPH-g/d/o by EPA Method 8015B. Analysis will be conducted based on 2 highest PID readings, and if all zero, then 2 shallowest.
		SV6			Soil Vapor	5, 15	2	VOCs by EPA Method 8260B (using a mobile lab)
Total for 1st Phase	36							
Total for 2nd Phase	31							

Notes:

Sampling completed in the first phase of work

Sampling completed in the second phase of work

Sampling completed during additional step-out sampling

\* - Samples analyzed for OCPs around building exteriors will be composited in accordance with DTSC Guidance Documents (DTSC, 2006). Discrete analysis will be conducted pending the results of the composite sample.

A,B,C - step-out sampling convention will be in a triangle formation, with the "A" sample 5-feet to the north, "B" 5-feet to the southwest, and "C" 5-feet to the southeast, This is subject to change based on conditions observed in the field.

AOC - Area of Concern

AST - aboveground storage tank

B - soil boring

DTSC - Department of Toxic Substances Control

DTSC, 2006 - Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-based Paint, Organochlorine Pesticides from termiticides, and Polychlorinated Biphenyls from Electrical Transformers (Revised June 9, 2006)

DTSC, 2008 - Interim Guidance for Sampling Agricultural Properties (Third Revision)

EPA - United States Environmental Protection Agency

ft, bgs - feet below ground surface

PAHs - polycyclic aromatic hydrocarbons

PCBs - polychlorinated biphenyls

PLM - polarized light microscopy

OCPs - organochlorine pesticides

SCAQMD - South Coast Air Quality Management District

SV - soil vapor

TPH - total petroleum hydrocarbons

TPH-g/d/o - TPH-gasoline/diesel/oil

UST - underground storage tank

VOCs - volatile organic compounds

Table 2 – Soil Sample Analytical Results – Metals																							
Sample ID	Date Sampled	EPA Method 6010B/7471A (mg/kg)																					
		Antimony	Arsenic (TTLc)	Arsenic (STLC) (mg/l)	Arsenic (TCLP) (mg/l)	Barium	Beryllium	Cadmium	Chromium	Chromium, Hexavalent (µg/kg)	Cobalt	Copper	Lead (TTLc)	Lead (STLC) (mg/l)	Lead (TCLP) (mg/l)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B1-0.5	2/18/2023	NA	ND<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B2-0.5	2/18/2023	ND<2.0	ND<2.0	NA	NA	84	ND<0.5	ND<0.5	12	ND<0.4	6.9	9.7	17	NA	NA	0.22	ND<1.0	7.1	ND<4.8	ND<0.5	ND<2.0	28	48
B2-N-0.5	4/3/2023	NA	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B3-0.5	2/18/2023	ND<2.0	52	2.5	NA	92	ND<0.5	1.6	13	ND<0.4	7.8	12	26	NA	NA	ND<0.10	ND<1.0	7.7	ND<4.8	ND<0.5	ND<2.0	31	66
B3-2.5	2/18/2023	NA	ND<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-0.5	2/18/2023	ND<2.0	700	53	22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-2.5	2/18/2023	NA	130	7.0	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-5	4/3/2023	NA	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-E-0.5	4/3/2023	NA	26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-E-2.5	4/3/2023	NA	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-E2-0.5	4/3/2023	NA	46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-W-0.5	4/3/2023	NA	720	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-W-2.5	4/3/2023	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-W2-0.5	4/3/2023	NA	180	11	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-W3-0.5	5/6/2023	NA	53	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B4-N-0.5	4/3/2023	NA	35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B5-0.5	2/18/2023	ND<2.0	ND<2.0	NA	NA	100	ND<0.5	ND<0.5	16	ND<0.4	10	14	6	NA	NA	ND<0.10	ND<1.0	9.6	ND<4.8	ND<0.5	ND<2.0	39	NA
B6-0.5	2/18/2023	NA	ND<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B7-0.5	2/18/2023	NA	ND<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B8-0.5	2/18/2023	ND<2.0	ND<2.0	NA	NA	77	ND<0.5	ND<0.5	11	ND<0.4	7.2	9.4	4.8	NA	NA	ND<0.10	ND<1.0	6.6	ND<4.8	ND<0.5	ND<2.0	27	39
B9-0.5	2/18/2023	ND<2.0	ND<2.0	NA	NA	74	ND<0.5	ND<0.5	9	ND<0.4	6.3	9	9.1	NA	NA	ND<0.10	ND<1.0	5.9	ND<4.8	ND<0.5	ND<2.0	23	39
B10-0.5	2/18/2023	NA	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	91	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
B10-2.5	2/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B11-0.5	2/18/2023	ND<2.0	6.8	NA	NA	ND<1.0	ND<0.5	ND<0.5	ND<0.5	NA	ND<0.5	NA	55	1.8	NA	ND<0.10	NA	NA	NA	NA	NA	NA	NA
B11-2.5	2/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B12-0.5	2/18/2023	ND<2.0	ND<2.0	NA	NA	70	ND<0.5	ND<0.5	10	ND<0.4	6.7	9.2	18	ND<0.1	NA	ND<0.10	ND<1.0	6.4	ND<4.8	ND<0.5	ND<2.0	26	42
B13-0.5	2/18/2023	ND<2.0	3.2	NA	NA	ND<1.0	ND<0.5	ND<0.5	ND<0.5	NA	ND<0.5	NA	53	1.6	NA	ND<0.10	NA	NA	NA	NA	NA	NA	NA
B13-2.5	2/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B14-0.5	2/18/2023	ND<2.0	28	NA	NA	110	ND<0.5	1.2	19	ND<0.4	9.1	18	32	ND<0.1	NA	ND<0.10	ND<1.0	12	ND<4.8	ND<0.5	ND<2.0	36	110
B14-2.5	2/18/2023	NA	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B14-E-0.5	4/3/2023	NA	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B14-S-0.5	4/3/2023	NA	7.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B15-0.5	2/18/2023	ND<2.0	5.9	NA	NA	100	ND<0.5	ND<0.5	19	ND<0.4	9.6	16	24	ND<0.1	NA	ND<0.10	ND<1.0	13	ND<4.8	ND<0.5	ND<2.0	39	79
B16-0.5	2/18/2023	NA	7.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	92	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
B16-2.5	2/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B17-0.5	2/18/2023	NA	6.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B18-0.5	2/18/2023	ND<2.0	ND<2.0	NA	NA	110	ND<0.5	ND<0.5	18	ND<0.4	8.3	13	36	ND<0.1	NA	ND<0.10	ND<1.0	9.2	ND<4.8	ND<0.5	ND<2.0	34	90
B19-0.5	2/20/2023	NA	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	63	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
B20-0.5	2/20/2023	ND<2.0	3.2	NA	NA	62	ND<0.5	ND<0.5	13	ND<0.4	7	12	18	NA	NA	ND<0.10	ND<1	11	ND<4.8	ND<0.5	ND<2.0	25	75
B20-W-0.5	4/3/2023	NA	ND<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B20-E-0.5	4/3/2023	NA	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B21-0.5	2/20/2023	NA	38	NA	NA	NA	NA	NA	NA	NA	NA	NA	42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B21-2.5	2/20/2023	NA	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B21-W-0.5	4/3/2023	NA	7.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B22-0.5	2/18/2023	ND<2.0	64	2.8	NA	NA	NA	NA	NA	NA	NA	NA	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B22-2.5	2/18/2023	NA	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B23-0.5	2/20/2023	ND<2.0	ND<2.0	NA	NA	55	ND<0.5	ND<0.5	7.1	ND<0.4	5	11	38	NA	NA	0.24	ND<1.0	5.9	ND<4.8	ND<0.5	ND<2.0	20	54

Table 2 – Soil Sample Analytical Results – Metals																							
Sample ID	Date Sampled	EPA Method 6010B/7471A (mg/kg)																					
		Antimony	Arsenic (TTLC)	Arsenic (STLC) (mg/l)	Arsenic (TCLP) (mg/l)	Barium	Beryllium	Cadmium	Chromium	Chromium, Hexavalent (µg/kg)	Cobalt	Copper	Lead (TTLC)	Lead (STLC) (mg/l)	Lead (TCLP) (mg/l)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B24-0.5	2/20/2023	NA	ND<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	66	2.8	NA	ND<0.10	NA	NA	NA	NA	NA	NA	NA
B25-0.5	2/20/2023	ND<2.0	3.6	NA	NA	86	ND<0.5	ND<0.5	15	ND<0.4	8.1	14	21	NA	NA	0.11	ND<1.0	9.8	ND<4.8	ND<0.5	ND<2.0	32	56
B26-0.5	2/20/2023	ND<2.0	2.8	NA	NA	83	ND<0.5	ND<0.5	15	0.23 J	18	18	34	NA	NA	ND<1.0	ND<1.0	10	ND<4.8	ND<0.5	ND<2.0	30	98
B27-0.5	2/20/2023	NA	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B28-0.5	2/20/2023	NA	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B29-0.5	2/20/2023	NA	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B30-0.5	2/20/2023	NA	ND<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B32-2.5	2/20/2023	ND<2.0	ND<2.0	NA	NA	130	ND<0.5	ND<0.5	19	NA	12	19	6	NA	NA	0.11	ND<1.0	12	ND<4.8	ND<0.5	ND<2.0	44	60
B32-5	2/20/2023	ND<2.0	ND<2.0	NA	NA	130	ND<0.5	ND<0.5	19	NA	13	17	4.6	NA	NA	0.15	ND<1.0	12	ND<4.8	ND<0.5	ND<2.0	49	64
B33-2.5	2/20/2023	ND<2.0	3.9	NA	NA	160	0.58	ND<0.5	24	NA	16	23	6.7	NA	NA	0.11	ND<1.0	17	ND<4.8	ND<0.5	ND<2.0	55	77
B33-5	2/20/2023	ND<2.0	ND<2.0	NA	NA	150	0.57	ND<0.5	22	NA	15	22	5.3	NA	NA	ND<1.0	ND<1.0	15	ND<4.8	ND<0.5	ND<2.0	52	71
B34-2.5 <sup>1</sup>	2/20/2023	ND<2.5	ND<2.0	NA	NA	140	ND<0.50	ND<0.50	19	NA	12	18	24	NA	NA	0.12	ND<1.0	12	ND<4.8	ND<0.50	ND<0.20	41	120
B34-2.5	4/5/2023	ND<2.0	2.4	NA	NA	190	ND<0.5	ND<0.5	12	NA	7.3	17	230	11	0.19	0.11	ND<1.0	8.0	ND<4.8	ND<0.5	ND<2.0	27	210
B34-5	4/5/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B34-10	4/5/2023	ND<2.0	ND<2.0	NA	NA	71	ND<0.5	ND<0.5	10	NA	7.7	11	3.3	NA	NA	ND<0.10	ND<1.0	6.9	ND<4.8	ND<0.5	ND<2.0	28	35
B34-NW-2.5	2/20/2023	ND<2.0	ND<2.0	NA	NA	140	ND<0.5	ND<0.5	19	NA	12	18	24	NA	NA	NA	ND<1.0	12	ND<4.8	ND<0.5	ND<2.0	41	120
B34-NE-0.5	5/6/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B34-NE-2.5	5/6/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	360	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B34-NE2-2.5	5/6/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	94	2.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
B34-SW-0.5	5/6/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B34-SW-2.5	5/6/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B35-2.5	4/5/2023	ND<2.0	ND<2.0	NA	NA	85	ND<0.5	ND<0.5	13	NA	8.3	12	3.4	NA	NA	0.11	ND<1.0	8.5	ND<4.8	ND<0.5	ND<2.0	32	45
B35-10	4/5/2023	ND<2.0	ND<2.0	NA	NA	71	ND<0.5	ND<0.5	10	NA	7.0	11	2.4	NA	NA	0.18	ND<1.0	6.4	ND<4.8	ND<0.5	ND<2.0	26	35
B36-0.5	4/5/2023	ND<2.0	2.1	NA	NA	88	ND<0.5	ND<0.5	13	NA	7.6	19	15	NA	NA	0.18	ND<1.0	7.9	ND<4.8	ND<0.5	ND<2.0	31	46
B36-2.5	4/5/2023	ND<2.0	2.2	NA	NA	110	ND<0.5	ND<0.5	15	NA	10	15	5.6	NA	NA	0.20	ND<1.0	11	ND<4.8	ND<0.5	ND<2.0	39	51
B37-0.5	4/5/2023	ND<2.0	2.3	NA	NA	100	ND<0.5	ND<0.5	14	NA	9.4	13	13	NA	NA	0.14	ND<1.0	9.2	ND<4.8	ND<0.5	ND<2.0	36	62
B37-2.5	4/5/2023	ND<2.0	ND<2.0	NA	NA	120	ND<0.5	ND<0.5	18	NA	12	16	4.1	NA	NA	0.13	ND<1.0	12	ND<4.8	ND<0.5	ND<2.0	46	56
B37-5	4/5/2023	ND<2.0	ND<2.0	NA	NA	94	ND<0.5	ND<0.5	14	NA	9.8	13	3.9	NA	NA	0.11	ND<1.0	9.6	ND<4.8	ND<0.5	ND<2.0	37	46
B37-10	4/5/2023	ND<2.0	3.9	NA	NA	150	0.76	ND<0.5	21	NA	14	24	6.3	NA	NA	0.14	ND<1.0	15	ND<4.8	ND<0.5	ND<2.0	53	67
B37-15	4/5/2023	ND<2.0	ND<2.0	NA	NA	80	ND<0.5	ND<0.5	13	NA	8.5	11	2.6	NA	NA	ND<0.10	ND<1.0	8.4	ND<4.8	ND<0.5	ND<2.0	34	41
B38-0.5	4/5/2023	ND<2.0	ND<2.0	NA	NA	110	ND<0.5	ND<0.5	15	NA	10	15	8.4	NA	NA	0.15	ND<1.0	10	ND<4.8	ND<0.5	ND<2.0	39	53
B38-2.5	4/5/2023	ND<2.0	ND<2.0	NA	NA	100	ND<0.5	ND<0.5	15	NA	10	14	6.9	NA	NA	0.18	ND<1.0	9.7	ND<4.8	ND<0.5	ND<2.0	40	51
B38-5	4/5/2023	ND<2.0	2.5	NA	NA	150	0.71	ND<0.5	23	NA	14	25	6.8	NA	NA	0.49	ND<1.0	16	ND<4.8	ND<0.5	ND<2.0	54	67
B38-10	4/5/2023	ND<2.0	2.2	NA	NA	85	ND<0.5	ND<0.5	12	NA	8.1	11	2.6	NA	NA	0.13	ND<1.0	7.5	ND<4.8	ND<0.5	ND<2.0	30	40
B38-15	4/5/2023	ND<2.0	ND<2.0	NA	NA	82	ND<0.5	ND<0.5	14	NA	7.6	13	5.7	NA	NA	0.19	ND<1.0	11	ND<4.8	ND<0.5	ND<2.0	33	42
B39-0.5	4/5/2023	ND<2.0	ND<2.0	NA	NA	100	ND<0.5	ND<0.5	15	NA	9.6	15	16	NA	NA	0.11	ND<1.0	9.9	ND<4.8	ND<0.5	ND<2.0	39	58
B39-2.5	4/5/2023	ND<2.0	ND<2.0	NA	NA	93	ND<0.5	ND<0.5	14	NA	7.8	11	6.9	NA	NA	0.19	ND<1.0	7.9	ND<4.8	ND<0.5	ND<2.0	32	46
B39-5	4/5/2023	ND<2.0	ND<2.0	NA	NA	150	ND<0.5	ND<0.5	16	NA	9.6	14	13	NA	NA	0.17	ND<1.0	10	ND<4.8	ND<0.5	ND<2.0	38	62
B39-10	4/5/2023	ND<2.0	ND<2.0	NA	NA	82	ND<0.5	ND<0.5	9.7	NA	7.3	9.3	2.1	NA	NA	0.18	ND<1.0	6.4	ND<4.8	ND<0.5	ND<2.0	26	40
B39-15	4/5/2023	ND<2.0	ND<2.0	NA	NA	49	ND<0.5	ND<0.5	5.6	NA	4.9	ND<5	1.4	NA	NA	ND<0.10	ND<1.0	4.1	ND<4.8	ND<0.5	ND<2.0	18	260
B40A-0.5	5/6/2023	NA	2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B40-2.5	2/18/2023	NA	ND<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B41A-0.5	5/6/2023	NA	89	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B41-2.5	2/18/2023	NA	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B42A-0.5	4/3/2023	NA	63	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B42A-2.5	4/3/2023	NA	2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 2 – Soil Sample Analytical Results – Metals

Sample ID	Date Sampled	EPA Method 6010B/7471A (mg/kg)																					
		Antimony	Arsenic (TTLC)	Arsenic (STLC) (mg/l)	Arsenic (TCLP) (mg/l)	Barium	Beryllium	Cadmium	Chromium	Chromium, Hexavalent (µg/kg)	Cobalt	Copper	Lead (TTLC)	Lead (STLC) (mg/l)	Lead (TCLP) (mg/l)	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B44-0.5	4/3/2023	ND<2.0	3.1	NA	NA	130	ND<0.5	ND<0.5	20	NA	12	17	29	NA	NA	ND<0.10	ND<1.0	13	ND<4.8	ND<0.5	ND<2.0	42	100
B44-2.5	4/3/2023	ND<2.0	ND<2.0	NA	NA	130	ND<0.5	ND<0.5	18	NA	12	17	4.4	NA	NA	ND<0.10	ND<1.0	12	ND<4.8	ND<0.5	ND<2.0	42	62
B45-0.5	4/3/2023	ND<2.0	3.3	NA	NA	120	ND<0.5	0.56	13	NA	8.5	36	200	4.7	0.11	0.26	ND<1.0	14	ND<4.8	ND<0.5	ND<2.0	32	250
B45-2.5	4/3/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B45-15	4/3/2023	ND<2.0	ND<2.0	NA	NA	72	ND<0.5	ND<0.5	9	NA	7.6	7.9	2	NA	NA	ND<0.10	ND<1.0	6.3	ND<4.8	ND<0.5	ND<2.0	25	36
B43-0.5	4/5/2023	ND<2.0	ND<2.0	NA	NA	430	ND<0.5	ND<0.5	12	NA	7.7	11	7.1	NA	NA	0.15	ND<1.0	7.6	ND<4.8	ND<0.5	ND<2.0	32	50
B43-2.5	4/5/2023	ND<2.0	ND<2.0	NA	NA	110	ND<0.5	ND<0.5	13	NA	9.0	13	4.7	NA	NA	0.10	ND<1.0	8.7	ND<4.8	ND<0.5	ND<2.0	35	49
B43-5	4/5/2023	ND<2.0	2.5	NA	NA	130	0.59	ND<0.5	20	NA	13	20	4.2	NA	NA	0.19	ND<1.0	13	ND<4.8	ND<0.5	ND<2.0	52	62
B43-10	4/5/2023	ND<2.0	ND<2.0	NA	NA	95	ND<0.5	ND<0.5	12	NA	8.9	13	3.0	NA	NA	0.16	ND<1.0	8.1	ND<4.8	ND<0.5	ND<2.0	31	44
B43-15	4/5/2023	ND<2.0	2.0	NA	NA	110	0.54	ND<0.5	17	NA	12	19	4.2	NA	NA	0.11	ND<1.0	12	ND<4.8	ND<0.5	ND<2.0	45	56
B46-0.5	4/5/2023	ND<2.0	ND<2.0	NA	NA	100	ND<0.5	ND<0.5	15	NA	8.9	14	16	NA	NA	0.45	ND<1.0	9.3	ND<4.8	ND<0.5	ND<2.0	36	71
B46-2.5	4/5/2023	ND<2.0	ND<2.0	NA	NA	95	ND<0.5	ND<0.5	15	NA	9.5	13	8.6	NA	NA	0.14	ND<1.0	9.4	ND<4.8	ND<0.5	ND<2.0	38	52
B46-5	4/5/2023	ND<2.0	ND<2.0	NA	NA	88	ND<0.5	ND<0.5	14	NA	8.8	13	3.9	NA	NA	0.12	ND<1.0	8.6	ND<4.8	ND<0.5	ND<2.0	34	44
B46-10	4/5/2023	ND<2.0	ND<2.0	NA	NA	84	ND<0.5	ND<0.5	12	NA	8.6	12	3.1	NA	NA	ND<0.10	ND<1.0	8.3	ND<4.8	ND<0.5	ND<2.0	32	43
S1	4/3/2023	NA	3.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S2	4/3/2023	NA	31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S3	4/3/2023	NA	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4	4/3/2023	NA	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S5	4/3/2023	NA	6.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Regulatory Screening Levels (mg/kg)																							
EPA RSLs (Residential Soil)		31*	0.68	NL	NL	15,000*	160*	7.1*	NL	6.3	23*	3,100*	400	NL	NL	11	390*	1,500*	390*	390*	0.78	390*	23,000*
DTSC HERO HHRA (Residential Soil)		NL	0.11	NL	NL	NL	16*	910	NL	NL	NL	NL	80*	NL	NL	1.0	NL	820*	NL	NL	NL	NL	NL
DTSC Acceptable Clean Up Levels		NL	12	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
Hazardous Waste Criteria																							
TTLC (mg/kg)		500	500	--	--	10,000	75	100	2,500	500	8,000	2,500	1,000	--	--	20	3,500	2,000	100	500	700	2,400	5,000
10 X STLC (mg/kg)		150	50	--	--	1,000	7.5	10	50	50	800	250	50	--	--	2	3,500	200	10	50	70	240	2,500
20 X TCLP (mg/kg)		--	100	--	--	2000	--	20	100	--	--	--	100	--	--	4	--	--	20	100	--	--	--
STLC (mg/l)		15	5	5	--	100	0.75	1	5	5	80	25	5	5	--	0.2	350	20	1	5	7	24	250
TCLP (mg/l)		NL	5	--	5	100	NL	1	5	NL	NL	NL	5	--	5	0.2	NL	NL	1	5	NL	NL	NL

Notes:

-- - not applicable

\* - non-cancer endpoint

<sup>1</sup> - Two co-located samples were collected with corresponding ID of B34-2.5 due to refusal encountered in the original boring B34 on February 20, 2023. The report text refers to the second B34 sample collected on April 5, 2023.

bold indicates exceedance of regulatory screening level(s)

DTSC HERO HHRA - Department of Toxic Substances Control Human and Ecological Risk Office Human Health Risk Assessment, Note 3, Recommended Screening Levels for Soil (June 2020)

EPA - United States Environmental Protection Agency

ID - Identification

J - Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

mg/kg - milligrams per kilogram

mg/l - milligrams per liter

NA - not analyzed

ND< - not detected above the laboratory reporting limit

NL - not listed

RSLs - United States Environmental Protection Agency Regional Screening Levels (May 2023)

STLC - soluble threshold limit concentration

TCLP - toxicity characteristic leaching procedure

TTLC - total threshold limit concentration

µg/kg - micrograms per kilogram

**Table 3 – Soil Sample Analytical Results – TPHs, VOCs, PAHs, Asbestos**

Sample ID	Date Sample Collected	TPHs EPA Method 8015B (mg/kg)			VOC's EPA 8260B (µg/kg)	PAHs EPA 8270C (µg/kg)	Asbestos PLM (percentage)
		DROs	MROs	GROs			
B2-0.5	2/18/2023	NA	NA	NA	NA	ND	ND
B3-0.5	2/18/2023	NA	NA	NA	NA	ND	ND
B5-0.5	2/18/2023	NA	NA	NA	NA	ND	ND
B8-0.5	2/18/2023	NA	NA	NA	NA	ND	ND
B9-0.5	2/18/2023	NA	NA	NA	NA	ND	ND
B12-0.5	2/18/2023	NA	NA	NA	NA	ND	ND
B14-0.5	2/18/2023	NA	NA	NA	NA	ND	ND
B15-0.5	2/18/2023	NA	NA	NA	NA	ND	ND
B18-0.5	2/18/2023	NA	NA	NA	NA	ND	ND
B20-0.5	2/20/2023	ND<10	ND<50	ND<0.2	NA	ND	ND<0.1%
B20-2.5	2/20/2023	NA	NA	NA	NA	NA	ND<0.1%
B23-0.5	2/20/2023	NA	NA	NA	NA	ND	ND
B25-0.5	2/20/2023	NA	NA	NA	NA	ND	ND
B26-0.5	2/20/2023	NA	NA	NA	NA	ND	ND
B32-2.5	2/20/2023	ND<10	120	ND<0.2	ND	NA	NA
B32-5	2/20/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B33-2.5	2/20/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B33-5	2/20/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B34-2.5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B34-10	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B34-W-2.5	2/20/2023	NA	NA	NA	ND	NA	NA
B35-2.5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B35-10	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B36-0.5	4/5/2023	18	78	ND<0.2	ND	ND	NA
B36-2.5	4/5/2023	ND<10	ND<50	ND<0.2	ND	ND	NA
B37-0.5	4/5/2023	ND<10	ND<50	ND<0.2	NA	NA	NA
B37-2.5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B37-5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B37-10	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B37-15	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B38-0.5	4/5/2023	ND<10	ND<50	ND<0.2	NA	NA	NA
B38-2.5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B38-5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B38-10	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B38-15	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B39-0.5	4/5/2023	ND<10	ND<50	ND<0.2	NA	NA	NA
B39-2.5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B39-5	4/5/2023	12	ND<50	ND<0.2	ND	NA	NA
B39-10	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B39-15	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B40-2.5	2/18/2023	ND<10	140	ND<0.2	ND	NA	NA
B41-2.5	2/18/2023	14	75	ND<0.2	ND	NA	NA
B42-2.5	2/18/2023	ND<10	67	ND<0.2	ND	NA	NA
B43-0.5	4/5/2023	ND<10	ND<50	ND<0.2	NA	NA	NA
B43-2.5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B43-5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B43-10	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B43-15	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA

**Table 3 – Soil Sample Analytical Results – TPHs, VOCs, PAHs, Asbestos**

Sample ID	Date Sample Collected	TPHs EPA Method 8015B (mg/kg)			VOC's EPA 8260B (µg/kg)	PAHs EPA 8270C (µg/kg)	Asbestos PLM (percentage)
		DROs	MROs	GROs			
B44-0.5	4/3/2023	ND<10	ND<50	0.71	ND	NA	NA
B44-2.5	4/3/2023	ND<10	ND<50	0.58	ND	NA	NA
B45-0.5	4/3/2023	490	1,900	0.67	ND	NA	NA
B45-2.5	4/3/2023	ND<10	ND<50	NA	NA	NA	NA
B45-15	4/3/2023	ND<10	ND<50	0.67	ND	NA	NA
B46-0.5	4/5/2023	ND<10	ND<50	ND<0.2	NA	NA	NA
B46-2.5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B46-5	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
B46-10	4/5/2023	ND<10	ND<50	ND<0.2	ND	NA	NA
Regulatory Screening Levels (mg/kg)					(µg/kg)		(%)
EPA RSLs (Residential Soil)		97*	2,400*	82*	Various	Various	NL

**Notes:**

\* - non-cancer endpoint

bold indicates exceedance of regulatory screening level(s)

DROs - diesel range organics

EPA - United States Environmental Protection Agency

GROs - gasoline range organics

ID - Identification

mg/kg - milligrams per kilogram

MROs - motor oil range organics

NA - not analyzed

ND< - not detected above the laboratory reporting limit

NL - not listed

PAHs - polycyclic aromatic hydrocarbon

PLM - polarized light microscopy

RSLs - United States Environmental Protection Agency Regional Screening Levels (May 2023)

TPH - total petroleum hydrocarbons

VOCs - volatile organic compounds

µg/kg - micrograms per kilogram

**Table 4 – Soil Analytical Results – OCPs & PCBs**

Sample ID	Date Sample Collected	OCPs by EPA Method 8081A (µg/kg)	PCBs by EPA Method 8082 (µg/kg)			
			PCB-1016	PCB-1254	PCB-1260	Other PCBs
B1-0.5	2/18/2023	NA	ND<25	ND<25	ND<25	ND
B7-0.5	2/18/2023	NA	ND<25	ND<25	ND<25	ND
B10-0.5	2/18/2023	NA	ND<25	ND<25	ND<25	ND
B16-0.5	2/18/2023	NA	ND<25	ND<25	ND<25	ND
B19-0.5	2/20/2023	NA	420	250	97	ND
B21-0.5	2/20/2023	NA	ND<100	ND<100	ND<100	ND
B22-0.5	2/18/2023	NA	ND<75	ND<75	ND<75	ND
B23-0.5	2/20/2023	NA	ND<200	ND<200	ND<200	ND
B24-0.5	2/20/2023	NA	ND<200	ND<200	ND<200	ND
B27-0.5	2/20/2023	NA	ND<25	ND<25	ND<25	ND
B28-0.5	2/20/2023	NA	ND<25	ND<25	ND<25	ND
B29-0.5	2/20/2023	NA	ND<200	ND<200	ND<200	ND
B31-0.5	2/20/2023	NA	ND<200	ND<200	ND<200	ND
B32-2.5	2/20/2023	ND	NA	NA	NA	NA
B32-5	2/20/2023	ND	NA	NA	NA	NA
B33-2.5	2/20/2023	ND	NA	NA	NA	NA
B33-5	2/20/2023	ND	NA	NA	NA	NA
B34-2.5	4/5/2023	ND	NA	NA	NA	NA
B34-10	4/5/2023	ND	NA	NA	NA	NA
B34-W-2.5	2/20/2023	ND	NA	NA	NA	NA
B35-2.5	4/5/2023	ND	NA	NA	NA	NA
B35-10	4/5/2023	ND	NA	NA	NA	NA
B37-0.5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B37-2.5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B37-5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B37-10	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B37-15	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B38-0.5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B38-2.5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B38-5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B38-10	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B38-15	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B39-0.5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B39-2.5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B39-5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B39-10	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B39-15	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B43-0.5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B43-2.5	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B43-5	4/5/2023	NA	ND<25	ND<25	ND<25	ND



**Table 4 – Soil Analytical Results – OCPs & PCBs**

Sample ID	Date Sample Collected	OCPs by EPA Method 8081A (µg/kg)	PCBs by EPA Method 8082 (µg/kg)			
			PCB-1016	PCB-1254	PCB-1260	Other PCBs
B43-10	4/5/2023	NA	ND<25	ND<25	ND<25	ND
B43-15	4/5/2023	NA	ND<25	ND<25	ND<25	ND
Composite 1	2/18/2023	ND	NA	NA	NA	NA
Composite 2	2/18/2023	ND	NA	NA	NA	NA
Composite 3	2/18/2023	ND	NA	NA	NA	NA
Composite 4	2/18/2023	ND	NA	NA	NA	NA
Composite 5	2/18/2023	ND	NA	NA	NA	NA
Composite 6	2/18/2023	ND	NA	NA	NA	NA
Composite 7	2/18/2023	ND	NA	NA	NA	NA
Composite 8	2/18/2023	ND	NA	NA	NA	NA
Composite 9	2/18/2023	ND	NA	NA	NA	NA
Composite 10	2/18/2023	ND	NA	NA	NA	NA
Composite 11	2/18/2023	ND	NA	NA	NA	NA
Composite 12	2/18/2023	ND	NA	NA	NA	NA
Regulatory Screening Levels (µg/kg)						
EPA RSLs (Residential Soil)		Various	4,100*	240	240	Various
DTSC HERO HHRA (Residential Soil)		Various	4,000*	NL	NL	Various

Notes:

\* non-cancer endpoint

bold indicates result in exceedance of screening level

DTSC HERO HHRA - Department of Toxic Substances Control Human and Ecological Risk Office Human Health Risk Assessment, Note 3, Recommended Screening Levels, June 2020

EPA - United States Environmental Protection Agency

ID - identification

NA - not analyzed

ND&lt; - not detected above the laboratory reporting limit

NL - not listed

OCPs - organochlorine pesticides

PCBs - polychlorinated biphenyls

RSLs - United States Environmental Protection Agency Regional Screening Levels (May 2023)

µg/kg - micrograms per kilogram

**Table 5 – Soil Sample Analytical Results – Dioxins and Furans**

Sample ID	Date Sampled	EPA Method SW846 8290A (pg/g)					
		1,2,3,7,8,9-HxCDF	1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDF	OCDD	OCDF	Other Dioxins & Furans
B36-0.5	4/5/2023	0.13 J,B,q	0.46 J,B	0.29 J,B,q	2.3 J,B	0.47 J,B,q	ND
Regulatory Screening Levels (pg/g)							
EPA RSLs (Residential Soil)		48	480	480	16000	16,000	Various
DTSC HERO HHRA (Residential Soil)		NL	NL	NL	NL	NL	Various

**Notes:**

B - compound was found in the blank and sample

bold indicates exceedance of regulatory screening level(s)

DTSC HERO HHRA - Department of Toxic Substances Control Human and Ecological Risk Office Human Health Risk Assessment, Note 3, Recommended Screening Levels for Soil (June 2020)

EPA - United States Environmental Protection Agency

ID - Identification

J - Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

pg/g - picograms per gram

ND - not detected above the laboratory reporting limit

NL - not listed

q - the reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

RSLs - United States Environmental Protection Agency Regional Screening Levels (May 2023)

**Table 6 – Soil Vapor Sampling Analytical Results – VOCs**

Sample ID	Date Sampled	EPA Method 8260B (µg/m³)							
		1,2,4-Trimethylbenzene	Ethylbenzene	Freon 12	Tetrachloroethene	Toluene	m,p-Xylenes	o-Xylene	Other VOCs
SV-1-5'	4/6/2023	9	13	32	27	46	52	15	ND
SV-1-15'	4/6/2023	22	31	44	20	92	140	41	ND
SV-1-15' REP	4/6/2023	20	32	42	26	82	135	39	ND
SV-2-5'	4/6/2023	ND<8	ND<8	ND<16	28	39	25	8	ND
SV-2-15'	4/6/2023	11	ND<8	18	26	22	26	ND<8	ND
SV-3-5'	4/6/2023	ND<8	10	ND<16	16	59	37	12	ND
SV-3-15'	4/6/2023	ND<8	ND<8	ND<16	26	29	20	ND<8	ND
SV-4-5'	4/6/2023	ND<8	ND<8	ND<16	30	22	ND<16	ND<8	ND
SV-4-15'	4/6/2023	10	14	ND<16	23	57	50	16	ND
SV-5-5'	4/6/2023	14	15	69	38	44	73	22	ND
SV-5-15'	4/6/2023	16	19	82	91	60	71	21	ND
SV-6-5'	4/6/2023	10	12	ND<16	87	51	49	15	ND
SV-6-15'	4/6/2023	10	ND<8	ND<16	64	33	34	11	ND
Regulatory Screening Levels (µg/m³)									
Modified EPA RSLs (Residential Air) <sup>1</sup>		2,100*	36.7	3,333*	367	173,333*	3,333*	3,333*	Various
Modified DTSC HERO HHRA (Residential Air) <sup>1</sup>		NL	NL	NL	15.3	10,333*	NL	NL	Various

**Notes:**

\* - non-cancer endpoint

bold indicates exceedance of modified EPA RSLs and DTSC HERO HHRA for residential air

DTSC HERO HHRA - Department of Toxic Substances Control Human and Ecological Risk Office Human Health Risk Assessment, Note 3, Recommended Screening Levels for Soil (June 2020-Revised May 2022)

EPA - United States Environmental Protection Agency

ID - Identification

ND< - not detected above the laboratory reporting limit

NL - not listed

<sup>1</sup>Modified EPA RSLs and DTSC HERO HHRA using attenuation factor of 0.03

REP - replicate

RSLs - United States Environmental Protection Agency Regional Screening Levels (May 2023)

µg/m³ - micrograms per cubic meter

VOCs - Volatile Organic Compounds



# FIGURES



NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE. | REFERENCE: USGS, 2021.

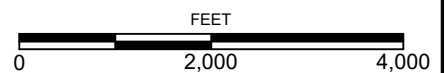
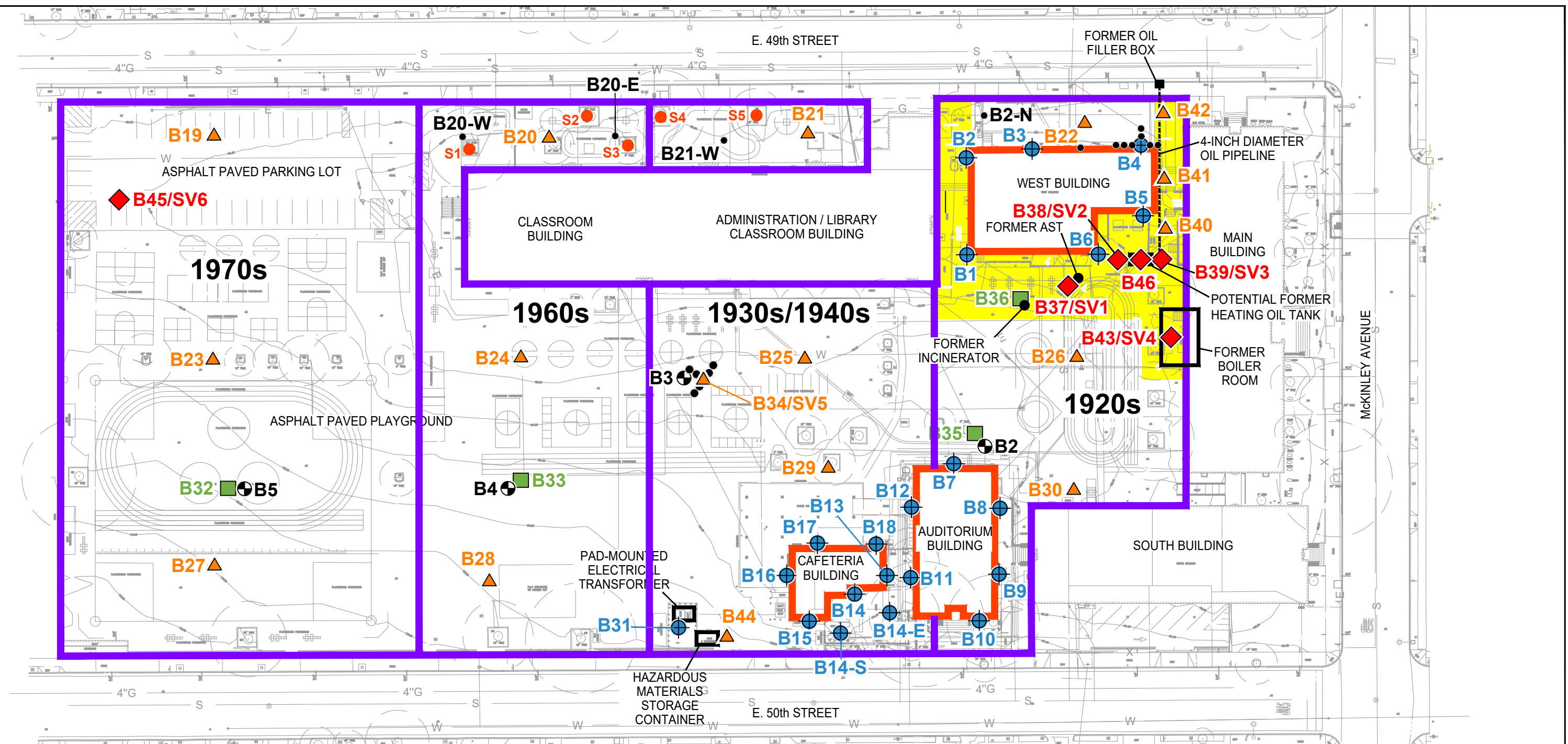


FIGURE 1



211936010.dwg 07/18/2023 (July 2023) GK\_JDP



LEGEND

- |  |     |                             |         |  |
|--|-----|-----------------------------|---------|--|
| PEA / COMP MOD BOUNDARY                  | B31 | SOIL BORING TO 2.5 FEET BGS | B46/SV7 | SOIL AND/OR SOIL VAPOR BORING TO 15'     |
| BUILDINGS TO BE DEMOLISHED               | B42 | SOIL BORING TO 5 FEET BGS   | B5      | GPI 2021 GEOTECHNICAL EXPLORATORY BORING |
| LIMITS OF A FULL SCAN GEOPHYSICAL SURVEY | B36 | SOIL BORING TO 10 FEET BGS  | BGS     | = BELOW GROUND SURFACE                   |
|  | B21 | STEP-OUT BORING             |         |  |
|  | S5  | PLANTER BOX SURFACE SAMPLE  |         |  |

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

REFERENCES:

STANTEC TITLE VICINITY MAP, TOPOGRAPHIC SURVEY, SUBSURFACE UTILITY AND VAULT INVESTIGATION, SHEETS V1-V-10 (6/17/22).  
LAUSD VAULT DIAGRAM AND PLOT PLANS (9/1/1934, 10/1/1934, 1/1/1948).  
TETRA TECH PHASE I ENVIRONMENTAL SITE ASSESSMENT (3/22/22).

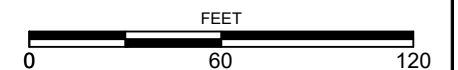
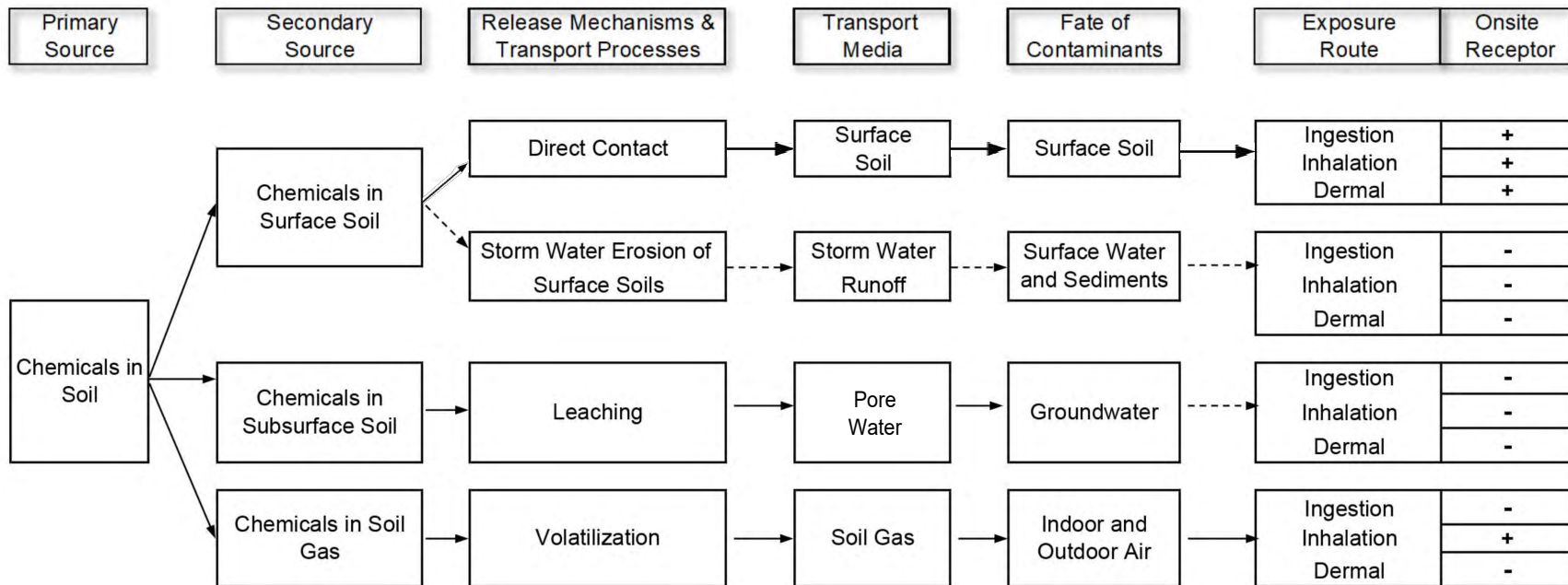


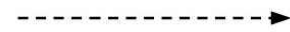
FIGURE 2



#### LEGEND



Complete exposure pathway



Incomplete exposure pathway



Complete exposure route

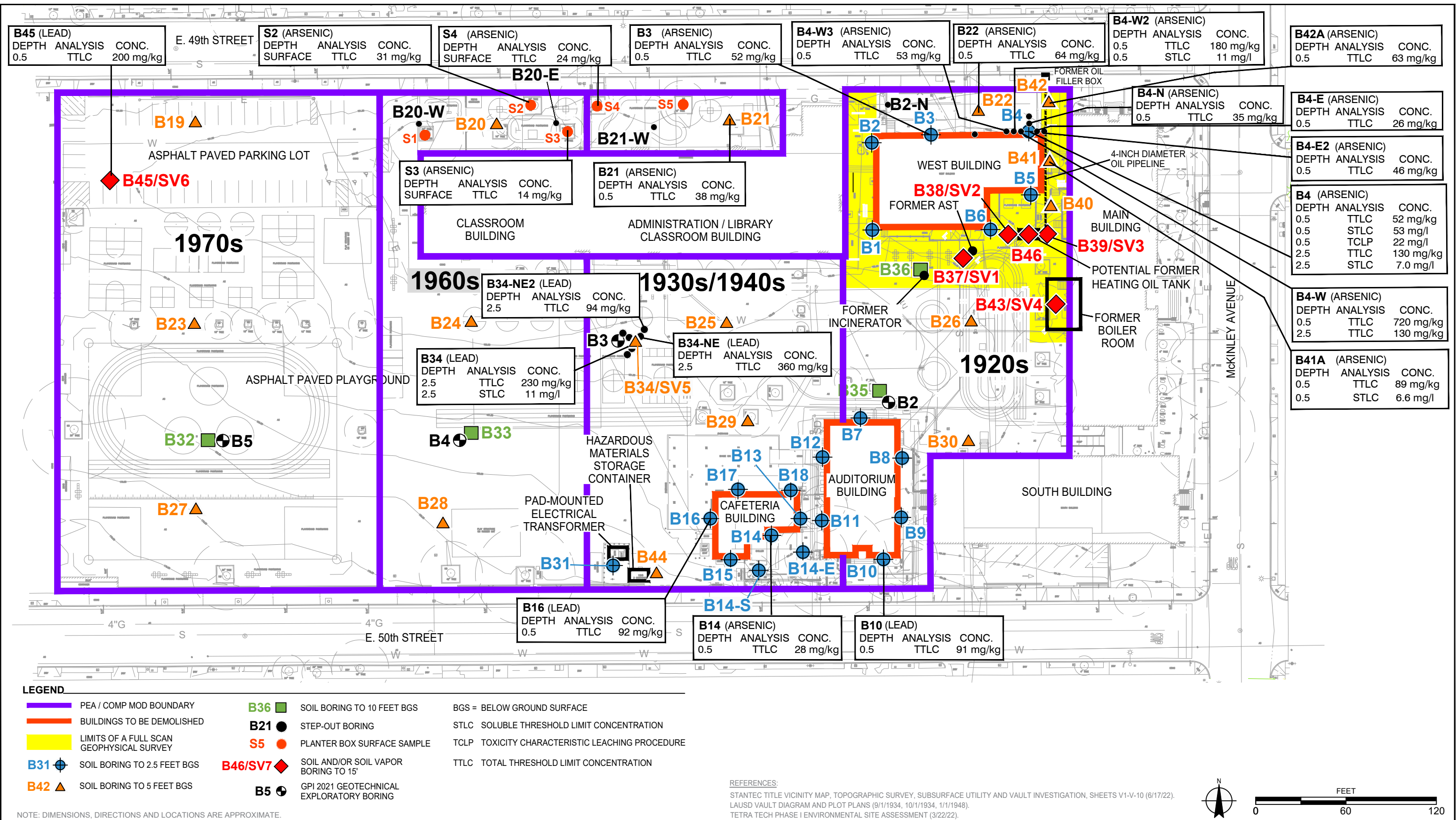


Incomplete exposure route

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

FIGURE 3

211936010.dwg 07/18/2023 (July 2023) GK\_JDP



**B45 (LEAD)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 200 mg/kg

**S2 (ARSENIC)**  
DEPTH ANALYSIS CONC.  
SURFACE TTLIC 31 mg/kg

**S4 (ARSENIC)**  
DEPTH ANALYSIS CONC.  
SURFACE TTLIC 24 mg/kg

**B3 (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 52 mg/kg

**B4-W3 (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 53 mg/kg

**B22 (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 64 mg/kg

**B4-W2 (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 180 mg/kg  
0.5 STLC 11 mg/l

**B42A (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 63 mg/kg

**B4-E (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 26 mg/kg

**B4-E2 (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 46 mg/kg

**B4 (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 52 mg/kg  
0.5 STLC 53 mg/l  
0.5 TCLP 22 mg/l  
2.5 TTLIC 130 mg/kg  
2.5 STLC 7.0 mg/l

**B4-W (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 720 mg/kg  
2.5 TTLIC 130 mg/kg

**B41A (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 89 mg/kg  
0.5 STLC 6.6 mg/l

**B4-N (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 35 mg/kg

**B34-NE2 (LEAD)**  
DEPTH ANALYSIS CONC.  
2.5 TTLIC 94 mg/kg

**B34-NE (LEAD)**  
DEPTH ANALYSIS CONC.  
2.5 TTLIC 360 mg/kg

**B34 (LEAD)**  
DEPTH ANALYSIS CONC.  
2.5 TTLIC 230 mg/kg  
2.5 STLC 11 mg/l

**B16 (LEAD)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 92 mg/kg

**B14 (ARSENIC)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 28 mg/kg

**B10 (LEAD)**  
DEPTH ANALYSIS CONC.  
0.5 TTLIC 91 mg/kg

**B19**

ASPHALT PAVED PARKING LOT

1970s

**B23**

ASPHALT PAVED PLAYGROUND

**B32**

**B27**

**B20-W**

**B20**

**S3 (ARSENIC)**  
DEPTH ANALYSIS CONC.  
SURFACE TTLIC 14 mg/kg

CLASSROOM BUILDING

1960s

**B24**

1930s/1940s

**B3**

**B25**

**B34/SV5**

**B3**

HAZARDOUS MATERIALS STORAGE CONTAINER

PAD-MOUNTED ELECTRICAL TRANSFORMER

**B28**

**B29**

**B13**

**B17**

**B16**

**B15**

**B14-S**

**B14-E**

**B10**

**B12**

**B18**

**B11**

**B9**

**B7**

**B8**

**B1**

**B2**

**B3**

**B4**

**B5**

**B6**

**B7**

**B8**

**B9**

**B10**

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**B207**

**B208**

**B209**

**B210**

**B211**

**B212**

**B213**

**B214**

**B215**

**B216**





# APPENDIX A

## Field Notifications

# Los Angeles Unified School District

## Office of Environmental Health and Safety

ALBERTO M. CARVALHO  
*Superintendent*

CARLOS A. TORRES  
*Director, Environmental Health and Safety*

JENNIFER FLORES  
*Deputy Director, Environmental Health and Safety*

February 1, 2023

TO: Neighbors and Community Members of the  
49<sup>th</sup> Street Elementary School

FROM: Los Angeles Unified School District  
Office of Environmental Health and Safety

REGARDING: Preliminary Environmental Assessment  
49<sup>th</sup> Street Elementary School, Los Angeles, California

The Los Angeles Unified School District (LAUSD) - Office of Environmental Health and Safety (OEHS) would like to provide you with advance notice for a Preliminary Environmental Assessment (PEA) that will be conducted within the boundaries of the 49<sup>th</sup> Street Elementary School, located at 750 East 49<sup>th</sup> Street, Los Angeles, California 90011. This PEA is one of the first steps for the overall comprehensive modernization project planned for the elementary school.

A licensed contractor, working on behalf of LAUSD, will perform the PEA field activities under the oversight of the LAUSD-OEHS. The PEA will consist of a subsurface investigation around the footprints of existing buildings that will be removed, where historical structures were present, or where other recognized environmental concerns were identified. Soil and soil vapor samples collected will be analyzed for various chemicals of concern. If necessary, soil cleanup will be performed prior to construction activities to protect students, faculty, and staff.

Fieldwork will be conducted intermittently and is anticipated to be completed over multiple days between February and December, 2023. Intrusive fieldwork, such as coring of the concrete or asphalt pavement and soil sampling will only be conducted on school holidays or weekends. Fieldwork will be conducted at the Site between the hours of 7AM and 5 PM.

The results of the PEA investigation will be submitted to LAUSD-OEHS in a report for review. The report will include an assessment of whether any of the above listed compounds are present in soil and/or soil vapor at concentrations that would require further delineation, or if a response action will be necessary before the Site is cleared for construction activities. When the OEHS's review is complete, OEHS will issue an official determination with regard to the assessment.

If you have any questions concerning the upcoming environmental investigation or other related activities for the proposed project, please contact Filmon Tesfaslasie, LAUSD-OEHS, Site Assessment Project Manager at (213) 241-4674 (email at [cp-f.tesfaslasie@lausd.net](mailto:cp-f.tesfaslasie@lausd.net)).

# Los Angeles Unified School District

## Office of Environmental Health and Safety

ALBERTO M. CARVALHO  
*Superintendent*

CARLOS A. TORRES  
*Director, Environmental Health and Safety*

JENNIFER FLORES  
*Deputy Director, Environmental Health and Safety*

1 de Febrero de 2023

PARA: Vecinos y Miembros de la Comunidad de la  
Escuela Primaria de la Calle 49

DE: Los Angeles Unified School District  
Office of Environmental Health and Safety

EN LO QUE  
RESPECTA: Evaluación Ambiental Preliminar  
49<sup>th</sup> Street Elementary School, Los Angeles, California

El Los Angeles Unified School District (LAUSD) – Office of Environmental Health and Safety (OEHS) le gustaría avisarle con antelación de una Evaluación Ambiental Preliminar (EAP) que se llevará a cabo dentro de los límites del 49<sup>th</sup> Street Elementary School, ubicado en 750 East 49<sup>th</sup> Street, Los Angeles, California 90011 (en lo sucesivo se denominará como “el Sitio”). Esta EAP es uno de los primeros pasos para el Proyecto general de modernización integral planeado para la escuela primaria.

Un contratista con licencia, trabajando en nombre del LAUSD llevará a cabo las actividades de campo de la EAP bajo la supervisión del LAUSD-OEHS. La EAP consistirá en una investigación del subsuelo alrededor de las huellas de los edificios existentes que se eliminarán, donde estuvieran presentes estructuras históricas o donde se identificaron otras preocupaciones ambientales reconocidas. Muestras de suelo y vapor de suelo se analizarán por varios químicos en cuestión. Si es necesario, la limpieza del suelo se realizará antes de las actividades de construcción para proteger a los estudiantes, el profesorado, y el personal.

El trabajo de campo se llevará a cabo de forma intermitente y se prevé que se complete durante varios días entre Febrero y Diciembre del 2023. El trabajo de campo intrusivo, por ejemplo la perforación de pavimento de hormigón o asfalto y el muestreo del suelo, solo se llevarán a cabo en vacaciones escolares o fines de semana. El trabajo de campo se llevará a cabo en el Sitio entre las 7 A.M. y las 5 P.M.

Los resultados de la investigación del EAP se presentará a LAUSD-OEHS en un informe para su revisión. El informe incluirá una evaluación de si alguno de los compuestos enumerados anteriormente está presente en el suelo y/o en el vapor del suelo a concentraciones que requerirán una mayor delineación, o si será necesaria una acción de respuesta antes de que el Sitio sea autorizado para actividades de construcción. Cuando se complete la revisión de la OEHS, la OEHS emitirá una determinación oficial con respecto a la evaluación.

Si tiene alguna pregunta sobre la próxima investigación ambiental o otras actividades relacionadas con el proyecto propuesto, póngase en contacto con Filmon Tesfaslasie, LAUSD-OEHS, Gerente de Proyecto de Evaluación del Sitio al (213) 241-4674 (correo electrónico: cp-f.tesfaslasie@lausd.net).



# APPENDIX B

## Photographs



**Photograph 1:** View of site, looking west from eastern portion of the site.



**Photograph 2:** View of parking lot, in the northwestern portion of the site.

**FIGURE B-1**





**Photograph 3:** View of boring location B22, in the northeastern portion of the site.



**Photograph 4:** View of backfilled and patched original and co-located boring for B40.

**FIGURE B-2**





**Photograph 5:** View of a typical backfilled and patched borings on-site.



**Photograph 6:** View of backfilled and patched step-out locations for the original boring B34.

**FIGURE B-3**





**Photograph 7:** View of soil screening activities at boring B23



**Photograph 8:** View of soil vapor purging and sampling activities at boring B38/SV2

**FIGURE B-4**





**Photograph 9:** View of 5 and 15 foot soil vapor probes at boring location B34/SV5, prior to patching.



**Photograph 10:** View of drums of soil cuttings and decontamination water located along the southern site boundary.

**FIGURE B-5**





**Photograph 11:** View of West Building, looking northeast from the Auditorium Building.



**Photograph 12:** Looking east with view of planter boxes at the north-central portion of the site.




























**FIGURE B-6**



# APPENDIX C

## Boring Logs

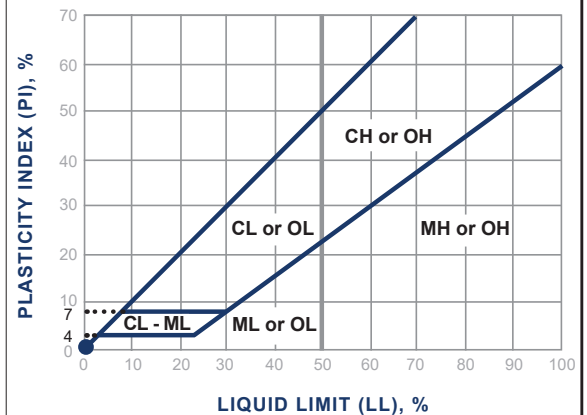
## Soil Classification Chart Per ASTM D 2488

Primary Divisions			Secondary Divisions			
			Group Symbol	Group Name		
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVEL more than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVEL less than 5% fines		GW	well-graded GRAVEL	
				GP	poorly graded GRAVEL	
		GRAVEL with DUAL CLASSIFICATIONS 5% to 12% fines		GW-GM	well-graded GRAVEL with silt	
				GP-GM	poorly graded GRAVEL with silt	
				GW-GC	well-graded GRAVEL with clay	
				GP-GC	poorly graded GRAVEL with clay	
		GRAVEL with FINES more than 12% fines		GM	silty GRAVEL	
				GC	clayey GRAVEL	
				GC-GM	silty, clayey GRAVEL	
	SAND 50% or more of coarse fraction passes No. 4 sieve	CLEAN SAND less than 5% fines		SW	well-graded SAND	
				SP	poorly graded SAND	
		SAND with DUAL CLASSIFICATIONS 5% to 12% fines		SW-SM	well-graded SAND with silt	
				SP-SM	poorly graded SAND with silt	
				SW-SC	well-graded SAND with clay	
				SP-SC	poorly graded SAND with clay	
		SAND with FINES more than 12% fines		SM	silty SAND	
				SC	clayey SAND	
				SC-SM	silty, clayey SAND	
	FINE-GRAINED SOILS 50% or more passes No. 200 sieve	SILT and CLAY liquid limit less than 50%	INORGANIC		CL	lean CLAY
					ML	SILT
					CL-ML	silty CLAY
			ORGANIC		OL (PI > 4)	organic CLAY
					OL (PI < 4)	organic SILT
		SILT and CLAY liquid limit 50% or more	INORGANIC		CH	fat CLAY
					MH	elastic SILT
			ORGANIC		OH (plots on or above "A"-line)	organic CLAY
					OH (plots below "A"-line)	organic SILT
			Highly Organic Soils			PT

## Grain Size

Description		Sieve Size	Grain Size	Approximate Size
Boulders		> 12"	> 12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	Coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	Fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	Coarse	#10 - #4	0.075 - 0.19"	Rock-salt-sized to pea-sized
	Medium	#40 - #10	0.017 - 0.075"	Sugar-sized to rock-salt-sized
	Fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized
Fines		Passing #200	< 0.0029"	Flour-sized and smaller

## Plasticity Chart



## Apparent Density - Coarse-Grained Soil

Apparent Density	Spooling Cable or Cathead		Automatic Trip Hammer	
	SPT (blows/foot)	Modified Split Barrel (blows/foot)	SPT (blows/foot)	Modified Split Barrel (blows/foot)
Very Loose	≤ 4	≤ 8	≤ 3	≤ 5
Loose	5 - 10	9 - 21	4 - 7	6 - 14
Medium Dense	11 - 30	22 - 63	8 - 20	15 - 42
Dense	31 - 50	64 - 105	21 - 33	43 - 70
Very Dense	> 50	> 105	> 33	> 70

## Consistency - Fine-Grained Soil

Consistency	Spooling Cable or Cathead		Automatic Trip Hammer	
	SPT (blows/foot)	Modified Split Barrel (blows/foot)	SPT (blows/foot)	Modified Split Barrel (blows/foot)
Very Soft	< 2	< 3	< 1	< 2
Soft	2 - 4	3 - 5	1 - 3	2 - 3
Firm	5 - 8	6 - 10	4 - 5	4 - 6
Stiff	9 - 15	11 - 20	6 - 10	7 - 13
Very Stiff	16 - 30	21 - 39	11 - 20	14 - 26
Hard	> 30	> 39	> 20	> 26

# BORING LOG EXPLANATION SHEET

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	
	Bulk	Driven						
0								<p>Bulk sample.</p> <p>Modified split-barrel drive sampler.</p> <p>No recovery with modified split-barrel drive sampler.</p> <p>Sample retained by others.</p> <p>Standard Penetration Test (SPT).</p> <p>No recovery with a SPT.</p> <p>Shelby tube sample. Distance pushed in inches/length of sample recovered in inches.</p> <p>No recovery with Shelby tube sampler.</p> <p>Continuous Push Sample.</p> <p>Seepage.</p> <p>Groundwater encountered during drilling.</p> <p>Groundwater measured after drilling.</p>
5			XX/XX					
10								
15							SM	<p>MAJOR MATERIAL TYPE (SOIL):</p> <p>Solid line denotes unit change.</p>
							CL	<p>Dashed line denotes material change.</p> <p>Attitudes: Strike/Dip</p> <p>b: Bedding</p> <p>c: Contact</p> <p>j: Joint</p> <p>f: Fracture</p> <p>F: Fault</p> <p>cs: Clay Seam</p> <p>s: Shear</p> <p>bss: Basal Slide Surface</p> <p>sf: Shear Fracture</p> <p>sz: Shear Zone</p> <p>sbs: Shear Bedding Surface</p>
20								<p>The total depth line is a solid line that is drawn at the bottom of the boring.</p>

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B1</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			09:02	B1-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 4 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
			09:04	B1-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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10										
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FIGURE C- 1

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B2</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			08:50	B2-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 4 inches thick. <b>FILL:</b> Dark brown, dry, loose, silty SAND; fine-grained sand.	
			08:54	B2-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with concrete and bentonite to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 2



DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven							4/3/23	B2-N				
									GROUND ELEVATION	XXXXX' ± (MSL)	SHEET	1	OF	1
									METHOD OF DRILLING	3" Hand Auger (Interphase)				
									DRIVE WEIGHT	-	DROP	-		
									SAMPLED BY	EAC/AC	LOGGED BY	EAC	REVIEWED BY	JA
									DESCRIPTION/INTERPRETATION					
0			13:07	B2-N-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick.					
			13:10	B2-N-2.5					FILL: Brown, dry, loose, silty SAND; fine-grained sand.					
								SP-SM	Light brown, dry, loose, poorly graded SAND with silt; fine-grained sand.					
5			13:13	B2-N-5					Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.					
									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.					
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
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15														

FIGURE C- 3



DEPTH (feet)	SAMPLES Bulk Driven	SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B3</u>	
								GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u>	
								METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u>	
								DRIVE WEIGHT <u>-</u> DROP <u>-</u>	
								SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
								<b>DESCRIPTION/INTERPRETATION</b>	
0		09:23	B3-0.5				SM	FILL: Brown, dry, loose, silty SAND; fine-grained sand.	
		09:25	B3-2.5						
5								Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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15									
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FIGURE C- 4

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B4</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			09:31	B4-0.5				SM	ASPHALT CONCRETE: Approximately 2 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained.	
			09:32	B4-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 5

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u> BORING NO. <u>B4</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0								SM	<b>ASPHALT CONCRETE:</b> Approximately 3 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.		
5			12:35	B4-5							
			12:39	B4-7.5							
10									Total Depth = 7.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 6

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u>	BORING NO. <u>B4-E2</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>EAC/AC</u>	LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>
									<b>DESCRIPTION/INTERPRETATION</b>	
0			10:55	B4-E2-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained sand.	
			10:57	B4-E2-2.5						
			10:59	B4-E2-5						
5									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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15										
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FIGURE C- 7

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven							4/3/23	B4-N				
									GROUND ELEVATION	XXXXX' ± (MSL)	SHEET	1	OF	1
									METHOD OF DRILLING	3" Hand Auger (Interphase)				
									DRIVE WEIGHT	-	DROP	-		
									SAMPLED BY	EAC/AC	LOGGED BY	EAC	REVIEWED BY	JA
									DESCRIPTION/INTERPRETATION					
0			11:32	B4-N-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick.					
			11:34	B4-N-2.5					FILL: Brown, dry, loose, silty SAND; fine-grained sand.					
5			11:36	B4-N-5					Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.					
									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.					
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
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15														
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FIGURE C- 8

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven							4/3/23	B4-N2				
									GROUND ELEVATION	XXXXX' ± (MSL)	SHEET	1	OF	1
									METHOD OF DRILLING	3" Hand Auger (Interphase)				
									DRIVE WEIGHT	-	DROP	-		
									SAMPLED BY	EAC/AC	LOGGED BY	EAC	REVIEWED BY	JA
									DESCRIPTION/INTERPRETATION					
0			12:05	B4-N2-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick.					
			12:07	B4-N2-2.5					FILL: Brown, dry, loose, silty SAND; fine-grained sand.					
			12:09	B4-N2-5										
5									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.					
									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.					
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
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15														

FIGURE C- 9

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.
	Bulk	Driven							4/3/23	B4-W
									GROUND ELEVATION	XXXXX' ± (MSL)
									SHEET	1 OF 1
									METHOD OF DRILLING	3" Hand Auger (Interphase)
									DRIVE WEIGHT	- DROP -
									SAMPLED BY	EAC/AC
									LOGGED BY	EAC
									REVIEWED BY	JA
									DESCRIPTION/INTERPRETATION	
0			11:12	B4-W-0.5				SM	ASPHALT CONCRETE: Approximately 4 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained sand.	
			11:14	B4-W-2.5						
			11:16	B4-W-5						
5									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 10

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u>	BORING NO. <u>B4-W2</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>EAC/AC</u>	LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>
<b>DESCRIPTION/INTERPRETATION</b>										
0			11:26	B4-W2-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained sand.	
			11:28	B4-W2-2.5						
			11:30	B4-W2-5						
5									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
10										
15										
20										

FIGURE C- 11



DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/6/23</u> BORING NO. <u>B4-W3</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3.25" Hand Auger</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							<b>DESCRIPTION/INTERPRETATION</b>		
0			08:13	B4-W3-0.5				SM	<b>FILL:</b> Reddish gray, dry, medium dense, silty SAND; fine-grained sands.		
			08:15	B4-W3-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 5/6/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
5											
10											
15											
20											

FIGURE C- 12

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/6/23</u> BORING NO. <u>B4-W4</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3.25" Hand Auger</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							<b>DESCRIPTION/INTERPRETATION</b>		
0			08:03	B4-W4-0.5				SM	<b>FILL:</b> Reddish gray, dry, medium dense, silty SAND; fine-grained sands.		
			08:06	B4-W4-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 5/6/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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10											
15											
20											

**FIGURE C- 13**

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u> BORING NO. <u>B4A</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			12:18	B4A-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 3 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
			12:20	B4A-2.5						
5			12:22	B4A-5					Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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15										
20										

FIGURE C- 14

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B5</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			11:02	B5-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Light brown, dry, loose, silty SAND; fine-grained sand.	
11:04			B5-2.5						Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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10										
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FIGURE C- 15

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B6</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			11:11	B6-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
			11:12	B6-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 16

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B7</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			12:54	B7-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
			12:55	B7-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 17



DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B8</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			12:48	B8-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
			12:50	B8-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 18

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B9</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			13:20	B9-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
			13:22	B9-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 19

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B10</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			14:20	B10-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Dark brown, dry, loose, silty SAND; fine-grained sand.	
			14:22	B10-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 20

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B11</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			13:07	B11-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
			13:09	B11-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 21

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B12</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			13:02	B12-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Light brown, dry, loose, silty SAND; fine-grained sand.	
13:04			B12-2.5						Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 22

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B13</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			13:36	B13-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
			13:38	B13-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 23

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B14</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			13:40	B14-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
			13:42	B14-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 24



DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven							4/3/23	B14-E				
									GROUND ELEVATION	XXXXX' ± (MSL)	SHEET	1	OF	1
									METHOD OF DRILLING 3" Hand Auger (Interphase)					
									DRIVE WEIGHT	-	DROP	-		
									SAMPLED BY	EAC/AC	LOGGED BY	EAC	REVIEWED BY	JA
									DESCRIPTION/INTERPRETATION					
0			14:40	B14-E-0.5				SM	FILL: Brown, dry, loose, silty SAND; fine-grained sand.					
			14:41	B14-E-2.5										
									Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and cement to ground surface on 4/3/23.					
5									<u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.					
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
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FIGURE C- 25

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u> BORING NO. <u>B14-S</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>
	Bulk	Driven							
0			14:45	B14-S-0.5				SM	<b>DESCRIPTION/INTERPRETATION</b> <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.
			14:47	B14-S-2.5					
5									Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and cement to ground surface on 4/3/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.
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FIGURE C- 26

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B15</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			13:57	B15-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 3 inches thick. <b>FILL:</b> Light brown, dry, loose, silty SAND; fine-grained sand.	
			13:59	B15-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 27

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B16</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			14:09	B16-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
14:10			B16-2.5						Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 28

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B17</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			13:51	B17-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 3 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.	
			13:53	B17-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 29

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B18</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			14:12	B18-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine to medium sand.	
14:14				B18-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 30

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.
	Bulk	Driven							2/20/23	B19
									GROUND ELEVATION	XXXXX' ± (MSL)
									SHEET	1 OF 1
									METHOD OF DRILLING	3" Hand Auger (Interphase)
									DRIVE WEIGHT	- DROP -
									SAMPLED BY	EAC
									LOGGED BY	EAC
									REVIEWED BY	JA
									DESCRIPTION/INTERPRETATION	
0			08:20	B19-0.5				SM	ASPHALT CONCRETE: Approximately 4 inches thick. FILL: Dark brown, dry, loose, silty SAND; fine-grained sand.	
			08:25	B19-2.5						
								SP	Light brown, dry, loose, poorly graded SAND; fine-grained sand.	
5			08:29	B19-5					Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 31



DEPTH (feet)	BULK SAMPLES Driven	SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/20/23</u> BORING NO. <u>B20</u>	
								GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u>	
								METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u>	
								DRIVE WEIGHT <u>-</u> DROP <u>-</u>	
								SAMPLED BY <u>EAC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>	
								<b>DESCRIPTION/INTERPRETATION</b>	
0		07:50	B20-0.5				SM	FILL: Light brown, dry, loose, silty SAND; fine-grained sand.	
		07:52	B20-2.5					Dark brown.	
5		07:58	B20-5					Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite to ground surface on 2/20/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 32

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u> BORING NO. <u>B20-E</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0			09:57	B20-E-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 3 inches thick. <b>FILL:</b> Brown, dry, very loose, silty SAND; fine-grained sand.		
			10:03	B20-E-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 33

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u> BORING NO. <u>B20-W</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0			09:39	B20-W-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 3 inches thick. <b>FILL:</b> Brown, dry, very loose, silty SAND; fine-grained sand.		
			09:41	B20-W-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 34

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/20/23</u> BORING NO. <u>B21</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0			08:03	B21-0.5				SM	FILL: Brown, dry, loose, silty SAND; fine-grained sand.		
			08:05	B21-2.5							
			08:08	B21-5							
5									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite to ground surface on 2/20/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 35

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u> BORING NO. <u>B21-W</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0			10:19	B21-W-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 3 inches thick. <b>FILL:</b> Brown, dry, very loose, silty SAND; fine-grained sand.		
			10:25	B21-W-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 36

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u> BORING NO. <u>B22</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			08:38	B22-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 2 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine to medium-grained sand.	
			08:40	B22-2.5						
5			08:42	B22-5					Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 37

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/20/23</u>	BORING NO. <u>B23</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>EAC</u>	LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>
									<b>DESCRIPTION/INTERPRETATION</b>	
0			08:42	B23-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Dark brown, dry, loose, silty SAND; fine-grained sand.	
			08:44	B23-2.5						
			08:47	B23-5						
5									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.	
									<u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.	
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 38



DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven							2/20/23	B24				
									GROUND ELEVATION	XXXXX' ± (MSL)	SHEET	1	OF	1
									METHOD OF DRILLING	3" Hand Auger (Interphase)				
									DRIVE WEIGHT	-	DROP	-		
									SAMPLED BY	EAC	LOGGED BY	EAC	REVIEWED BY	JA
									DESCRIPTION/INTERPRETATION					
0			09:00	B24-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick.					
			09:05	B24-2.5					FILL: Brown, dry, loose, silty SAND; fine-grained sand.					
			09:10	B24-5										
5									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.					
									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.					
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
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FIGURE C- 39

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
	Bulk	Driven							2/20/23	B25	
									GROUND ELEVATION	XXXXX' ± (MSL)	SHEET 1 OF 1
									METHOD OF DRILLING 3" Hand Auger (Interphase)		
									DRIVE WEIGHT	-	DROP -
									SAMPLED BY	EAC	LOGGED BY EAC REVIEWED BY JA
									DESCRIPTION/INTERPRETATION		
0			09:38	B25-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick.		
			09:40	B25-2.5					FILL: Brown, dry, loose, silty SAND; fine-grained sand.		
			09:47	B25-5				SP	NATIVE: Light brown, dry, loose, poorly graded SAND; fine-grained sand.		
5									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.		
									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.		
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 40

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/20/23</u> BORING NO. <u>B26</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0			10:05	B26-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 4 inches thick. <b>FILL:</b> Dark brown, dry, loose, silty SAND; fine-grained sand.		
			10:09	B26-2.5							
5			10:12	B26-5					Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 41

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
	Bulk	Driven							2/20/23	B27	
									GROUND ELEVATION	XXXXX' ± (MSL)	SHEET 1 OF 1
									METHOD OF DRILLING 3" Hand Auger (Interphase)		
									DRIVE WEIGHT	-	DROP -
									SAMPLED BY	EAC	LOGGED BY EAC REVIEWED BY JA
									DESCRIPTION/INTERPRETATION		
0			12:19	B27-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick.		
			12:21	B27-2.5					FILL: Dark brown, dry, loose, silty SAND; fine-grained sand.		
5			12:23	B27-5				SP	NATIVE: Light brown, dry, loose, poorly graded SAND; fine-grained sand.		
									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.		
									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.		
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 42

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven							2/20/23	B28				
									GROUND ELEVATION	XXXXX' ± (MSL)	SHEET	1	OF	1
									METHOD OF DRILLING	3" Hand Auger (Interphase)				
									DRIVE WEIGHT	-	DROP	-		
									SAMPLED BY	EAC	LOGGED BY	EAC	REVIEWED BY	JA
									DESCRIPTION/INTERPRETATION					
0			11:58	B28-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick.					
			12:03	B28-2.5					FILL: Brown, dry, loose, silty SAND; fine-grained sand.					
5			12:04	B28-5				SP	NATIVE: Light brown, dry, loose, poorly graded SAND; fine-grained sand.					
									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.					
									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.					
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
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FIGURE C- 43

DEPTH (feet)	Bulk Driven	SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/20/23</u> BORING NO. <u>B29</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>		
								DESCRIPTION/INTERPRETATION		
0		10:55	B29-0.5				SM	FILL: Dark brown, dry, loose, silty SAND; fine-grained sand.		
		11:00	B29-2.5							
5		11:03	B29-5				SP	NATIVE: Light brown, dry, loose, poorly graded SAND; fine-grained sand.		
								Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite to ground surface on 2/20/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 44



DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/20/23</u> BORING NO. <u>B30</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0			10:25	B30-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 3 inches thick. <b>FILL:</b> Dark brown, dry, loose, silty SAND; fine-grained sand.		
			10:28	B30-2.5							
5			10:31	B30-5					Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 45

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/20/23</u> BORING NO. <u>B31</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							<b>DESCRIPTION/INTERPRETATION</b>		
0			07:30	B31-0.5				SM	<b>ASPHALT CONCRETE:</b> Approximately 3 inches thick. <b>FILL:</b> Brown, dry, loose, silty SAND; fine-grained sand.		
			07:32	B31-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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FIGURE C- 46

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/20/23</u>	BORING NO. <u>B32</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>3" Hand Auger to 5' bgs; then Direct Push (Interphase)</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>EAC</u>	LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>
<b>DESCRIPTION/INTERPRETATION</b>										
0								SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained sand.	
			12:52	B32-2.5	1.7					
5								SP	NATIVE: Light brown, dry, loose, poorly graded SAND; fine-grained sand.	
			12:56	B32-5	1.5					
								SW	Light brown, dry, loose, well-graded SAND; fine to medium-grained sand.	
10			13:04	B32-10	0.0				Total Depth = 10 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 47

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/20/23</u>	BORING NO. <u>B33</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>3" Hand Auger to 5' bgs; then Direct Push (Interphase)</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>EAC</u>	LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>
DESCRIPTION/INTERPRETATION										
0								SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Dark brown, dry, loose, silty SAND; fine-grained sand.	
			13:39	B33-2.5	2.6					
5								SP	NATIVE: Light brown, dry, loose, poorly graded SAND; fine-grained sand.	
			13:42	B33-5	1.8					
10									Total Depth = 10 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
			13:50	B33-10	0.2					
15										
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FIGURE C- 48

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/20/23</u>	BORING NO. <u>B34</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>3" Hand Auger to 5' bgs; then Direct Push (Interphase)</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>EAC</u>	LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>
									<b>DESCRIPTION/INTERPRETATION</b>	
0								SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained sand.	
14:19				B34-2.5	2.0				Total Depth = 3 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/20/23.  Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
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FIGURE C- 49

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/6/23</u> BORING NO. <u>B34-NE</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3.25" Hand Auger</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							<b>DESCRIPTION/INTERPRETATION</b>		
0			09:21	B34-NE-0.5				SM	<b>FILL:</b> Brown, dry, dense, silty SAND; fine to coarse-grained sand with trace fine gravel.		
			09:26	B34-NE-2.5					Medium dense; fine to medium-grained sands.		
5									Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 5/6/23.		
									<b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.		
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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15											
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FIGURE C- 50

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/6/23</u> BORING NO. <u>B34-NE2</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3.25" Hand Auger</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							<b>DESCRIPTION/INTERPRETATION</b>		
0			09:08	B34-NE2-0.5				SM	<b>FILL:</b> Brown, dry, dense, silty SAND; fine to coarse-grained sand with trace fine to coarse gravel.		
			09:17	B34-NE2-2.5					Fine-grained sands. Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 5/6/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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10											
15											
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FIGURE C- 51



DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/6/23</u> BORING NO. <u>B34-NW</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3.25" Hand Auger</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0			09:31	B34-NW-0.5				SM	<b>FILL:</b> Brown, dry, dense, silty SAND; fine to medium-grained sands. Total Dept = 0.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 5/6/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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10											
15											
20											

FIGURE C- 52

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/6/23</u> BORING NO. <u>B34-NW2</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3.25" Hand Auger</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							<b>DESCRIPTION/INTERPRETATION</b>		
0			09:38	B34-NW2-0.5				SM	<b>FILL:</b> Reddish gray, dry, medium dense, silty SAND; fine-grained sands.		
			09:44	B34-NW2-2.5					Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 5/6/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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10											
15											
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FIGURE C- 53

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/6/23</u> BORING NO. <u>B34-SW</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3.25" Hand Auger</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							<b>DESCRIPTION/INTERPRETATION</b>		
0			09:50	B34-SW-0.5				SM	<b>FILL:</b> Brown, dry, dense, silty SAND; fine-grained sands.		
			09:54	B34-SW-2.5					Medium dense.  Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 5/6/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
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10											
15											
20											

FIGURE C- 54

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/6/23</u> BORING NO. <u>B34-SW2</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3.25" Hand Auger</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0			10:10	B34-SW2-0.5				SM	FILL: Brown, dry, dense, silty SAND; fine to coarse-grained sands.		
			10:21	B34-SW2-2.5					Metal debris around 2 feet bgs. Fine-grained sands. Total Depth = 2.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface.		
5									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.		
10									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
15											
20											

FIGURE C- 55

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/5/23</u> BORING NO. <u>B34/SV5</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>2</u>
									METHOD OF DRILLING <u>Hand Auger to 4' bgs; then Geoprobe 6620 DT Direct Push</u>
									DRIVE WEIGHT <u>-</u> DROP <u>-</u>
									SAMPLED BY <u>AC/SML</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>
<b>DESCRIPTION/INTERPRETATION</b>									
0								SM	ASPHALT CONCRETE: Approximately 3 inches thick.
			08:00	B34-2.5	0.3				FILL: Brown, dry, loose, silty SAND; fine to coarse-grained sands.
5			08:20	B34-5	0.3				Fine-grained sands.
								SP	NATIVE: Light brown, dry, loose, poorly graded SAND; fine-grained sand.
10			08:30	B34-10	0.3				
								SM	Brown, dry, loose, silty SAND; fine-grained sand.
15									
20									Total Depth = 15.5 feet bgs. Groundwater was not encountered during drilling. Soil vapor probes installed at approximately 5 and 15 feet bgs. Backfilled with bentonite and concrete to ground surface on 4/5/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of

FIGURE C- 56


**FIGURE C- 57**  
**750 EAST 49TH STREET**  
**LOS ANGELES, CALIFORNIA**  
**211936010 | 7/23**

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/5/23</u> BORING NO. <u>B35</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>Hand Auger to 4' bgs; then Geoprobe 6620 DT Direct Push</u>
									DRIVE WEIGHT <u>-</u> DROP <u>-</u>
									SAMPLED BY <u>SML/AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>
									<b>DESCRIPTION/INTERPRETATION</b>
0								SM	ASPHALT CONCRETE: Approximately 3 inches thick.
			09:10	B35-2.5	0.1				FILL: Brown, dry, loose, silty SAND; fine-grained sand.
5			09:23	B35-5	0.3				Light brown.
10			09:25	B35-10	0.8				
15									Total Depth = 10 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 4/5/23.
20									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.

FIGURE C- 58



DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
	Bulk	Driven							GROUND ELEVATION	SHEET	OF
									4/5/23		B36
									XXXXX' ± (MSL)	1	1
									Hand Auger to 4' bgs; then Geoprobe 6620 DT Direct Push		
									-	-	
									AC	AC	JA
DESCRIPTION/INTERPRETATION											
0			14:20	B36-0.5	5.5			SW-SM	ASPHALT CONCRETE: Approximately 3 inches thick.		
									FILL: Reddish gray, dry, loose, well-graded SAND with silt; fine to coarse grained sand with trace amounts of fine to coarse gravel.		
			14:23	B36-2.5	2.7			SM	Reddish gray, dry, loose, silty SAND; fine-grained sand.		
5			14:40	B36-5	3.5						
10			14:42	B35-10	3.0			SM	NATIVE: Reddish gray, moist, medium dense, silty SAND; fine-grained sand.		
									Total Depth = 10 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 4/5/23.		
									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.		
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
15											
20											

FIGURE C- 59

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/5/23</u>	BORING NO. <u>B37/SV1</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>2</u>
									METHOD OF DRILLING <u>Hand Auger to 4' bgs; then Geoprobe 6620 DT Direct Push</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>AC</u>	LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>
<b>DESCRIPTION/INTERPRETATION</b>										
0			13:26	B37-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained sand to fine gravel.	
			13:32	B37-2.5	0.4				Fine-grained sand.	
5			13:42	B37-5	0.4					
10			13:44	B37-10	0.8			SP	NATIVE: Light brown, dry, loose, poorly graded SAND; fine-grained sand.	
15			13:46	B37-15	0.8			SW	Light brown, dry, loose, fine to coarse-grained sand.	
20									Total Depth = 15.5 feet bgs. Groundwater was not encountered during drilling. Soil vapor probes installed at approximately 5 and 15 feet bgs. Backfilled with bentonite and concrete to ground surface on 4/5/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of	

FIGURE C- 60



**FIGURE C- 61**  
**750 EAST 49TH STREET**  
**LOS ANGELES, CALIFORNIA**  
**211936010 | 7/23**

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/5/23</u>	BORING NO. <u>B38/SV2</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>2</u>
									METHOD OF DRILLING <u>Hand Auger to 4' bgs; then Geoprobe 6620 DT Direct Push</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>AC</u>	LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>
									<b>DESCRIPTION/INTERPRETATION</b>	
0			12:37	B38-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Reddish brown, dry, loose, silty SAND; fine to coarse-grained sand.	
			12:39	B38-2.5	0.3					
5			12:53	B38-5	1.0				Fine-grained sand.	
10			12:55	B38-10	0.7				Light brown.	
15			12:58	B38-15	0.8					
20									Total Depth = 15.5 feet bgs. Groundwater was not encountered during drilling. Soil vapor probes installed at approximately 5 and 15 feet bgs. Backfilled with bentonite and concrete to ground surface on 4/5/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of	

FIGURE C- 62


**FIGURE C- 63**  
**750 EAST 49TH STREET**  
**LOS ANGELES, CALIFORNIA**  
**211936010 | 7/23**

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/5/23</u> BORING NO. <u>B39/SV3</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>2</u>
									METHOD OF DRILLING <u>Hand Auger to 4' bgs; then Geoprobe 6620 DT Direct Push</u>
									DRIVE WEIGHT <u>-</u> DROP <u>-</u>
									SAMPLED BY <u>AC/SML</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>
									<b>DESCRIPTION/INTERPRETATION</b>
0			10:49	B39-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick.
			10:52	B39-2.5	0.1				FILL: Reddish brown, dry, loose, silty SAND; fine to coarse-grained sand.
5			11:00	B39-5	0.5				Fine-grained sand.
10			11:02	B39-10	0.9				
15			11:05	B39-15	0.6			SP	NATIVE: Light brown, dry, loose, poorly graded SAND; fine-grained sand.
20									Total Depth = 15.5 feet bgs. Groundwater was not encountered during drilling. Soil vapor probes installed at approximately 5 and 15 feet bgs. Backfilled with bentonite and concrete to ground surface on 4/5/23.
									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of

FIGURE C- 64



**FIGURE C- 65**  
**750 EAST 49TH STREET**  
**LOS ANGELES, CALIFORNIA**  
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DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven							2/18/23	B40				
									GROUND ELEVATION	XXXXX' ± (MSL)	SHEET	1	OF	1
									METHOD OF DRILLING	3" Hand Auger (Interphase)				
									DRIVE WEIGHT	-	DROP	-		
									SAMPLED BY	EAC/AC	LOGGED BY	EAC/AC	REVIEWED BY	JA
									DESCRIPTION/INTERPRETATION					
0								SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained sand.					
			10:39	B40-2.5	0.0									
5			11:26	B40-5	0.0									
									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.  Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
10														
15														
20														

FIGURE C- 66



DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/6/23</u> BORING NO. <u>B40A</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3.25" Hand Auger</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0								SM	<p><b>FILL:</b>  Brown, dry, dense, silty SAND; fine to medium-grained sands.  Total Depth = 0.5 feet bgs.  Groundwater was not encountered during drilling.  Backfilled with bentonite and concrete with black dye to ground surface on 5/6/23.</p> <p><b>Notes:</b>  Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.</p> <p>The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.</p>		
5											
10											
15											
20											

FIGURE C- 67

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>2/18/23</u>	BORING NO. <u>B41</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>EAC/AC</u>	LOGGED BY <u>EAC/AC</u> REVIEWED BY <u>JA</u>
<b>DESCRIPTION/INTERPRETATION</b>										
0								SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained sand.	
			10:11	B41-2.5	0.0					
			10:14	B41-5	0.0					
5									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to surface on 2/18/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
10										
15										
20										

FIGURE C- 68

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>5/6/23</u> BORING NO. <u>B41A</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3.25" Hand Auger</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>AC</u> LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>		
	Bulk	Driven							DESCRIPTION/INTERPRETATION		
0			08:37	B41A-0.5				SM	<b>FILL:</b> Brown, dry, medium dense, silty SAND; fine to medium-grained sands. Total Depth = 0.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 5/6/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.		
5											
10											
15											
20											

FIGURE C- 69

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
	Bulk	Driven							2/18/23	B42				
									GROUND ELEVATION	XXXXX' ± (MSL)	SHEET	1	OF	1
									METHOD OF DRILLING	3" Hand Auger (Interphase)				
									DRIVE WEIGHT	-	DROP	-		
									SAMPLED BY	EAC/AC	LOGGED BY	EAC/AC	REVIEWED BY	JA
									DESCRIPTION/INTERPRETATION					
0				B42-2.5	0.0			SM	ASPHALT CONCRETE: Approximately 3 inches thick.					
									FILL: Dark brown, dry, loose, silty SAND; fine-grained sand.					
5				B42-5	0.0				Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 2/18/23.					
									Notes: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.					
									The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.					
10														

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u> BORING NO. <u>B42A</u> GROUND ELEVATION <u>XXXXX' ± (MSL)</u> SHEET <u>1</u> OF <u>1</u> METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u> DRIVE WEIGHT <u>-</u> DROP <u>-</u> SAMPLED BY <u>EAC/AC</u> LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>	
	Bulk	Driven							DESCRIPTION/INTERPRETATION	
0			13:44	B42A-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained sand.	
			13:46	B42A-2.5						
5			13:48	B42A-5					Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
10										
15										
20										

FIGURE C- 71

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/5/23</u>	BORING NO. <u>B43/SV4</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>2</u>
									METHOD OF DRILLING <u>Hand Auger to 4' bgs; then Geoprobe 6620 DT Direct Push</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>AC</u>	LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>
									<b>DESCRIPTION/INTERPRETATION</b>	
0			15:15	B43-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, loose, silty SAND; fine-grained sand with trace fine gravel.	
			15:20	B43-2.5	2.7					
5			15:28	B43-5	1.0			SM	Light brown, dry, loose, silty SAND; fine-grained sands.	
10			15:30	B43-10	0.9				Brown.	
15			15:35	B43-15	1.6					
20									Total Depth = 15.5 feet bgs. Groundwater was not encountered during drilling. Soil vapor probes installed at approximately 5 and 15 feet bgs. Backfilled with bentonite and concrete to ground surface on 4/5/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of	

FIGURE C- 72


**FIGURE C- 73**  
**750 EAST 49TH STREET**  
**LOS ANGELES, CALIFORNIA**  
**211936010 | 7/23**

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u>	BORING NO. <u>B44</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>3" Hand Auger (Interphase)</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>EAC/AC</u>	LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>
									<b>DESCRIPTION/INTERPRETATION</b>	
0			14:16	B44-0.5	3.9			SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, very loose, silty SAND; fine-grained sand.	
			14:18	B44-2.5	4.5					
			14:20	B44-5	2.3					
5									Total Depth = 5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents.	
10										
15										
20										

FIGURE C- 74



DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/3/23</u>	BORING NO. <u>B45/SV6</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>2</u>
									METHOD OF DRILLING <u>Hand Auger to 5' bgs; then Geoprobe 6620 DT Direct Push</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>AC</u>	LOGGED BY <u>EAC</u> REVIEWED BY <u>JA</u>
									<b>DESCRIPTION/INTERPRETATION</b>	
0			08:00	B45-0.5	0.1			SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Reddish brown, dry, loose, silty SAND; fine-grained sand. @ 1': Brick material encountered.	
			08:05	B45-2.5	0.1					
5			08:15	B45-5	0.1			SP-SM	Brown, dry, loose, poorly graded SAND with silt; fine-grained sand.	
								SP	Light brown, dry, very loose, poorly graded SAND; fine-grained sand.	
10			08:30	B45-10	0.1					
15			08:35	B45-15	0.2					
20									Total Depth = 15.5 feet bgs. Groundwater was not encountered during drilling. Soil vapor probes installed at approximately 5 and 15 feet bgs. Backfilled with bentonite and concrete to ground surface on 4/3/23.  <u>Notes:</u> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of	

FIGURE C- 75



Geotechnical & Environmental Sciences Consultants

**FIGURE C- 76**

**750 EAST 49TH STREET**  
**LOS ANGELES, CALIFORNIA**

**211936010 | 7/23**

DEPTH (feet)	SAMPLES		SAMPLE TIME	SAMPLE ID	PID READING (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/5/23</u>	BORING NO. <u>B46</u>
	Bulk	Driven							GROUND ELEVATION <u>XXXXX' ± (MSL)</u>	SHEET <u>1</u> OF <u>2</u>
									METHOD OF DRILLING <u>Hand Auger to 4' bgs; then Geoprobe 6620 DT Direct Push</u>	
									DRIVE WEIGHT <u>-</u>	DROP <u>-</u>
									SAMPLED BY <u>AC/SML</u>	LOGGED BY <u>AC</u> REVIEWED BY <u>JA</u>
<b>DESCRIPTION/INTERPRETATION</b>										
0			09:58	B46-0.5				SM	ASPHALT CONCRETE: Approximately 3 inches thick. FILL: Brown, dry, loose, silty SAND; fine to coarse-grained sand.	
			10:00	B46-2.5	0.2					
5			10:13	B46-5	0.2					
10			10:15	B46-10	0.5				Light brown. Void from approximately 10 to 11.5 feet bgs.	
15			10:25	B46-15	0.8					
20									Total Depth = 15.5 feet bgs. Groundwater was not encountered during drilling. Backfilled with bentonite and concrete with black dye to ground surface on 4/5/23.  <b>Notes:</b> Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.  The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design	

**FIGURE C- 77**


**FIGURE C- 78**  
**750 EAST 49TH STREET**  
**LOS ANGELES, CALIFORNIA**  
**211936010 | 7/23**



# APPENDIX D

## Geophysical Survey Report



February 28, 2023

Project/Invoice No. 23-058

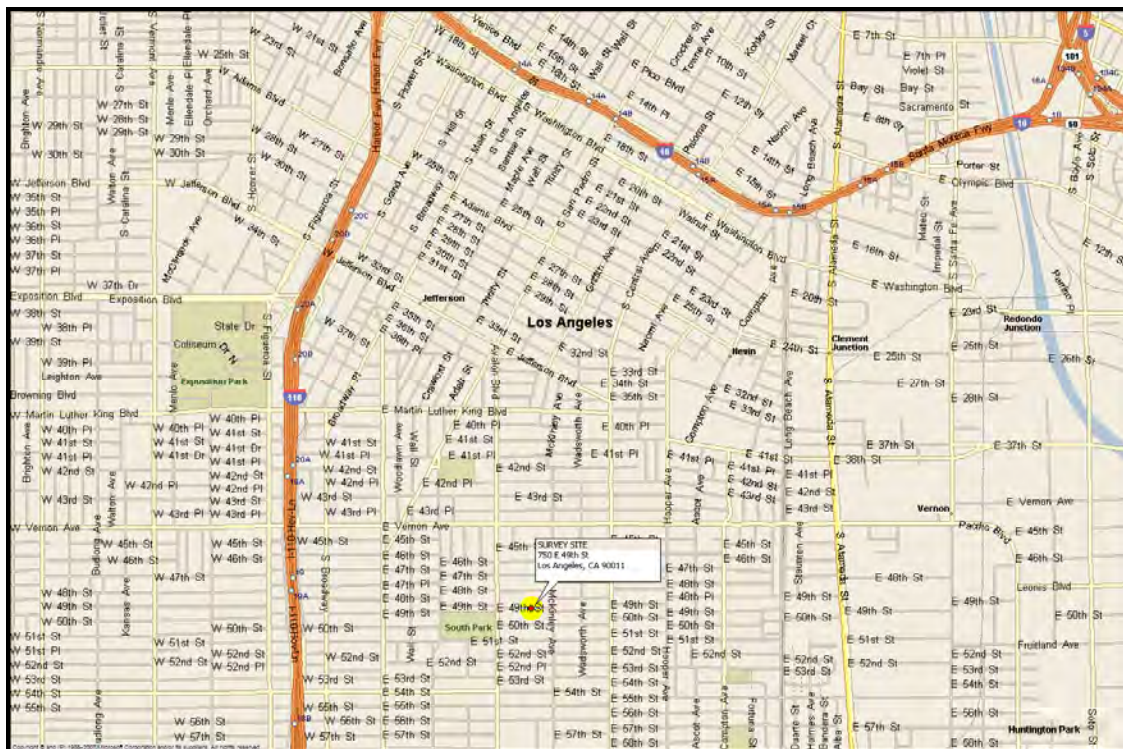
**Ninyo & Moore**  
475 Goddard, Suite 200  
Irvine, California 92618

Attn: **Dennis Fee**

Re: Geophysical Investigation Report, 49th Street Elementary School; 750 East 49th Street, Los Angeles, California 90043

This report is to present the results of our geophysical survey carried out at 49th Street Elementary School located at 750 East 49th Street, Los Angeles, California 90043 (Figure 1). The survey was performed on February 18<sup>th</sup> & 20<sup>th</sup>, 2023, and its primary purpose was to detect and delineate, insofar as possible, underground fuel storage tanks (UST), a former incinerator, evidence of a former above ground storage tank (AST), and a former boiler room. A secondary purpose of the survey was to detect and delineate, insofar as possible, pipes, conduits, utilities, and other underground obstructions within a five (5) foot radius of forty-six (46) proposed boreholes and three (3) alternate drill locations.

A combination of electromagnetic induction (EM), magnetometry, and ground penetrating radar (GPR) were brought to the field in anticipation of use. Utility locators with line tracing capabilities were also used where applicable.



**FIGURE 1. Site location map.**

**Survey Design** – The area of investigation for the UST, AST, Boiler Room and incinerator included the northeastern portion of the school with a focus around the West Building. The forty-six boreholes and three alternate drill locations were located throughout the campus with their exact locations indicated in the field by the client.

For all survey objectives, the best use of time was achieved by systematically free-traversing with the instruments while monitoring them manually, continuously, and in real-time to determine which responses were significant and due to true subsurface targets, and which were due to other non-target or above-ground features and must be ignored (an example being nearby rebar reinforced concrete and ADA Ramp). In these situations, the free-traversing method is advantageous in that it allows for immediate detection of anomalous objects and facilitates the opportunity to investigate them further despite the obstructions and without the need to first download data. Where space was available for traversing, the EM devices, magnetic gradiometer, and GPR were traversed systematically over the survey areas in multiple, organized directions. Other traverses were taken for detailing and confirmation where anomalous conditions were found.

In addition, the line tracers were used to impress signals onto pipes, generally through accessible risers and tracer wires when present, to delineate the lines' locations and orientations. The instruments were also used in passive mode, configured to detect 60 Hz electrical signals and other common radio-frequency signals found in active electrical and communication lines.

A Geonic's model EM61 and a Fischer M-Scope was used for the EM sampling. A Sensors & Software Noggin Ground Penetrating Radar unit with a 500 MHz antenna produced the radar images. The magnetic gradiometer was a Schonstedt GA-52, and a Metrotech 9890 and RIDGID SR-60 SeekTech utility locator rounded out the tools applied.

**Brief Description of the Geophysical Methods Applied** – The EM61 instrument is a high resolution, time-domain device for detecting buried conductive objects. It consists of a powerful transmitter that generates a pulsed primary magnetic field when its coils are energized, which induces eddy currents in nearby conductive objects. The decay of the eddy currents, following the input pulse, is measured by the coils, which in turn serve as receiver coils. The decay rate is measured for two coils, mounted concentrically, one above the other. By making the measurements at a relatively long time interval (measured in milliseconds) after termination of the primary pulse, the response is nearly independent of the electrical conductivity of the ground. Thus, the instrument is a super-sensitive metal detector. Due to its unique coil arrangement, the response curve is a single well-defined positive peak directly over a buried conductive object. This facilitates quick and accurate location of targets.

The M-Scope device energizes the ground by producing an alternating primary magnetic field with AC current in a transmitting coil. If conducting materials are within the area of influence of the primary field, AC eddy currents are induced to flow in the conductors. A receiving coil senses the secondary magnetic field produced by these eddy currents, and outputs the response as anomalous conditions. The strength of the secondary field is a function of the conductivity of the object; say a pipe, tank or cluster of drums, its size, and its depth and position relative to the instrument's two coils. Conductive objects, to a depth of approximately 7 feet below ground surface (bgs) for the M-Scope are sensed. The device is also somewhat focused; that is, it is more sensitive to conductors below the instrument than they are to conductors off to the side.

The GPR instrument beams energy into the ground from its transducer/antenna, in the form of electromagnetic waves. A portion of this energy is reflected back to the antenna at a boundary in the subsurface across which there is an electrical contrast. The instrument produces a continuous record of the reflected energy as the antenna is traversed across the ground surface. The greater the electrical contrast, the higher the amplitude of the returned energy. The radar wave travels at a velocity unique to the material properties of the ground being investigated, and when these velocities are known, the two-way travel times can be converted to depth. The depth of penetration and image resolution produced are a function of ground electrical conductivity and dielectric constant.

The magnetic gradiometer has two flux gate magnetic fixed sensors that are passed closely to and over the ground. When not in close proximity to a magnetic object, that is, only in the earth's field, the instrument emits a sound signal at a low frequency. When the instrument passes over a buried iron or steel object, so that locally there is a high magnetic gradient, the frequency of the emitted sound increases. The frequency is a function of the gradient between the two sensors.

The line locator is used to passively detect energized high voltage electric lines and electrical conduit (50-60 Hz), VLF signals (14-22 kHz), as well as to actively trace other utilities. Where risers are present, the utility locator transmitter can be connected directly to the object, and a signal (9.8-82 kHz) is sent traveling along the conductor, pipe, conduit, etc. In the absence of a riser, the transmitter can be used to impress an input signal on the utility by induction. In either case, the receiver unit is tuned to the input signal, and is used to actively trace the signal along the pipe's surface projection.

**Interpretation and Conclusions** – The interpretation took place in real time as the survey progressed, and accordingly, the findings of our investigation were marked on the ground cover at the site with spray chalk, reported directly to the client, and are further documented with a site map of notable findings (Figure 2) and site photographs of notable findings and proposed boreholes (Figures 3-50). Note that boreholes **B11, B13 & B14** were not cleared as they had already been hand augured before subsurface survey personnel could scan the locations.

Detected items were painted out on site and are additionally highlighted in all accompanying graphics in coordinated colors including red for electric, orange for communication, blue for water, green for sewer and drain, yellow for gas and former fuel lines, and white for unknown lines. Additionally, orange was used to mark out the extent of a deep soil disturbance, yellow was used to mark out a shallow soil disturbance and pink was used to mark out a shallow EM anomaly. Please review the site map and site photographs for the locations and orientations of all detected items.

No evidence of a former incinerator was detected within the survey area (Figure 2 & 37).

No evidence of a former AST was detected within the survey area (Figures 2 & 38).

A shallow soil disturbance was detected in the survey area measuring approximately 10 feet 8 inches by 6 feet 6 inches and was located adjacent to the west side of the Main Building near the reported location of a former boiler room (Figures 2 & 49). This anomaly coincides with the reported location of the former boiler room and is most likely a result of the removal of the former boiler room footing or foundations.

A deep soil disturbance was detected in the survey area near the south edge of the ADA Ramp measuring approximately 11 feet 9 inches by 11 feet 6 inches (Figures 2 & 46-50). This anomaly is near the reported



location of the UST however due to the presence of the highly reinforced ADA Ramp overlying part of the anomaly we are unable to determine if any large metallic anomalies lay within the deep soil disturbance. Additionally the ADA Ramp prevented full and complete radar passes across the anomaly and reduced our detection capabilities near the ramp. Therefore while no UST was detected we cannot say with 100% certainty that a UST is not present underlying or immediately adjacent to the ADA Ramp.

A former fuel line was also detected within the survey area leading to a concrete patch within the sidewalk north of the survey area (Figures 2 & 50). This fuel line could only be traced from the concrete patch south into the survey area up to the canopy connecting the West Building and the Main Building. After the canopy the ADA Ramp prevented detection of the fuel line as full radar traverses could not traverse the potential path of the fuel line.

An EM anomaly measuring approximately 4 feet 6 inches in diameter was detected just west of the base of the ADA Ramp and Deep Soil Disturbance (Figures 2 & 46-47). This anomaly appears to be a near surface metallic object at approximately 2-3 feet bgs. Further information about this anomaly could not be ascertained as it was not visible on radar and the nearby concrete encased electrical conduit and ADA Ramp masked the presence of any deeper metallic responses.

The forty-nine proposed boreholes were either clear as where originally positioned by the client or were moved slightly to better avoid detected obstructions. In their final locations all were marked in white with a yellow “SSS” to indicate that each had been checked by company personnel.

**Limitations and Further Recommendations** - It should be understood that limitations inherent in geophysical instruments and/or surveying techniques exist at all sites, and nearly all sites exhibit conditions under which such might not perform optimally. Consequently, the detection of buried objects in all circumstances **cannot be guaranteed**. Such limitations are numerous and include, but are not limited to, rebar-reinforced ground cover, abrupt changes in ground cover type, above-ground obstacles preventing full traverses or traverses in one direction only, above-ground conductive objects interfering with instrument signal, nearby powerlines or EM transmitters, highly conductive background soil conditions, limited GPR penetration, non-metallic targets, shallower or larger objects shielding deeper or smaller targets, tracing signal jumping from one line to another, and inaccessible risers, cleanouts, valve boxes, and manholes. If one or more geophysical instrument is rendered ineffective and cannot be utilized, the quality of the survey can be somewhat degraded.

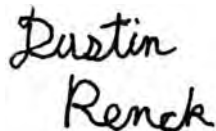
For the above reasons, and in the interest of maximum safety, we encourage our clients to take advantage of Underground Service Alert (USA), Dig Alert, or other similar services, when possible. Furthermore, we recommend hand-auguring and the use of a drilling method known as air knifing or vacuum extraction, when feasible or if applicable to this project. These methods may significantly limit damage to underground pipes, conduits, and utilities that might not have been detectable during the course of this survey. Please bear in mind, that geophysical surveying is only one of several levels of protection that is available to our clients.

SubSurface Surveys may include maps in some reports. While they are an accurate general representation of the site and our findings, they are not of engineering quality (i.e., measured and mapped by a licensed land surveyor).

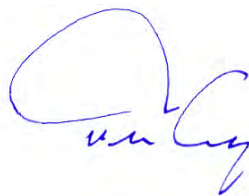
SubSurface Surveys and Associates makes no guarantee either expressed or implied regarding the accuracy

of the findings and interpretations present. And, in no event will SubSurface Surveys and Associates be liable for any direct, indirect, special, incidental, or consequential damages resulting from interpretations and opinions presented herewith.

All data generated on this project are in confidential file in this office, and are available for review by authorized persons at any time. The opportunity to participate in this investigation is very much appreciated. Please call, if there are questions.

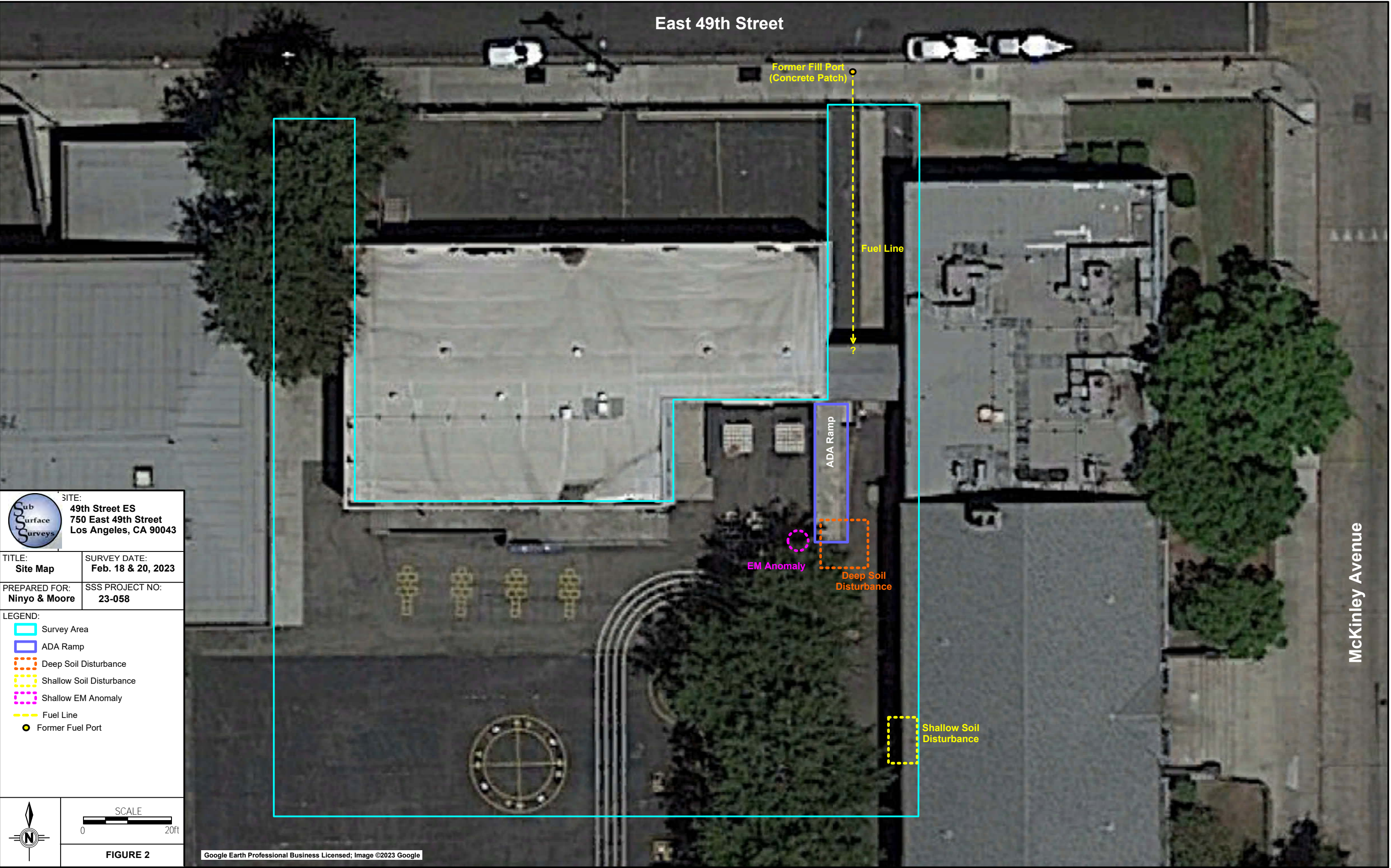
A handwritten signature in black ink that reads "Dustin Renck". The signature is written in a cursive, slightly slanted style.

Dustin Renck  
Staff Geophysicist, SubSurface Surveys

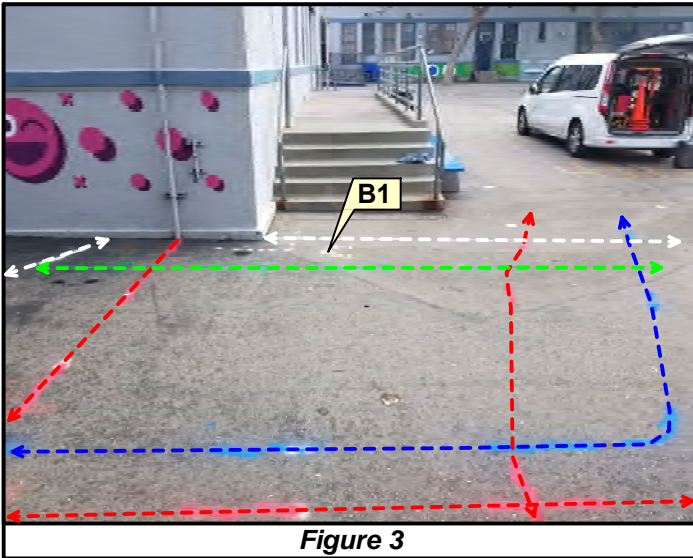
A handwritten signature in blue ink that reads "Travis Crosby". The signature is written in a cursive, slightly slanted style.

Travis Crosby  
CA State Geophysics Registration GP1044  
Senior Geophysicist, SubSurface Surveys

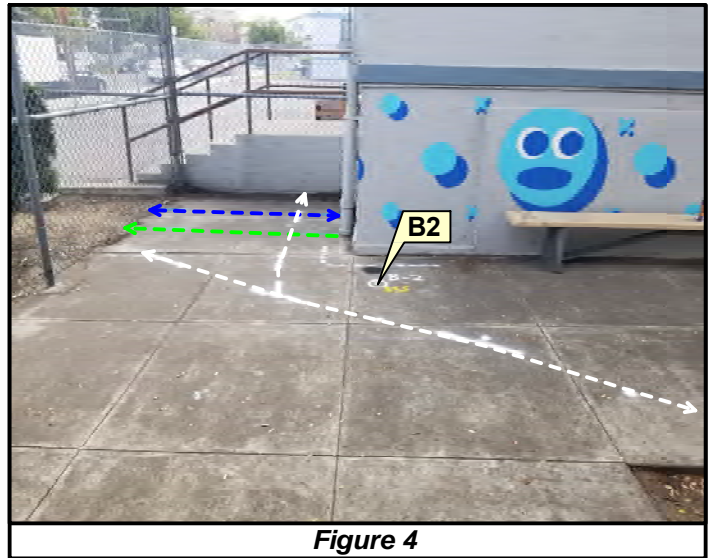




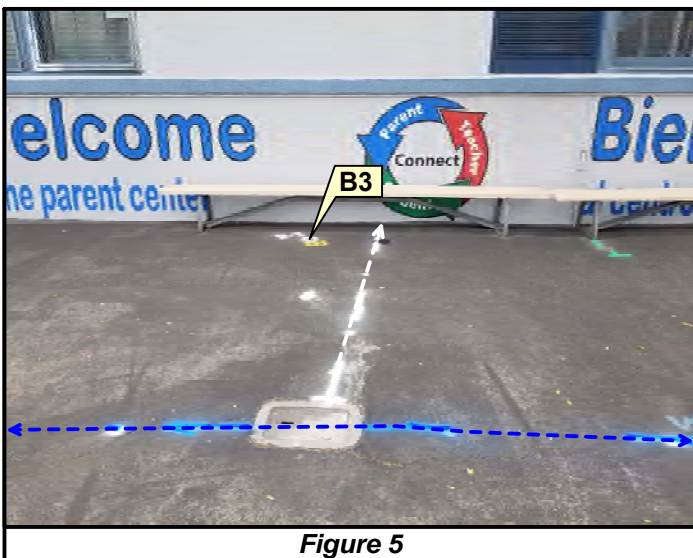




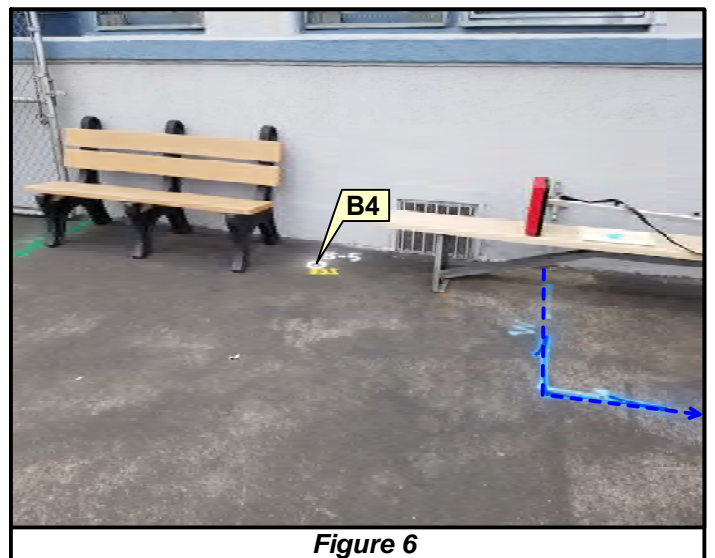
**Figure 3**



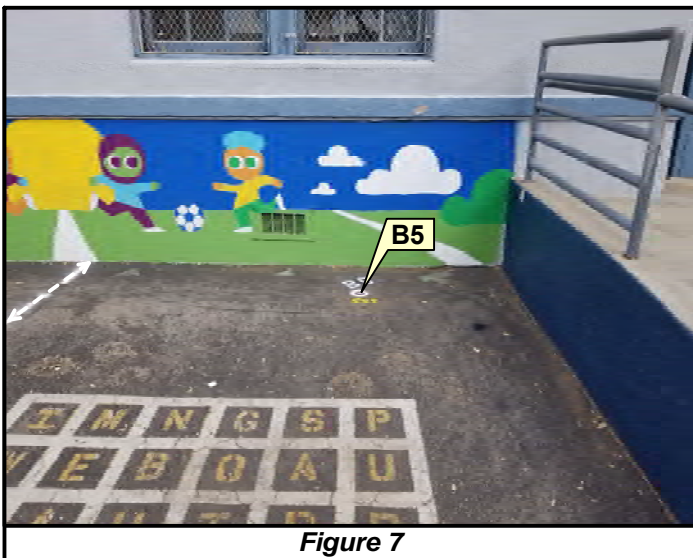
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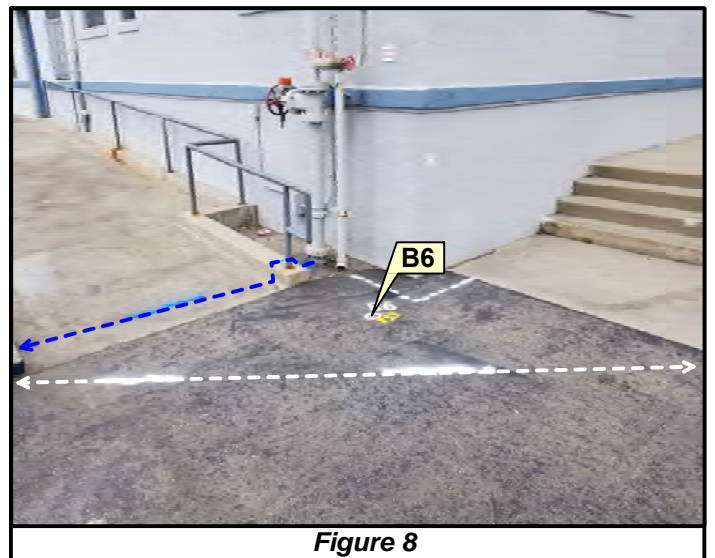
**Figure 5**



**Figure 6**



**Figure 7**



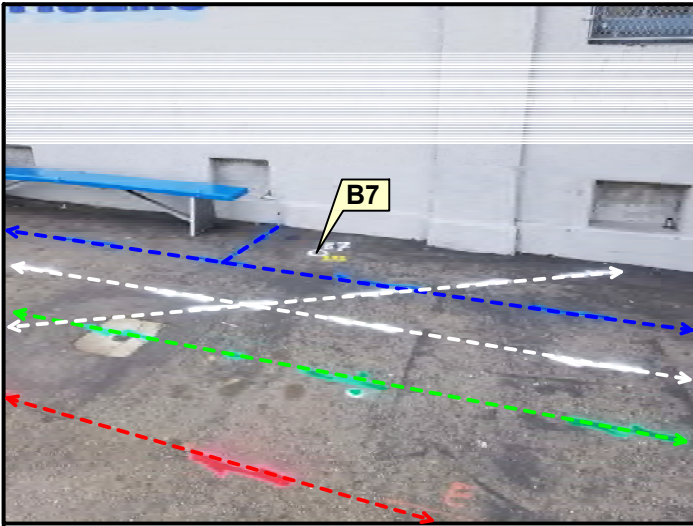
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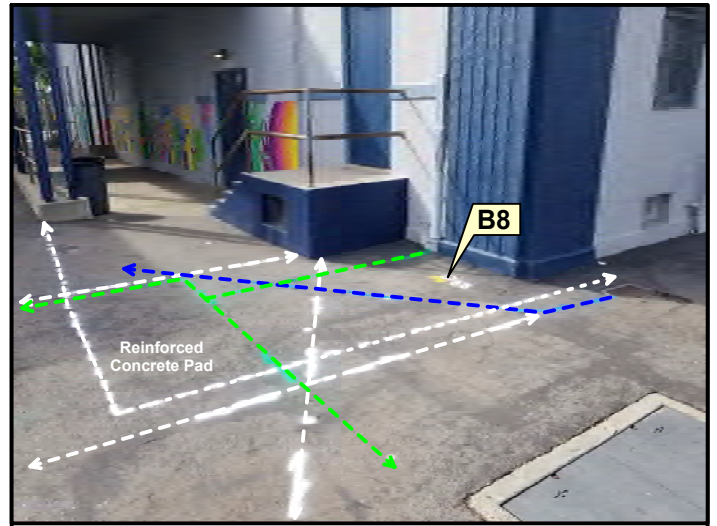
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49th Street Elementary School  
750 East 49th Street  
Los Angeles, California 90043

**TITLE:**  
Site Photographs  
**PREPARED FOR:**  
Ninyo & Moore

**SURVEY DATE:**  
February 18 & 20, 2023  
**SSS PROJECT NO:**  
23-058



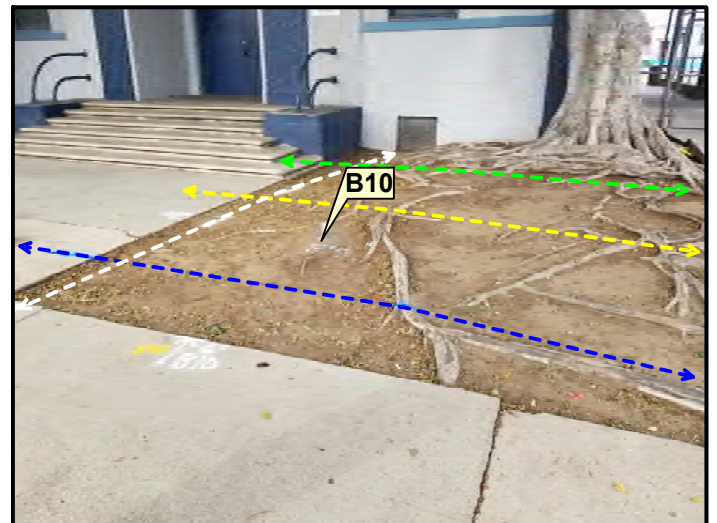
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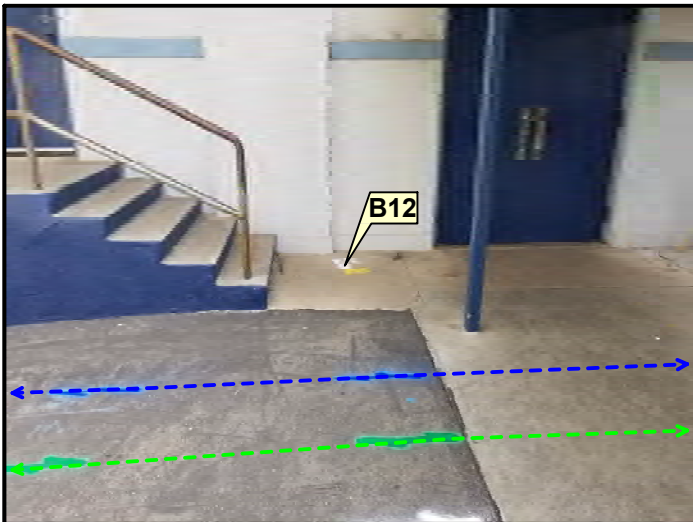
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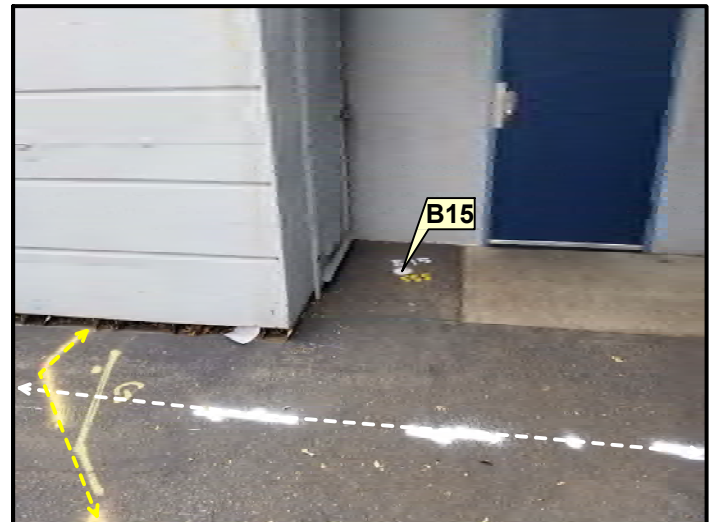
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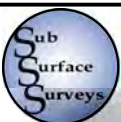
**Figure 12**



**Figure 13**



**Figure 14**



**SITE:**  
49th Street Elementary School  
750 East 49th Street  
Los Angeles, California 90043

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Site Photographs  
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23-058





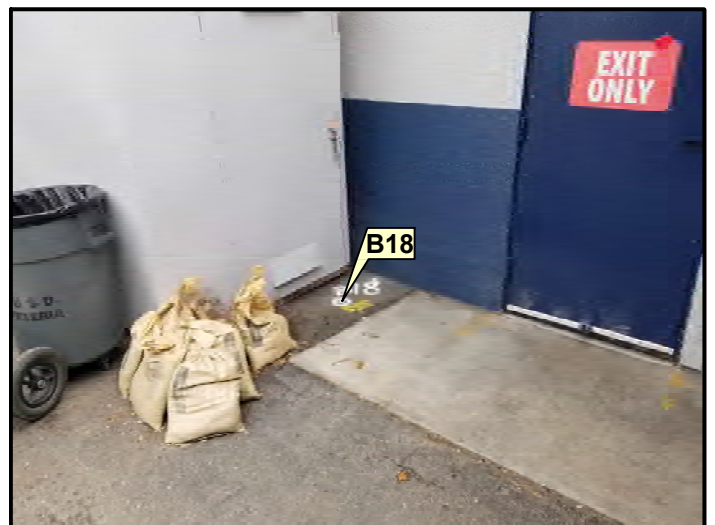
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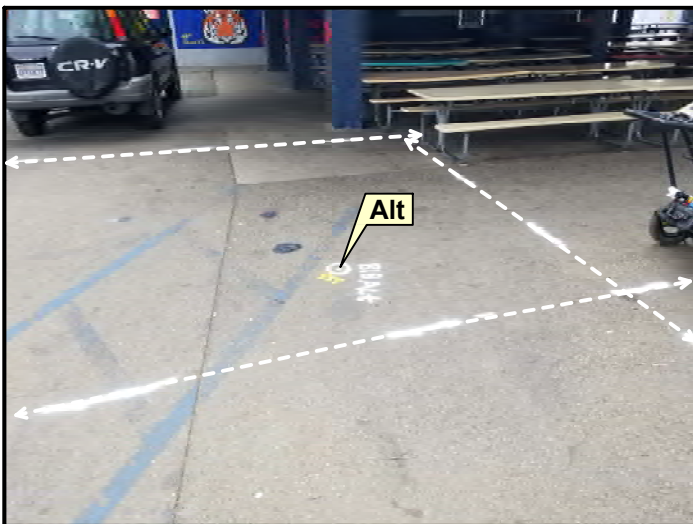
**Figure 16**



**Figure 17**



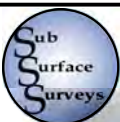
**Figure 18**



**Figure 19**



**Figure 20**



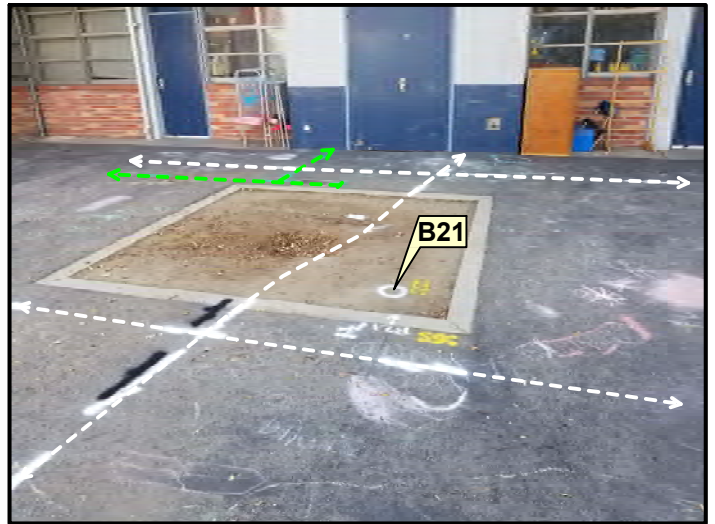
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750 East 49th Street  
Los Angeles, California 90043

**TITLE:**  
Site Photographs  
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Ninyo & Moore

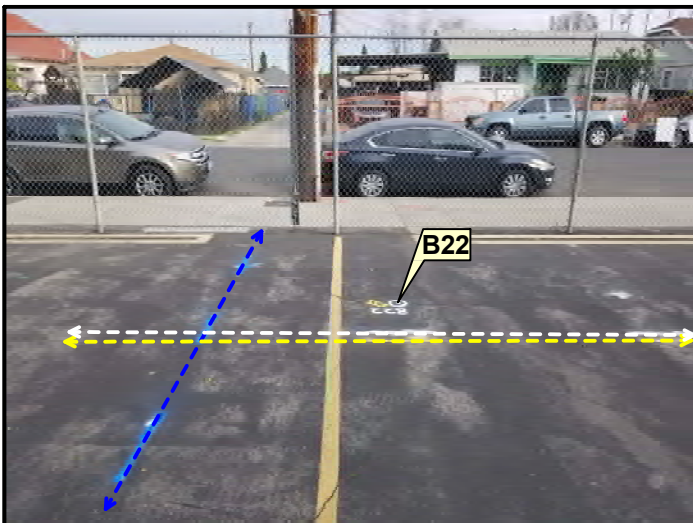
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February 18 & 20, 2023  
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23-058



**Figure 21**



**Figure 22**



**Figure 23**



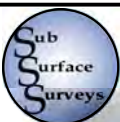
**Figure 24**



**Figure 25**



**Figure 26**

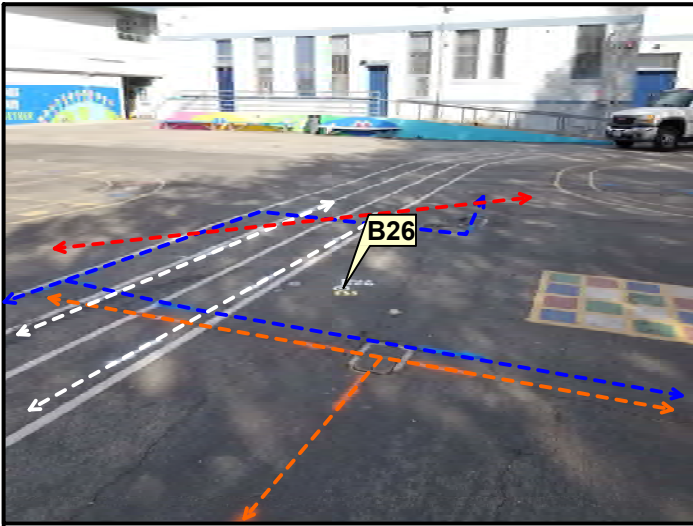


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23-058





**Figure 27**



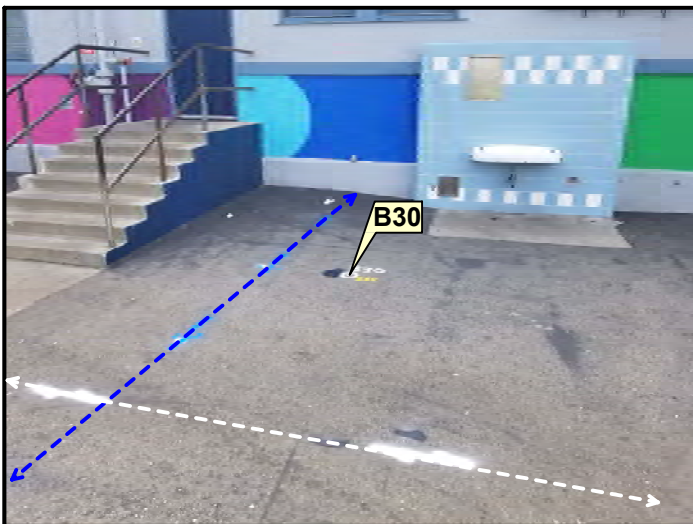
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**Figure 29**



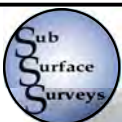
**Figure 30**



**Figure 31**



**Figure 32**



**SITE:**  
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750 East 49th Street  
Los Angeles, California 90043

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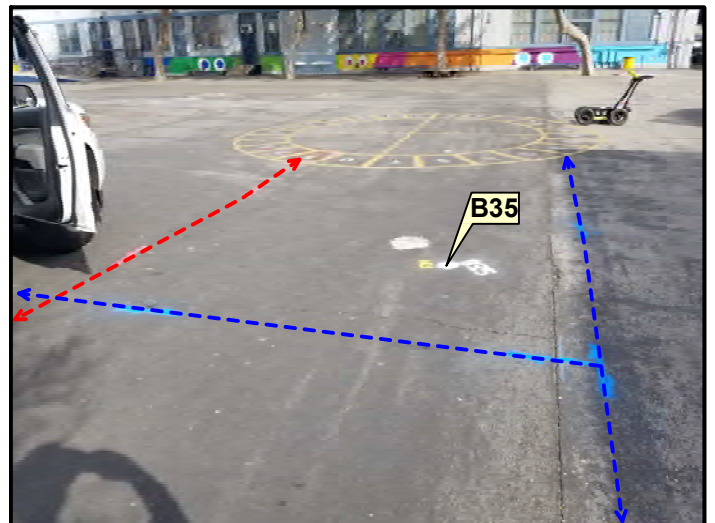
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**Figure 34**



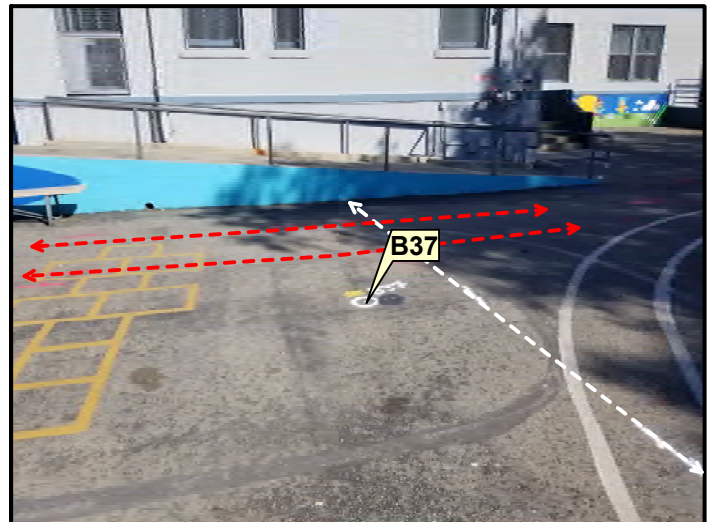
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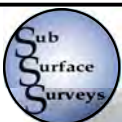
**Figure 36**



**Figure 37**



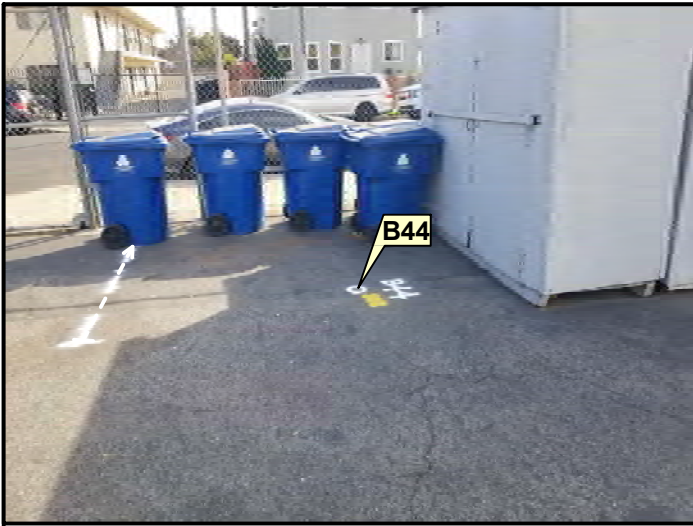
**Figure 38**



**SITE:**  
49th Street Elementary School  
750 East 49th Street  
Los Angeles, California 90043

**TITLE:**  
Site Photographs  
**PREPARED FOR:**  
Ninyo & Moore

**SURVEY DATE:**  
February 18 & 20, 2023  
**SSS PROJECT NO:**  
23-058



**Figure 39**



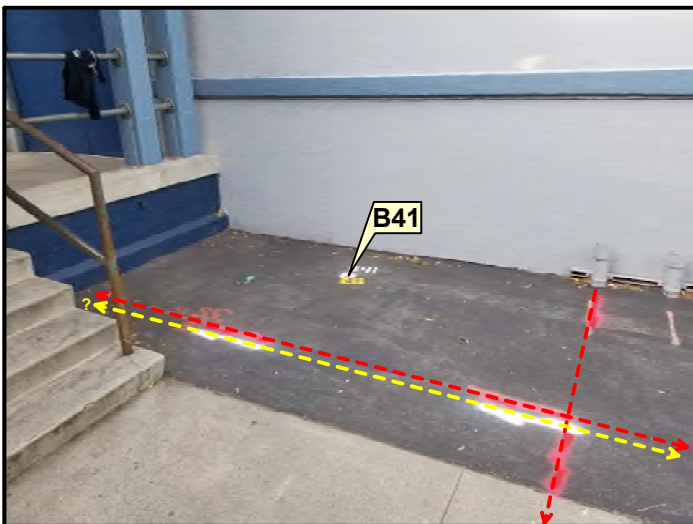
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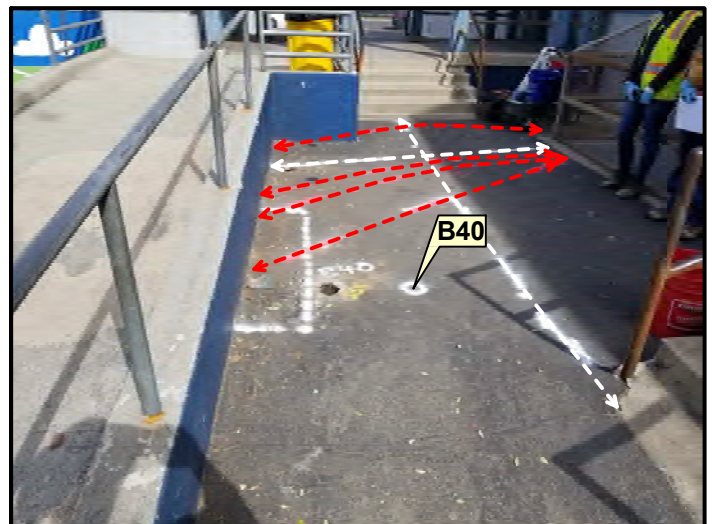
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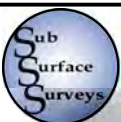
**Figure 42**



**Figure 43**



**Figure 44**

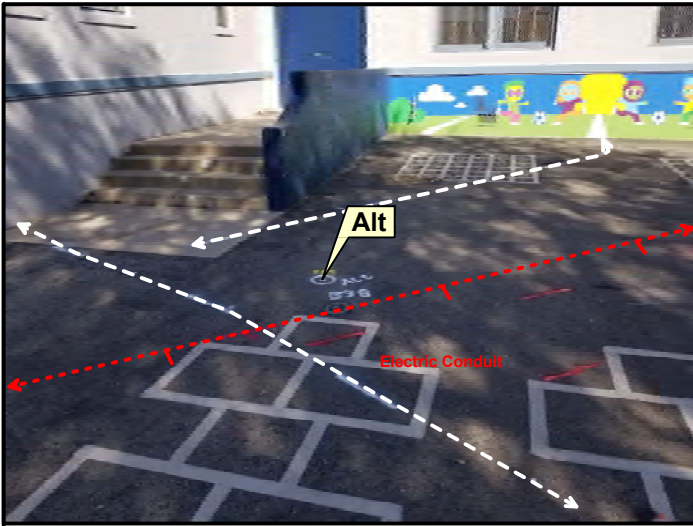


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Los Angeles, California 90043

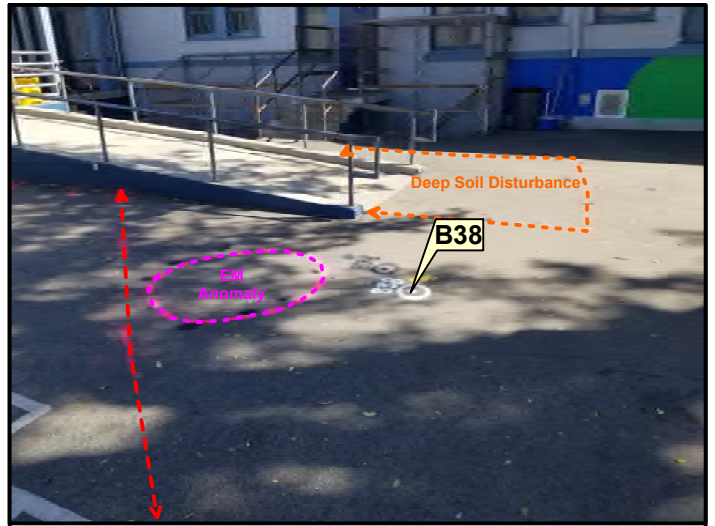
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**SSS PROJECT NO:**  
23-058

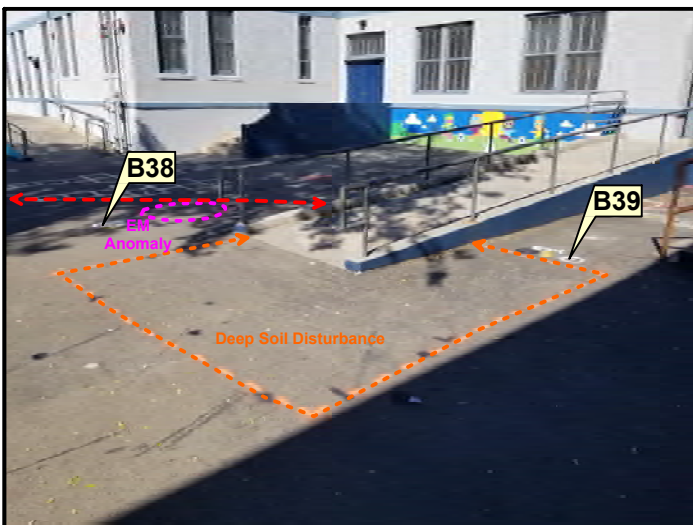




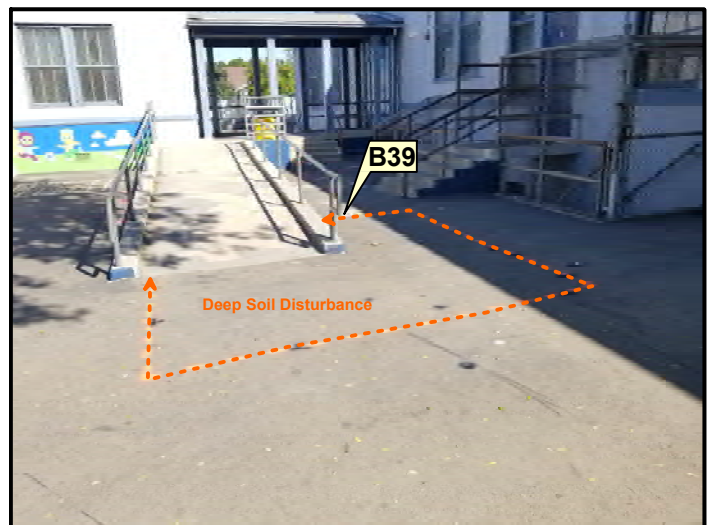
**Figure 45**



**Figure 46**



**Figure 47**



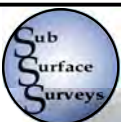
**Figure 48**



**Figure 49**



**Figure 50**



**SITE:**  
49th Street Elementary School  
750 East 49th Street  
Los Angeles, California 90043

**TITLE:**  
Site Photographs  
**PREPARED FOR:**  
Ninyo & Moore

**SURVEY DATE:**  
February 18 & 20, 2023  
**SSS PROJECT NO:**  
23-058



# APPENDIX E

## Signed Non-Hazardous Waste Manifest



# Manifest

## SOIL SAFE OF CA - TPST

Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment:	Responsible for Payment:	Transport Truck #:	Facility #:	Approval Number:	Load #
			A07		
Generator's Name and Billing Address:  L.A.U.S.D. - OEHS 333 S. BEAUDRY AVE. 21ST FLOOR LOS ANGELES, CA 90017			Generator's Phone #:		CAD982025165
			213-241-3199		
			Person to Contact:		
Consultant's Name and Billing Address:			FAX#:		Customer Account Number
			Person to Contact:		
Generation Site (Transport from): (name & address)  LAUSD - 49TH STREET ELEMENTARY SCHOOL 750 E. 49TH ST. LOS ANGELES, CA 90011			Consultant's Phone #:		
			Person to Contact:		
Designated Facility (Transport to): (name & address)  SOIL SAFE 12328 HIBISCUS AVENUE ADELANTO, CA 92301			FAX#:		Customer Account Number
			Person to Contact:		
Transporter Name and Mailing Address:  BELSHIRE 25971 TOWNE CENTRE DRIVE FOOTHILL RANCH, CA 92610  BES: 355449			Site Phone #:		
			Person to Contact:		
Facility Phone #:			Person to Contact:		
			FAX#:		
Transporter's Phone #:			Person to Contact:		
			FAX#:		
Description of Soil			Description of Delivery		
			Gross Weight		Tare Weight
Moisture Content			Approx. Qty:		
			Description of Delivery		
Contaminated by:			Gross Weight		
			Tare Weight		Net Weight
List any exception to items listed above:			Scale Ticket #		
			Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.		
Print or Type Name: Generator <input type="checkbox"/> Consultant <input type="checkbox"/>			Signature and date:		Month Day Year
					06 13 23
Transporter	Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.				
	Print or Type Name:			Signature and date:	
					06 13 23
Recycling Facility	Discrepancies:				
	Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:				
	Print or Type Name:			Signature and date:	
Joe Provansal / Barry Meek / Bill Bishop					

Please print or type.

GENERATOR/CONSULTANTS COPY



# APPENDIX F

## Laboratory Reports



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27693

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 2/20/2023

Date Reported: 3/1/2023

Chain of Custody Received: ☒

Analytical Method: 8015B, 8081A, 8260B, 8270C, 6010B, 7471A,

Mark Noorani, Laboratory Director



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 2°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B2-0.5	27693-001	2/20/2023	2/18/2023	Soil
B2-2.5	27693-002	2/20/2023	2/18/2023	Soil
B1-0.5	27693-003	2/20/2023	2/18/2023	Soil
B1-2.5	27693-004	2/20/2023	2/18/2023	Soil
B3-0.5	27693-005	2/20/2023	2/18/2023	Soil
B3-2.5	27693-006	2/20/2023	2/18/2023	Soil
B4-0.5	27693-007	2/20/2023	2/18/2023	Soil
B4-2.5	27693-008	2/20/2023	2/18/2023	Soil
B22-0.5	27693-009	2/20/2023	2/18/2023	Soil
B22-2.5	27693-010	2/20/2023	2/18/2023	Soil
B22-5	27693-011	2/20/2023	2/18/2023	Soil
B42-2.5	27693-012	2/20/2023	2/18/2023	Soil
B42-5	27693-013	2/20/2023	2/18/2023	Soil
B41-2.5	27693-014	2/20/2023	2/18/2023	Soil
B41-5	27693-015	2/20/2023	2/18/2023	Soil
B40-2.5	27693-016	2/20/2023	2/18/2023	Soil
B5-0.5	27693-017	2/20/2023	2/18/2023	Soil
B5-2.5	27693-018	2/20/2023	2/18/2023	Soil
B6-0.5	27693-019	2/20/2023	2/18/2023	Soil
B6-2.5	27693-020	2/20/2023	2/18/2023	Soil
B40-5	27693-021	2/20/2023	2/18/2023	Soil
B8-05	27693-022	2/20/2023	2/18/2023	Soil
B8-2.5	27693-023	2/20/2023	2/18/2023	Soil
B7-0.5	27693-024	2/20/2023	2/18/2023	Soil
B7-2.5	27693-025	2/20/2023	2/18/2023	Soil
B12-0.5	27693-026	2/20/2023	2/18/2023	Soil
B12-2.5	27693-027	2/20/2023	2/18/2023	Soil
B11-0.5	27693-028	2/20/2023	2/18/2023	Soil
B11-2.5	27693-029	2/20/2023	2/18/2023	Soil
B9-0.5	27693-030	2/20/2023	2/18/2023	Soil
B9-2.5	27693-031	2/20/2023	2/18/2023	Soil
B13-0.5	27693-032	2/20/2023	2/18/2023	Soil
B13-2.5	27693-033	2/20/2023	2/18/2023	Soil
B14-0.5	27693-034	2/20/2023	2/18/2023	Soil
B14-2.5	27693-035	2/20/2023	2/18/2023	Soil
B17-0.5	27693-036	2/20/2023	2/18/2023	Soil
B17-2.5	27693-037	2/20/2023	2/18/2023	Soil
B15-0.5	27693-038	2/20/2023	2/18/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B15-2.5	27693-039	2/20/2023	2/18/2023	Soil
B16-0.5	27693-040	2/20/2023	2/18/2023	Soil
B16-205	27693-041	2/20/2023	2/18/2023	Soil
B18-0.5	27693-042	2/20/2023	2/18/2023	Soil
B18-2.5	27693-043	2/20/2023	2/18/2023	Soil
B10-0.5	27693-044	2/20/2023	2/18/2023	Soil
B10-2.5	27693-045	2/20/2023	2/18/2023	Soil
Composite 1	27693-046	2/20/2023	2/18/2023	Soil
Composite 2	27693-047	2/20/2023	2/18/2023	Soil
Composite 3	27693-048	2/20/2023	2/18/2023	Soil
Composite 4	27693-049	2/20/2023	2/18/2023	Soil
Composite 5	27693-050	2/20/2023	2/18/2023	Soil
Composite 6	27693-051	2/20/2023	2/18/2023	Soil
Composite 7	27693-052	2/20/2023	2/18/2023	Soil
Composite 8	27693-053	2/20/2023	2/18/2023	Soil
Composite 9	27693-054	2/20/2023	2/18/2023	Soil
Composite 10	27693-055	2/20/2023	2/18/2023	Soil
Composite 11	27693-056	2/20/2023	2/18/2023	Soil
Composite 12	27693-057	2/20/2023	2/18/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B42-2.5	27693-012	2/20/2023 16:11	2/18/2023 9:58	2/22/2023 11:30	2/22/2023 20:02	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	106	
<u>Dilution Factor:</u>	1			* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u>	None					
B42-2.5	27693-012	2/20/2023 16:11	2/18/2023 9:58	2/22/2023 11:30	2/22/2023 20:02	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	67			Octacosane	106	
<u>Dilution Factor:</u>	1			* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u>	None					
B41-2.5	27693-014	2/20/2023 16:11	2/18/2023 10:11	2/22/2023 11:30	2/22/2023 20:46	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	14			Octacosane	100	
<u>Dilution Factor:</u>	1			* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u>	None					
B41-2.5	27693-014	2/20/2023 16:11	2/18/2023 10:11	2/22/2023 11:30	2/22/2023 20:46	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	75			Octacosane	100	
<u>Dilution Factor:</u>	1			* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u>	None					
B40-2.5	27693-016	2/20/2023 16:11	2/18/2023 10:39	2/22/2023 11:30	2/22/2023 21:29	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	103	
<u>Dilution Factor:</u>	1			* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u>	None					

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Extractable Fuel Hydrocarbons (EPA 8015B)***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B40-2.5	27693-016	2/20/2023 16:11	2/18/2023 10:39	2/22/2023 11:30	2/22/2023 21:29	Soil

<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
MROs	140	Octacosane	103
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

Method Blank	MBRC0222231	2/22/2023 11:30	2/22/2023 15:00	Soil
--------------	-------------	--------------------	--------------------	------

<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
DROs	<10	Octacosane	103
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

Method Blank	MBRC0222231	2/22/2023 11:30	2/22/2023 15:00	Soil
--------------	-------------	--------------------	--------------------	------

<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
MROs	<50	Octacosane	103
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B42-2.5	27693-012	2/20/2023 16:11	2/18/2023 9:58	2/18/2023 9:58	2/21/2023 18:23	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	94		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B41-2.5	27693-014	2/20/2023 16:11	2/18/2023 10:11	2/18/2023 10:11	2/21/2023 18:43	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	102		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B40-2.5	27693-016	2/20/2023 16:11	2/18/2023 10:39	2/18/2023 10:39	2/21/2023 19:02	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	75		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
Method Blank	MBLY0221231			2/21/2023 12:00	2/21/2023 12:51	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	113		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

Mr. Dennis Fee  
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475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 1	27693-046	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 12:19	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
Aldrin	309-00-2	<8.0		Decachlorobiphenyl	75	
alpha-BHC	319-84-6	<20				
beta-BHC	319-85-7	<20				
gamma-BHC (Lindane)	58-89-9	<20				
delta-BHC	319-86-8	<40				
Chlordane	57-74-9	<120				
4,4'-DDD	72-54-8	<40				
4,4'-DDE	72-55-9	<20				
4,4'-DDT	50-29-3	<40				
Dieldrin	60-57-1	<8.0				
Endosulfan I	959-98-8	<40				
Endosulfan II	33213-65-9	<20				
Endosulfan sulfate	1031-07-8	<40				
Endrin	72-20-8	<40				
Endrin aldehyde	7421-93-4	<40				
Endrin ketone	53494-70-5	<20				
Heptachlor	76-44-8	<8.0				
Heptachlor epoxide	1024-57-3	<20				
Methoxychlor	72-43-5	<40				
Toxaphene	8001-35-2	<160				

\* Acceptable Recovery: 35-130 %

Dilution Factor: 4

Data Qualifiers: D1,



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 2	27693-047	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 12:05	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
Aldrin	309-00-2	<2.0		Decachlorobiphenyl	81	
alpha-BHC	319-84-6	<5.0				
beta-BHC	319-85-7	<5.0				
gamma-BHC (Lindane)	58-89-9	<5.0				
delta-BHC	319-86-8	<10				
Chlordane	57-74-9	<30				
4,4'-DDD	72-54-8	<10				
4,4'-DDE	72-55-9	<5.0				
4,4'-DDT	50-29-3	<10				
Dieldrin	60-57-1	<2.0				
Endosulfan I	959-98-8	<10				
Endosulfan II	33213-65-9	<5.0				
Endosulfan sulfate	1031-07-8	<10				
Endrin	72-20-8	<10				
Endrin aldehyde	7421-93-4	<10				
Endrin ketone	53494-70-5	<5.0				
Heptachlor	76-44-8	<2.0				
Heptachlor epoxide	1024-57-3	<5.0				
Methoxychlor	72-43-5	<10				
Toxaphene	8001-35-2	<40				

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 3	27693-048	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 12:34	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
Aldrin	309-00-2	<8.0
alpha-BHC	319-84-6	<20
beta-BHC	319-85-7	<20
gamma-BHC (Lindane)	58-89-9	<20
delta-BHC	319-86-8	<40
Chlordane	57-74-9	<120
4,4'-DDD	72-54-8	<40
4,4'-DDE	72-55-9	<20
4,4'-DDT	50-29-3	<40
Dieldrin	60-57-1	<8.0
Endosulfan I	959-98-8	<40
Endosulfan II	33213-65-9	<20
Endosulfan sulfate	1031-07-8	<40
Endrin	72-20-8	<40
Endrin aldehyde	7421-93-4	<40
Endrin ketone	53494-70-5	<20
Heptachlor	76-44-8	<8.0
Heptachlor epoxide	1024-57-3	<20
Methoxychlor	72-43-5	<40
Toxaphene	8001-35-2	<160

Surrogate:                      % RC\*  
Decachlorobiphenyl        74  
  
\* Acceptable Recovery: 35-130 %  
  
Dilution Factor: 4  
Data Qualifiers: D1,

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 4	27693-049	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 12:48	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
Aldrin	309-00-2	<2.0	Decachlorobiphenyl	77
alpha-BHC	319-84-6	<5.0		
beta-BHC	319-85-7	<5.0		
gamma-BHC (Lindane)	58-89-9	<5.0		
delta-BHC	319-86-8	<10		
Chlordane	57-74-9	<30		
4,4'-DDD	72-54-8	<10		
4,4'-DDE	72-55-9	<5.0		
4,4'-DDT	50-29-3	<10		
Dieldrin	60-57-1	<2.0		
Endosulfan I	959-98-8	<10		
Endosulfan II	33213-65-9	<5.0		
Endosulfan sulfate	1031-07-8	<10		
Endrin	72-20-8	<10		
Endrin aldehyde	7421-93-4	<10		
Endrin ketone	53494-70-5	<5.0		
Heptachlor	76-44-8	<2.0		
Heptachlor epoxide	1024-57-3	<5.0		
Methoxychlor	72-43-5	<10		
Toxaphene	8001-35-2	<40		

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 5	27693-050	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 13:03	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
Aldrin	309-00-2	<2.0	Decachlorobiphenyl	74
alpha-BHC	319-84-6	<5.0		
beta-BHC	319-85-7	<5.0		
gamma-BHC (Lindane)	58-89-9	<5.0		
delta-BHC	319-86-8	<10		
Chlordane	57-74-9	<30		
4,4'-DDD	72-54-8	<10		
4,4'-DDE	72-55-9	<5.0		
4,4'-DDT	50-29-3	<10		
Dieldrin	60-57-1	<2.0		
Endosulfan I	959-98-8	<10		
Endosulfan II	33213-65-9	<5.0		
Endosulfan sulfate	1031-07-8	<10		
Endrin	72-20-8	<10		
Endrin aldehyde	7421-93-4	<10		
Endrin ketone	53494-70-5	<5.0		
Heptachlor	76-44-8	<2.0		
Heptachlor epoxide	1024-57-3	<5.0		
Methoxychlor	72-43-5	<10		
Toxaphene	8001-35-2	<40		

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 6	27693-051	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 13:17	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
Aldrin	309-00-2	<2.0	Decachlorobiphenyl	73
alpha-BHC	319-84-6	<5.0		
beta-BHC	319-85-7	<5.0		
gamma-BHC (Lindane)	58-89-9	<5.0		
delta-BHC	319-86-8	<10		
Chlordane	57-74-9	<30		
4,4'-DDD	72-54-8	<10		
4,4'-DDE	72-55-9	<5.0		
4,4'-DDT	50-29-3	<10		
Dieldrin	60-57-1	<2.0		
Endosulfan I	959-98-8	<10		
Endosulfan II	33213-65-9	<5.0		
Endosulfan sulfate	1031-07-8	<10		
Endrin	72-20-8	<10		
Endrin aldehyde	7421-93-4	<10		
Endrin ketone	53494-70-5	<5.0		
Heptachlor	76-44-8	<2.0		
Heptachlor epoxide	1024-57-3	<5.0		
Methoxychlor	72-43-5	<10		
Toxaphene	8001-35-2	<40		

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 7	27693-052	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 13:32	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
Aldrin	309-00-2	<2.0		Decachlorobiphenyl	75	
alpha-BHC	319-84-6	<5.0				
beta-BHC	319-85-7	<5.0				
gamma-BHC (Lindane)	58-89-9	<5.0				
delta-BHC	319-86-8	<10				
Chlordane	57-74-9	<30				
4,4'-DDD	72-54-8	<10				
4,4'-DDE	72-55-9	<5.0				
4,4'-DDT	50-29-3	<10				
Dieldrin	60-57-1	<2.0				
Endosulfan I	959-98-8	<10				
Endosulfan II	33213-65-9	<5.0				
Endosulfan sulfate	1031-07-8	<10				
Endrin	72-20-8	<10				
Endrin aldehyde	7421-93-4	<10				
Endrin ketone	53494-70-5	<5.0				
Heptachlor	76-44-8	<2.0				
Heptachlor epoxide	1024-57-3	<5.0				
Methoxychlor	72-43-5	<10				
Toxaphene	8001-35-2	<40				

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 8	27693-053	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 13:47	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
Aldrin	309-00-2	<2.0	Decachlorobiphenyl	76
alpha-BHC	319-84-6	<5.0		
beta-BHC	319-85-7	<5.0		
gamma-BHC (Lindane)	58-89-9	<5.0		
delta-BHC	319-86-8	<10		
Chlordane	57-74-9	<30		
4,4'-DDD	72-54-8	<10		
4,4'-DDE	72-55-9	<5.0		
4,4'-DDT	50-29-3	<10		
Dieldrin	60-57-1	<2.0		
Endosulfan I	959-98-8	<10		
Endosulfan II	33213-65-9	<5.0		
Endosulfan sulfate	1031-07-8	<10		
Endrin	72-20-8	<10		
Endrin aldehyde	7421-93-4	<10		
Endrin ketone	53494-70-5	<5.0		
Heptachlor	76-44-8	<2.0		
Heptachlor epoxide	1024-57-3	<5.0		
Methoxychlor	72-43-5	<10		
Toxaphene	8001-35-2	<40		

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None



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Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 9	27693-054	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 14:01	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
Aldrin	309-00-2	<10
alpha-BHC	319-84-6	<25
beta-BHC	319-85-7	<25
gamma-BHC (Lindane)	58-89-9	<25
delta-BHC	319-86-8	<50
Chlordane	57-74-9	<150
4,4'-DDD	72-54-8	<50
4,4'-DDE	72-55-9	<25
4,4'-DDT	50-29-3	<50
Dieldrin	60-57-1	<10
Endosulfan I	959-98-8	<50
Endosulfan II	33213-65-9	<25
Endosulfan sulfate	1031-07-8	<50
Endrin	72-20-8	<50
Endrin aldehyde	7421-93-4	<50
Endrin ketone	53494-70-5	<25
Heptachlor	76-44-8	<10
Heptachlor epoxide	1024-57-3	<25
Methoxychlor	72-43-5	<50
Toxaphene	8001-35-2	<200

Surrogate:      % RC\*

Decachlorobiphenyl      72

\* Acceptable Recovery: 35-130 %

Dilution Factor: 5

Data Qualifiers: D1,

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475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 10	27693-055	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 14:16	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
Aldrin	309-00-2	<2.0	Decachlorobiphenyl	73
alpha-BHC	319-84-6	<5.0		
beta-BHC	319-85-7	<5.0		
gamma-BHC (Lindane)	58-89-9	<5.0		
delta-BHC	319-86-8	<10		
Chlordane	57-74-9	<30		
4,4'-DDD	72-54-8	<10		
4,4'-DDE	72-55-9	<5.0		
4,4'-DDT	50-29-3	<10		
Dieldrin	60-57-1	<2.0		
Endosulfan I	959-98-8	<10		
Endosulfan II	33213-65-9	<5.0		
Endosulfan sulfate	1031-07-8	<10		
Endrin	72-20-8	<10		
Endrin aldehyde	7421-93-4	<10		
Endrin ketone	53494-70-5	<5.0		
Heptachlor	76-44-8	<2.0		
Heptachlor epoxide	1024-57-3	<5.0		
Methoxychlor	72-43-5	<10		
Toxaphene	8001-35-2	<40		

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 11	27693-056	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 14:30	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
Aldrin	309-00-2	<10		Decachlorobiphenyl	75	
alpha-BHC	319-84-6	<25				
beta-BHC	319-85-7	<25				
gamma-BHC (Lindane)	58-89-9	<25				
delta-BHC	319-86-8	<50				
Chlordane	57-74-9	<150				
4,4'-DDD	72-54-8	<50				
4,4'-DDE	72-55-9	<25				
4,4'-DDT	50-29-3	<50				
Dieldrin	60-57-1	<10				
Endosulfan I	959-98-8	<50				
Endosulfan II	33213-65-9	<25				
Endosulfan sulfate	1031-07-8	<50				
Endrin	72-20-8	<50				
Endrin aldehyde	7421-93-4	<50				
Endrin ketone	53494-70-5	<25				
Heptachlor	76-44-8	<10				
Heptachlor epoxide	1024-57-3	<25				
Methoxychlor	72-43-5	<50				
Toxaphene	8001-35-2	<200				

\* Acceptable Recovery: 35-130 %

Dilution Factor: 5

Data Qualifiers: D1,

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Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Composite 12	27693-057	2/20/2023 16:11	2/18/2023	2/21/2023 10:30	2/24/2023 14:45	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
Aldrin	309-00-2	<2.0		Decachlorobiphenyl	74	
alpha-BHC	319-84-6	<5.0				
beta-BHC	319-85-7	<5.0				
gamma-BHC (Lindane)	58-89-9	<5.0				
delta-BHC	319-86-8	<10				
Chlordane	57-74-9	<30				
4,4'-DDD	72-54-8	<10				
4,4'-DDE	72-55-9	<5.0				
4,4'-DDT	50-29-3	<10				
Dieldrin	60-57-1	<2.0				
Endosulfan I	959-98-8	<10				
Endosulfan II	33213-65-9	<5.0				
Endosulfan sulfate	1031-07-8	<10				
Endrin	72-20-8	<10				
Endrin aldehyde	7421-93-4	<10				
Endrin ketone	53494-70-5	<5.0				
Heptachlor	76-44-8	<2.0				
Heptachlor epoxide	1024-57-3	<5.0				
Methoxychlor	72-43-5	<10				
Toxaphene	8001-35-2	<40				

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBVV0221231			2/21/2023 10:30	2/24/2023 10:52	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
Aldrin	309-00-2	<2.0		Decachlorobiphenyl	86	
alpha-BHC	319-84-6	<5.0				
beta-BHC	319-85-7	<5.0				
gamma-BHC (Lindane)	58-89-9	<5.0				
delta-BHC	319-86-8	<10				
Chlordane	57-74-9	<30				
4,4'-DDD	72-54-8	<10				
4,4'-DDE	72-55-9	<5.0				
4,4'-DDT	50-29-3	<10				
Dieldrin	60-57-1	<2.0				
Endosulfan I	959-98-8	<10				
Endosulfan II	33213-65-9	<5.0				
Endosulfan sulfate	1031-07-8	<10				
Endrin	72-20-8	<10				
Endrin aldehyde	7421-93-4	<10				
Endrin ketone	53494-70-5	<5.0				
Heptachlor	76-44-8	<2.0				
Heptachlor epoxide	1024-57-3	<5.0				
Methoxychlor	72-43-5	<10				
Toxaphene	8001-35-2	<40				

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B42-2.5	27693-012	2/20/2023 16:11	2/18/2023 9:58	2/18/2023 9:58	2/22/2023 14:56	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	<u>1</u>	
Dibromofluoromethane:	113	65-130 %	<u>Data Qualifiers:</u>	None	
Toluene-d8:	83	58-130 %			
4-Bromofluorobenzene:	76	40-135 %			

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Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B41-2.5	27693-014	2/20/2023 16:11	2/18/2023 10:11	2/18/2023 10:11	2/22/2023 15:17	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	<u>1</u>	
Dibromofluoromethane:	110	65-130 %	<u>Data Qualifiers:</u>	None	
Toluene-d8:	86	58-130 %			
4-Bromofluorobenzene:	76	40-135 %			



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Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B40-2.5	27693-016	2/20/2023 16:11	2/18/2023 10:39	2/18/2023 10:39	2/22/2023 15:39	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	113	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	84	58-130 %	
4-Bromofluorobenzene:	73	40-135 %	

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Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT0221233			2/21/2023 15:00	2/22/2023 10:55	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1			
Dibromofluoromethane:	111	65-130 %	<u>Data Qualifiers:</u> None			
Toluene-d8:	86	58-130 %				
4-Bromofluorobenzene:	77	40-135 %				

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Project #: 211936010

**Polynuclear Aromatic Hydrocarbons by SIM (EPA 8270C)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B2-0.5	27693-001	2/20/2023 16:11	2/18/2023 8:50	2/21/2023 10:20	2/21/2023 17:58	Soil

ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	68
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

B3-0.5	27693-005	2/20/2023 16:11	2/18/2023 9:23	2/21/2023 10:20	2/21/2023 18:30	Soil
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ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	74
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

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**Polynuclear Aromatic Hydrocarbons by SIM (EPA 8270C)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B5-0.5	27693-017	2/20/2023 16:11	2/18/2023 11:02	2/21/2023 10:20	2/21/2023 19:02	Soil

ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	102
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

B8-05	27693-022	2/20/2023 16:11	2/18/2023 12:48	2/21/2023 10:20	2/21/2023 19:33	Soil
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ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	101
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

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**Polynuclear Aromatic Hydrocarbons by SIM (EPA 8270C)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B12-0.5	27693-026	2/20/2023 16:11	2/18/2023 13:02	2/21/2023 10:20	2/21/2023 17:26	Soil

ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	102
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

B9-0.5	27693-030	2/20/2023 16:11	2/18/2023 13:20	2/21/2023 10:20	2/21/2023 20:06	Soil
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ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	93
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

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Lab Reference #: NAM 27693  
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**Polynuclear Aromatic Hydrocarbons by SIM (EPA 8270C)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B14-0.5	27693-034	2/20/2023 16:11	2/18/2023 13:40	2/21/2023 10:20	2/21/2023 20:37	Soil

ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	75
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

B15-0.5	27693-038	2/20/2023 16:11	2/18/2023 13:57	2/21/2023 10:20	2/21/2023 21:10	Soil
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ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	76
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

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**Polynuclear Aromatic Hydrocarbons by SIM (EPA 8270C)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B18-0.5	27693-042	2/20/2023 16:11	2/18/2023 14:12	2/21/2023 10:20	2/21/2023 21:42	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	67
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	<u>Dilution Factor:</u> 1	
Benzo(b)fluoranthene:	205-99-2	<50	<u>Data Qualifiers:</u> None	
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

Method Blank	MBGS0221231		2/21/2023 10:20	2/21/2023 14:46	Soil
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<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	117
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	<u>Dilution Factor:</u> 1	
Benzo(b)fluoranthene:	205-99-2	<50	<u>Data Qualifiers:</u> None	
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received	Date Sampled		Matrix			
B2-0.5		27693-001	2/20/2023 16:11	2/18/2023 8:50		Soil			
ANALYTE	EPA Method	Result	Units	Date Extracted		Date Analyzed		Qual	DF
Antimony	6010B	<2.0	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Barium	6010B	84	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Chromium	6010B	12	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Cobalt	6010B	6.9	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Copper	6010B	9.7	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Lead	6010B	17	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Mercury	7471A	0.22	mg/kg	02/21/23 17:00		02/23/23 13:32		--	1
Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Nickel	6010B	7.1	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Selenium	6010B	<4.8	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Silver	6010B	<0.50	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Thallium	6010B	<2.0	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Vanadium	6010B	28	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
Zinc	6010B	48	mg/kg	02/21/23 09:40		02/23/23 14:49		--	1
B1-0.5		27693-003	2/20/2023 16:11	2/18/2023 9:02		Soil			
ANALYTE	EPA Method	Result	Units	Date Extracted		Date Analyzed		Qual	DF
Arsenic	6010B	<2.0	mg/kg	02/21/23 10:15		02/23/23 12:03		--	1
Lead	6010B	5.6	mg/kg	02/21/23 10:15		02/23/23 12:03		--	1

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Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received	Date Sampled		Matrix			
B3-0.5		27693-005	2/20/2023 16:11	2/18/2023 9:23		Soil			
ANALYTE	EPA Method	Result	Units	Date Extracted		Date Analyzed		Qual	DF
Antimony	6010B	<2.0	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Arsenic	6010B	52	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Barium	6010B	92	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Cadmium	6010B	1.6	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Chromium	6010B	13	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Cobalt	6010B	7.8	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Copper	6010B	12	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Lead	6010B	26	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Mercury	7471A	<0.10	mg/kg	02/21/23 17:00		02/23/23 13:37		--	1
Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Nickel	6010B	7.7	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Selenium	6010B	<4.8	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Silver	6010B	<0.50	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Thallium	6010B	<2.0	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Vanadium	6010B	31	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
Zinc	6010B	66	mg/kg	02/21/23 09:40		02/23/23 14:52		--	1
B4-0.5		27693-007	2/20/2023 16:11	2/18/2023 9:31		Soil			
ANALYTE	EPA Method	Result	Units	Date Extracted		Date Analyzed		Qual	DF
Arsenic	6010B	700	mg/kg	02/21/23 10:15		02/23/23 12:06		--	1
Lead	6010B	14	mg/kg	02/21/23 10:15		02/23/23 12:06		--	1

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Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number		Date Received		Date Sampled		Matrix			
B22-0.5	27693-009		2/20/2023 16:11		2/18/2023 9:38		Soil			
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
	Arsenic	6010B	64	mg/kg	02/21/23 10:15	02/23/23 12:07	--	1		
	Lead	6010B	40	mg/kg	02/21/23 10:15	02/23/23 12:07	--	1		
B5-0.5	27693-017		2/20/2023 16:11		2/18/2023 11:02		Soil			
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
	Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Barium	6010B	100	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Chromium	6010B	16	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Cobalt	6010B	10	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Copper	6010B	14	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Lead	6010B	6.0	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Mercury	7471A	<0.10	mg/kg	02/21/23 17:00	02/23/23 13:39	--	1		
	Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Nickel	6010B	9.6	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Vanadium	6010B	39	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		
	Zinc	6010B	49	mg/kg	02/21/23 09:40	02/23/23 14:55	--	1		

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Lab Reference #: NAM 27693  
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**Metals**

Client Sample ID	Lab Sample Number		Date Received		Date Sampled		Matrix		
B6-0.5	27693-019		2/20/2023 16:11		2/18/2023 11:11		Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	<2.0	mg/kg	02/21/23 10:15	02/23/23 12:18	--	1	
	Lead	6010B	4.4	mg/kg	02/21/23 10:15	02/23/23 12:18	--	1	
B8-05	27693-022		2/20/2023 16:11		2/18/2023 12:48		Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Barium	6010B	77	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Chromium	6010B	11	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Cobalt	6010B	7.2	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Copper	6010B	9.4	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Lead	6010B	4.8	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Mercury	7471A	<0.10	mg/kg	02/21/23 17:00	02/23/23 13:41	--	1	
	Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Nickel	6010B	6.6	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Vanadium	6010B	27	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	
	Zinc	6010B	39	mg/kg	02/21/23 09:40	02/23/23 14:58	--	1	

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Irvine, CA, 92618

Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number		Date Received		Date Sampled		Matrix			
B7-0.5	27693-024		2/20/2023 16:11		2/18/2023 12:54		Soil			
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
	Arsenic	6010B	<2.0	mg/kg	02/21/23 10:15	02/23/23 12:21	--	1		
	Lead	6010B	28	mg/kg	02/21/23 10:15	02/23/23 12:21	--	1		
B12-0.5	27693-026		2/20/2023 16:11		2/18/2023 13:02		Soil			
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
	Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Barium	6010B	70	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Chromium	6010B	10	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Cobalt	6010B	6.7	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Copper	6010B	9.2	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Lead	6010B	18	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Mercury	7471A	<0.10	mg/kg	02/21/23 17:00	02/23/23 13:42	--	1		
	Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Nickel	6010B	6.4	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Vanadium	6010B	26	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		
	Zinc	6010B	42	mg/kg	02/21/23 09:40	02/23/23 15:01	--	1		

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Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix			
B11-0.5		27693-028	2/20/2023	16:11	2/18/2023	13:07	Soil			
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
	Arsenic	6010B	6.8	mg/kg	02/21/23 10:15	02/23/23 12:23	--	1		
	Lead	6010B	55	mg/kg	02/21/23 10:15	02/23/23 12:23	--	1		
B9-0.5		27693-030	2/20/2023	16:11	2/18/2023	13:20	Soil			
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
	Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Barium	6010B	74	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Chromium	6010B	9.0	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Cobalt	6010B	6.3	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Copper	6010B	9.0	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Lead	6010B	9.1	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Mercury	7471A	<0.10	mg/kg	02/21/23 17:00	02/23/23 13:44	--	1		
	Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Nickel	6010B	5.9	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Vanadium	6010B	23	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		
	Zinc	6010B	39	mg/kg	02/21/23 09:40	02/23/23 15:04	--	1		

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Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number		Date Received		Date Sampled		Matrix		
B13-0.5	27693-032		2/20/2023 16:11		2/18/2023 13:36		Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	3.2	mg/kg	02/21/23 10:15	02/23/23 12:26	--	1	
	Lead	6010B	53	mg/kg	02/21/23 10:15	02/23/23 12:26	--	1	
B14-0.5	27693-034		2/20/2023 16:11		2/18/2023 13:40		Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Arsenic	6010B	28	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Barium	6010B	110	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Cadmium	6010B	1.2	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Chromium	6010B	19	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Cobalt	6010B	9.1	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Copper	6010B	18	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Lead	6010B	32	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Mercury	7471A	0.10	mg/kg	02/21/23 17:00	02/23/23 13:49	--	1	
	Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Nickel	6010B	12	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Vanadium	6010B	36	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	
	Zinc	6010B	110	mg/kg	02/21/23 09:40	02/23/23 15:07	--	1	



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Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number		Date Received		Date Sampled		Matrix		
B17-0.5	27693-036		2/20/2023 16:11		2/18/2023 13:51		Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	6.8	mg/kg	02/21/23 10:15	02/23/23 12:28	--	1	
	Lead	6010B	31	mg/kg	02/21/23 10:15	02/23/23 12:28	--	1	
B15-0.5	27693-038		2/20/2023 16:11		2/18/2023 13:57		Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Arsenic	6010B	5.9	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Barium	6010B	100	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Chromium	6010B	19	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Cobalt	6010B	9.6	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Copper	6010B	16	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Lead	6010B	24	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Mercury	7471A	0.13	mg/kg	02/21/23 17:00	02/23/23 13:51	--	1	
	Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Nickel	6010B	13	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Vanadium	6010B	39	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	
	Zinc	6010B	79	mg/kg	02/21/23 09:40	02/23/23 15:10	--	1	

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Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B16-0.5		27693-040	2/20/2023	16:11	2/18/2023	14:09	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	7.9	mg/kg	02/21/23 10:15	02/23/23 12:31	--	1	
	Lead	6010B	92	mg/kg	02/21/23 10:15	02/23/23 12:31	--	1	
B18-0.5		27693-042	2/20/2023	16:11	2/18/2023	14:12	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Barium	6010B	110	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Chromium	6010B	18	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Cobalt	6010B	8.3	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Copper	6010B	13	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Lead	6010B	36	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Mercury	7471A	<0.10	mg/kg	02/21/23 17:00	02/23/23 13:53	--	1	
	Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Nickel	6010B	9.2	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Vanadium	6010B	34	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	
	Zinc	6010B	90	mg/kg	02/21/23 09:40	02/23/23 15:13	--	1	

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Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID			Lab Sample Number	Date Received	Date Sampled		Matrix			
B10-0.5			27693-044	2/20/2023 16:11	2/18/2023 14:20	Soil				
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>		<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Arsenic	6010B	2.6	mg/kg	02/21/23 10:15	02/23/23 12:34			--	1
	Lead	6010B	91	mg/kg	02/21/23 10:15	02/23/23 12:34			--	1
Method Blank			Soil							
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>		<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
MBHV0221231	Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Barium	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Chromium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Cobalt	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Copper	6010B	<5.0	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Lead	6010B	<0.80	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221233	Mercury	7471A	<0.10	mg/kg	02/21/23 17:00	02/23/23 13:23			--	1
MBHV0221231	Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Nickel	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Vanadium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1
MBHV0221231	Zinc	6010B	<5.0	mg/kg	02/21/23 09:40	02/23/23 14:17			--	1

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Lab Reference #: NAM 27693  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received	Date Sampled		Matrix			
Method Blank						Soil			
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBHV0221232	Arsenic	6010B	<2.0	mg/kg	02/21/23 10:15	02/23/23 11:49	--	1	
MBHV0221232	Lead	6010B	<0.80	mg/kg	02/21/23 10:15	02/23/23 11:49	--	1	

**QA/QC Report**  
for  
**Extractable Fuel Hydrocarbons (EPA 8015B/8015M)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/22/2023 11:30

Date of Analysis: 2/22/2023 16:26

Dup Date of Analysis: 2/22/2023 16:48

Laboratory Sample #: 27690-007

MS/MSD Qualifiers: None

Reference #: NAM 27693

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
EFH as Diesel	250	1000	989	849	74	60	15	8-193	20	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Octacosane	146	129	<input type="checkbox"/>	103	100	<input type="checkbox"/>	40-160

**Laboratory Control Sample**

Date of Extraction: 2/22/2023 11:30

Date of Analysis: 2/22/2023 15:44

Dup Date of Analysis: 2/22/2023 16:05

Laboratory Sample #: RC0222231

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
EFH as Diesel	1000	813	744	81	74	9	17-180	42	<input type="checkbox"/>

**QA/QC Report**  
for  
**Volatile Fuel Hydrocarbons (EPA 8015B)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/21/2023 12:00

Date of Analysis: 2/21/2023 14:08

Dup Date of Analysis: 2/21/2023 14:27

Laboratory Sample #: 27689-001

MS/MSD Qualifiers: None

Reference #: NAM 27693

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
VFH as Gasoline	0.00	0.250	0.240	0.203	96	81	17	20-144	50	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
$\alpha$ - $\alpha$ -Trifluorotoluene	100	95	<input type="checkbox"/>	78	104	<input type="checkbox"/>	32-153

**Laboratory Control Sample**

Date of Extraction: 2/21/2023 12:00

Date of Analysis: 2/21/2023 13:11

Dup Date of Analysis: 2/21/2023 13:35

Laboratory Sample #: LY0221231

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
VFH as Gasoline	0.250	0.194	0.235	78	94	19	38-130	27	<input type="checkbox"/>

**QA/QC Report**  
for  
**Organochlorine Pesticides (EPA 8081A)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/22/2023 9:20

Date of Analysis: 2/24/2023 11:36

Dup Date of Analysis: 2/24/2023 11:50

Laboratory Sample #: 27693-047

MS/MSD Qualifiers: None

Reference #: NAM 27693

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Aldrin	0.00	20.0	10.3	9.95	51	50	3	14-130	28	--
alpha-BHC	0.00	20.0	10.2	10.1	51	50	1	13-130	29	--
beta-BHC	0.00	20.0	11.7	11.4	58	57	3	13-140	26	--
gamma-BHC (Lindane)	0.00	20.0	10.8	10.6	54	53	2	15-130	26	--
4,4'-DDD	0.00	20.0	15.5	15.5	77	77	0	18-169	20	--
4,4'-DDE	0.00	20.0	14.5	14.8	73	74	2	30-165	20	--
4,4'-DDT	0.00	20.0	16.0	15.9	80	79	1	34-170	20	--
delta-BHC	0.00	20.0	12.9	13.0	64	65	1	18-143	27	--
Dieldrin	0.00	20.0	12.7	12.9	63	64	2	24-147	20	--
Endosulfan I	0.00	20.0	11.9	12.0	59	60	1	13-158	23	--
Endosulfan II	0.00	20.0	12.9	12.6	64	63	2	19-143	29	--
Endosulfan sulfate	0.00	20.0	11.9	11.2	59	56	6	D-158	59	--
Endrin	0.00	20.0	13.7	13.9	69	69	1	26-156	25	--
Endrin Aldehyde	0.00	20.0	10.1	9.20	50	46	9	D-148	59	--
Endrin ketone	0.00	20.0	11.4	10.9	57	54	4	D-147	36	--
Heptachlor	0.00	20.0	9.79	9.43	49	47	4	10-130	30	--
Heptachlor epoxide	0.00	20.0	11.5	11.6	57	58	1	19-134	24	--
Methoxychlor	0.00	20.0	14.0	14.1	70	71	1	12-165	32	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Decachlorobiphenyl	84	84	<input type="checkbox"/>	88	79	<input type="checkbox"/>	35-130

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 2/21/2023 10:30

Date of Analysis: 2/24/2023 11:06

Dup Date of Analysis: 2/24/2023 11:21

Laboratory Sample #: VV0221231

LCS/LCSD Qualifiers: R7,

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Aldrin	20.0	11.6	9.32	58	47	22	7-130	31	--
alpha-BHC	20.0	11.6	9.13	58	46	24	10-130	25	--
beta-BHC	20.0	12.1	9.84	61	49	21	12-137	23	--
gamma-BHC (Lindane)	20.0	11.8	9.40	59	47	23	14-130	22	R7,
4,4'-DDD	20.0	16.2	14.6	81	73	10	25-161	20	--
4,4'-DDE	20.0	15.4	12.9	77	64	18	20-154	20	--

**QA/QC Report**  
**for**  
**Organochlorine Pesticides (EPA 8081A)**  
Reporting Units: ppb

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
4,4'-DDT	20.0	16.9	14.7	84	74	14	26-164	20	--
delta-BHC	20.0	13.2	11.6	66	58	13	17-137	24	--
Dieldrin	20.0	13.6	11.5	68	57	17	18-138	21	--
Endosulfan I	20.0	13.8	10.4	69	52	28	14-142	23	R7,
Endosulfan II	20.0	14.3	13.4	72	67	6	18-148	20	--
Endosulfan sulfate	20.0	13.1	13.3	66	67	2	11-159	32	--
Endrin	20.0	14.5	12.2	73	61	17	22-141	21	--
Endrin Aldehyde	20.0	10.9	10.6	54	53	3	2-140	40	--
Endrin ketone	20.0	12.8	12.4	64	62	3	12-145	22	--
Heptachlor	20.0	11.3	8.91	56	45	24	5-130	29	--
Heptachlor epoxide	20.0	12.4	10.1	62	50	20	14-130	22	--
Methoxychlor	20.0	15.4	12.2	77	61	23	29-157	20	R7,



**QA/QC Report**  
for  
**Volatile Organic Compounds (8260B)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/22/2023 9:26

Date of Analysis: 2/22/2023 12:23

Dup Date of Analysis: 2/22/2023 12:45

Laboratory Sample #: 27690-006

MS/MSD Qualifiers: None

Reference #: NAM 27693

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Benzene	0.00	10.0	9.84	9.57	98	96	3	70-138	20	--
Chlorobenzene	0.00	10.0	11.0	10.6	110	106	4	70-132	20	--
1,1-Dichloroethene	0.00	10.0	6.13	6.29	61	63	3	46-130	20	--
Toluene	0.00	10.0	9.84	9.23	98	92	6	70-130	20	--
Trichloroethene	0.00	10.0	10.2	9.85	102	99	3	70-135	20	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Dibromofluoromethane	113	111	<input type="checkbox"/>	112	109	<input type="checkbox"/>	65-130
Toluene-d8	89	86	<input type="checkbox"/>	90	84	<input type="checkbox"/>	58-130
4-Bromofluorobenzene	78	80	<input type="checkbox"/>	86	74	<input type="checkbox"/>	40-135

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 2/22/2023 9:26

Date of Analysis: 2/22/2023 11:39

Dup Date of Analysis: 2/22/2023 12:01

Laboratory Sample #: HT0222231

LCS/LCSD Qualifiers: None

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Benzene	10.0	10.5	9.80	105	98	7	70-134	20	--
Chlorobenzene	10.0	11.6	10.8	116	108	7	70-130	20	--
1,1-Dichloroethene	10.0	7.24	6.73	72	67	7	48-130	20	--
Toluene	10.0	10.3	9.49	103	95	8	70-130	20	--
Trichloroethene	10.0	10.9	10.3	109	103	6	70-132	20	--

**QA/QC Report**  
for  
**Semi-Volatile Organic Compounds (8270C)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/21/2023 10:20

Date of Analysis: 2/21/2023 16:23

Dup Date of Analysis: 2/21/2023 16:54

Laboratory Sample #: 27693-026

MS/MSD Qualifiers: M2, M2, S1,

Reference #: NAM 27693

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Acenaphthene	0.00	20.0	12.6	12.5	63	63	1	11-138	20	--
Acenaphthylene	0.00	20.0	12.1	12.2	61	61	1	54-130	32	--
Anthracene	0.00	20.0	10.5	10.3	52	51	2	43-130	30	--
Benz(a)anthracene	0.00	20.0	12.7	12.0	63	60	6	42-133	30	--
Benzo(a)pyrene	0.00	20.0	12.9	12.5	64	63	3	32-148	30	--
Benzo(b)fluoranthene	0.00	20.0	17.5	17.2	88	86	2	42-140	30	--
Benzo(g,h,i)perylene	0.00	20.0	14.8	14.4	74	72	3	D-195	30	--
Benzo(k)fluoranthene	0.00	20.0	19.4	20.5	97	102	6	25-146	30	--
Chrysene	0.00	20.0	14.7	14.6	74	73	1	44-140	35	--
Dibenz(a,h)anthracene	0.00	20.0	13.5	13.2	68	66	2	D-200	35	--
Fluoranthene	0.00	20.0	13.6	13.2	68	66	3	43-130	30	--
Fluorene	0.00	20.0	11.9	11.7	59	58	2	70-130	30	M2,
Indeno(1,2,3-cd)pyrene	0.00	20.0	13.7	13.3	69	67	3	D-151	30	--
Naphthalene	0.00	20.0	12.0	11.9	60	59	1	36-130	30	--
Phenanthrene	0.00	20.0	12.1	11.6	61	58	4	70-130	30	M2,
Pyrene	0.00	20.0	15.8	15.6	79	78	1	25-145	20	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Nitrobenzene-d5	133	138	✓	145	136	✓	8-134

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 2/21/2023 10:20

Date of Analysis: 2/21/2023 15:19

Dup Date of Analysis: 2/21/2023 15:51

Laboratory Sample #: GS0221231

LCS/LCSD Qualifiers: L2, S1,

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Acenaphthene	20.0	14.4	13.8	72	69	4	24-137	20	--
Acenaphthylene	20.0	14.9	14.0	75	70	6	54-126	32	--
Anthracene	20.0	13.4	12.7	67	63	5	43-118	27	--
Benz(a)anthracene	20.0	15.0	14.3	75	72	5	42-133	21	--

**QA/QC Report**  
**for**  
**Semi-Volatile Organic Compounds (8270C)**  
Reporting Units: ppb

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Benzo(a)pyrene	20.0	14.0	13.9	70	69	1	32-148	26	--
Benzo(b)fluoranthene	20.0	20.9	19.9	104	100	5	42-140	28	--
Benzo(g,h,i)perylene	20.0	16.0	16.1	80	81	1	D-195	30	--
Benzo(k)fluoranthene	20.0	19.8	20.4	99	102	3	25-146	22	--
Chrysene	20.0	16.5	16.1	82	81	2	44-140	35	--
Dibenz(a,h)anthracene	20.0	15.1	15.2	75	76	1	D-200	35	--
Fluoranthene	20.0	15.7	15.2	78	76	3	43-121	27	--
Fluorene	20.0	14.1	13.2	71	66	7	72-108	20	L2,
Indeno(1,2,3-cd)pyrene	20.0	15.4	15.4	77	77	0	D-151	30	--
Naphthalene	20.0	13.6	13.3	68	67	2	36-120	25	--
Phenanthrene	20.0	14.4	14.0	72	70	3	70-130	20	--
Pyrene	20.0	17.2	16.7	86	84	3	27-154	20	--

**QA/QC Report  
for  
Metals**

Reference #: NAM 27693

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B/7471A**

Laboratory Sample #: 27693-001

Date of Extraction: 02/21/23 09:40

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Antimony	02/23/23 14:33	02/23/23 14:42	0.00	20.0	3.01	3.30	15	16	9	75-125	20	M2,
Arsenic	02/23/23 14:33	02/23/23 14:42	0.00	20.0	18.8	19.0	94	95	1	75-125	20	--
Barium	02/23/23 14:33	02/23/23 14:42	84.0	20.0	101	100	85	80	1	75-125	20	--
Beryllium	02/23/23 14:33	02/23/23 14:42	0.00	20.0	17.5	17.7	88	89	1	75-125	20	--
Cadmium	02/23/23 14:33	02/23/23 14:42	0.00	20.0	16.4	16.7	82	84	2	75-125	20	--
Chromium	02/23/23 14:33	02/23/23 14:42	12.0	20.0	30.9	31.5	94	98	2	75-125	20	--
Cobalt	02/23/23 14:33	02/23/23 14:42	6.90	20.0	24.2	24.8	87	89	2	75-125	20	--
Copper	02/23/23 14:33	02/23/23 14:42	9.70	20.0	27.7	28.2	90	93	2	75-125	20	--
Lead	02/23/23 14:33	02/23/23 14:42	17.0	20.0	34.8	36.5	89	98	5	75-125	20	--
Molybdenum	02/23/23 14:33	02/23/23 14:42	0.00	20.0	16.0	16.2	80	81	1	75-125	20	--
Nickel	02/23/23 14:33	02/23/23 14:42	7.10	20.0	24.5	25.2	87	91	3	75-125	20	--
Selenium	02/23/23 14:33	02/23/23 14:42	0.00	20.0	17.1	16.8	86	84	2	75-125	20	--
Silver	02/23/23 14:33	02/23/23 14:42	0.00	20.0	18.6	18.8	93	94	1	75-125	20	--
Thallium	02/23/23 14:33	02/23/23 14:42	0.00	20.0	13.8	14.0	69	70	1	75-125	20	M2,
Vanadium	02/23/23 14:33	02/23/23 14:42	28.0	20.0	46.8	47.8	94	99	2	75-125	20	--
Zinc	02/23/23 14:33	02/23/23 14:42	48.0	20.0	69.9	70.2	110	111	0	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: HV0221231

Date of Extraction: 02/21/23 09:40

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Antimony	02/23/23 14:20	02/23/23 14:30	--	20.0	17.3	20.1	86	101	15	80-120	20	--
Arsenic	02/23/23 14:20	02/23/23 14:30	--	20.0	17.1	19.7	86	99	14	80-120	20	--
Barium	02/23/23 14:20	02/23/23 14:30	--	20.0	17.5	20.6	88	103	16	80-120	20	--
Beryllium	02/23/23 14:20	02/23/23 14:30	--	20.0	16.7	19.7	84	99	16	80-120	20	--
Cadmium	02/23/23 17:52	02/23/23 14:30	--	20.0	18.4	18.8	92	94	2	80-120	20	--
Chromium	02/23/23 14:20	02/23/23 14:30	--	20.0	17.6	20.9	88	104	17	80-120	20	--
Cobalt	02/23/23 14:20	02/23/23 14:30	--	20.0	17.4	21.5	87	108	21	80-120	20	R2,
Copper	02/23/23 14:20	02/23/23 14:30	--	20.0	16.4	20.1	82	101	20	80-120	20	--
Lead	02/23/23 14:20	02/23/23 14:30	--	20.0	17.8	20.4	89	102	14	80-120	20	--
Molybdenum	02/23/23 14:20	02/23/23 14:30	--	20.0	16.9	19.5	84	98	14	80-120	20	--
Nickel	02/23/23 14:20	02/23/23 14:30	--	20.0	18.4	21.5	92	108	16	80-120	20	--
Selenium	02/23/23 14:20	02/23/23 14:30	--	20.0	16.1	19.1	81	96	17	80-120	20	--
Silver	02/23/23 14:20	02/23/23 14:30	--	20.0	19.4	20.8	97	104	7	80-120	20	--
Thallium	02/23/23 14:20	02/23/23 14:30	--	20.0	17.8	19.8	89	99	11	80-120	20	--
Vanadium	02/23/23 14:20	02/23/23 14:30	--	20.0	16.3	19.1	81	96	16	80-120	20	--
Zinc	02/23/23 14:20	02/23/23 14:30	--	20.0	17.5	20.2	88	101	14	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B/7471A**

Laboratory Sample #: 27693-003

Date of Extraction: 02/21/23 10:15

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Arsenic	02/23/23 11:56	02/23/23 12:15	0.00	20.0	19.1	20.3	96	101	6	75-125	20	--
Lead	02/23/23 11:56	02/23/23 12:15	5.60	20.0	22.1	23.9	83	91	8	75-125	20	--

**QA/QC Report  
for  
Metals**

Reference #: NAM 27693

Reporting units: ppm

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: HV0221232

Date of Extraction: 02/21/23 10:15

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Arsenic	02/23/23 11:51	02/23/23 11:53	--	20.0	18.1	17.8	91	89	2	80-120	20	--
Lead	02/23/23 11:51	02/23/23 11:53	--	20.0	19.3	19.0	96	95	2	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B/7471A**

Laboratory Sample #: 27693-001

Date of Extraction: 02/21/23 17:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Mercury	02/23/23 13:34	02/23/23 12:35	0.22	1.00	0.827	0.830	61	61	0	80-120	20	M2,

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: HV0221233

Date of Extraction: 02/21/23 17:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Mercury	02/27/23 15:13	02/27/23 15:14	--	1.00	1.13	1.13	113	113	0	80-120	20	--

# Data Qualifier Definitions

## Qualifier

D1 = Sample required dilution due to matrix.

L2 = The associated blank spike recovery was below laboratory acceptance limits.

GS0221231	8270C	Fluorene	LCS/LCSD
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M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

27693-001	6010B	Antimony	MS/MSD
27693-001	6010B	Mercury	MS/MSD
27693-001	6010B	Thallium	MS/MSD
27693-026	8270C	Phenanthrene	MS/MSD

M2 = Matrix spike recovery was low.

27693-026	8270C	Fluorene	MS/MSD
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R2 = RPD/RSD exceeded the laboratory acceptance limit.

HV0221231	6010B	Cobalt	LCS/LCSD
-----------	-------	--------	----------

R7 = LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

VV0221231	8081A	Endosulfan I	LCS/LCSD
VV0221231	8081A	gamma-BHC (Lindane)	LCS/LCSD
VV0221231	8081A	Methoxychlor	LCS/LCSD

S1 = Surrogate recovery was above laboratory acceptance limits.

27693-026	8270C	Nitrobenzene-d5	MSD
GS0221231	8270C	Nitrobenzene-d5	LCS/LCSD

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

## Analysis Request &amp; Chain of Custody Record



ORANGE COAST ANALYTICAL, INC.

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Lab Job No.:

27093

Page:

1

of

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CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA				Lead by EPA 6010B	Arsenic by EPA 6010B	OCPs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	POCs by EPA 8260B	TPH-g.d.o by EPA 8015B	Standard:	X
Send Report To:	Dennis Fee	Project Number:	211936010														72 Hour:	
Email:	dfee@ninyoandmoore.com	PO #:															48 Hour:	
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA														24 Hour:	
Phone:	(949) 753-7070 Fax:	Sampled By:	EAC/AC															
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type												REMARKS / INSTRUCTIONS	
1 B2-0.5	1	2/18/23	0850	soil	9oz jar	X	X	C1		X	X	X	X	X	X	X	C1=composite group 1	
2 B2-2.5	1		0854					C2									C2=composite group 2	
3 B1-0.5	1		0902			X	X	C1										
4 B1-2.5	1		0904					C2										
5 B3-0.5	1		0923			X	X	C1		X	X	X	X					
6 B3-2.5	1		0925					C2										
7 B4-0.5	1		0931			X	X	C3									C3=composite group 3	
8 B4-2.5	1		0932					C4									C4=composite group 4	
9 B22-0.5	1		0938			X	X											
10 B22-2.5	1		0940														HOLD	
11 B22-5	1		0942														HOLD	
12 B42-2.5	5		0958		9oz jar									X	X			
13 B42-5	1		1000														HOLD	
14 B41-2.5	1		1011											X	X			
No. of Samples:	14	Method of Shipment:				Preservative:	1 = Ice	2 = HCl	3 = HNO <sub>3</sub>	4 = H <sub>2</sub> SO <sub>4</sub>	5 = NaOH	6 = Other						
Relinquished By:	<i>[Signature]</i>	Date:	2/20/23	Time:	1611	Received By:			Date:			Time:			Sample Matrix:	DW - Drinking Water		
Company:	N&M					Company:					GW - Groundwater	AQ - Aqueous						
Relinquished By:		Date:		Time:		Received By:			Date:			Time:			WW - Wastewater	SS - Soil / Solid		
Company:						Company:					SW - Stormwater	OT - Other						
Relinquished By:		Date:		Time:		Received For OCA By:	<i>[Signature]</i>		Date:	2-26-23		Time:	1611		Sample Integrity:	2.0 to 2.2 °C		
Company:						Company:	OCA, CA				Intact:	On Ice: Yes No @ 27.3 °C						

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



# Analysis Request & Chain of Custody Record



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Lab Job No.: 271093

Page: 2 of 4

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.o by EPA 8015B	Standard: <u>X</u>	
Send Report To: Dennis Fee		Project Number: 211936010															72 Hour: _____	
Email: <a href="mailto:dfee@ninyoandmoore.com">dfee@ninyoandmoore.com</a>		PO #:															48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA															24 Hour: _____	
Phone: (949) 753-7070 Fax: _____		EDD Required: _____																
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type											REMARKS / INSTRUCTIONS	
15	B41-5	5	2/18/23	1014	soil	9 oz jar 4 VOAS											HOLD	
16	B40-2.5	↓		1039		↓												
17	B5-0.5	1		1102		9 oz jar	X	X	C3		X	X	X	X				
18	B5-2.5	1		1104		↓			C4									
19	B6-0.5	1		1111		↓	X	X	C3									
20	B6-2.5	↓		1113		↓			C4									
21	B40-5	5		1126		9 oz jar 4 VOAS			C5								HOLD	
22	B8-0.5	1		1248		9 oz jar	X	X	C5		X	X	X	X			C5=composite group 5	
23	B8-2.5	1		1250		↓			C6								C6=composite group 6	
24	B7-0.5	1		1254		↓	X	X	C5									
25	B7-2.5	1		1255		↓			C6									
26	B12-0.5	1		1302		↓	X	X	C7		X	X	X	X			C7=composite group 7	
27	B12-2.5	1		1304		↓			C8								C8=composite group 8	
28	B11-0.5	↓		1307		↓	X	X	C7									
No. of Samples: <u>14</u>		Method of Shipment: _____					Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other											
Relinquished By: <u>[Signature]</u>		Date: <u>2/20/23</u>		Received By: _____		Date: _____		Sample Matrix: _____		DW - Drinking Water								
Company: <u>NEM</u>		Time: <u>1611</u>		Company: _____		Time: _____		GW - Groundwater		AQ - Aqueous								
Relinquished By: _____		Date: _____		Received By: _____		Date: _____		WW - Wastewater		SS - Soil / Solid								
Company: _____		Time: _____		Company: _____		Time: _____		SW - Stormwater		OT - Other								
Relinquished By: _____		Date: _____		Received For OCA By: <u>[Signature]</u>		Date: <u>2-20-23</u>		Sample Integrity: _____		2.0+0.2.0°C								
Company: _____		Time: _____		Company: <u>OCA, LP</u>		Time: <u>1611</u>		Intact: _____		On Ice: <u>Yes</u> No @ <u>3</u> °C								

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Lab Job No.:

27693

Page: 3 of 4

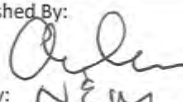
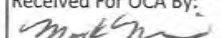
CUSTOMER INFORMATION		PROJECT INFORMATION					TURN-AROUND TIME											
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					Lead by EPA 6010B	Arsenic by EPA 6010B	OC's by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g,d,o by EPA 8015B	Standard: <u>X</u>	
Send Report To: Dennis Fee		Project Number: 211936010				72 Hour: _____												
Email: <a href="mailto:dfee@ninyoandmoore.com">dfee@ninyoandmoore.com</a>		PO #:				48 Hour: _____												
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA				24 Hour: _____												
Phone: (949) 753-7070 Fax:		EDD Required:																
		Sampled By: <u>EAC/AC</u>																REMARKS / INSTRUCTIONS
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type													
B11-2.5	1	2/18/23	1309	Soil	902 jar			C8										
B9-0.5			1320			XX		C5		XX	XX	XX						
B9-2.5			1322					C6										
B13-0.5			1336			XX		C9										C9=Composite group 9
B13-2.5			1338					C10										C10=Composite group 1
B14-0.5			1340			XX		C9		X	X	XX						
B14-2.5			1342					C10										
B17-0.5			1351			XX		C11										C11=Composite group 11
B17-2.5			1353					C12										C12=Composite group 12
B15-0.5			1357			XX		C9		X	X	XX						
B15-2.5			1359					C10										
B16-0.5			1409			XX		C11										
B16-2.5			1410					C12										
B18-0.5	✓	✓	1412	✓	✓	XX		C11		X	X	XX						
No. of Samples: 14		Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other														
Relinquished By:	Date: 2/20/23	Received By:	Date:	Sample Matrix: DW - Drinking Water														
Company: N & M	Time: 1611	Company:	Time:	GW - Groundwater AQ - Aqueous														
Relinquished By:	Date:	Received By:	Date:	WW - Wastewater SS - Soil / Solid														
Company:	Time:	Company:	Time:	SW - Stormwater OT - Other														
Relinquished By:	Date:	Received For OCA By:	Date: 2-20-23	Sample Integrity: 2.0 to 2.1 °C														
Company:	Time:	Company: OCA, LA	Time: 1611	Intact: _____ On Ice: <u>Yes</u> / No @ _____ °C														

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Phone: (714) 832-0064 Fax: (714) 832-0067

Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION		TURN-AROUND-TIME											
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA		Standard: <u>X</u>											
Send Report To: Dennis Fee		Project Number: 211936010		72 Hour: _____											
Email: <a href="mailto:dfee@ninyoandmoore.com">dfee@ninyoandmoore.com</a>		PO #:		48 Hour: _____											
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA		24 Hour: _____											
Phone: (949) 753-7070 Fax:		Sampled By: EAC/AC		REMARKS / INSTRUCTIONS											
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type	Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.o by EPA 8015B
B18-2.5	1	2/18/23	1414	Soil	902 jar										
B10-0.5	↓	↓	1420	↓	↓	X	X								
B10-2.5	↓	↓	1422	↓	↓										
AC 2/18/23															
No. of Samples: 3 Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other															
Relinquished By: 	Date: 2/20/23	Received By:	Date:	Sample Matrix: DW - Drinking Water											
Company: N & M	Time: 1611	Company:	Time:	GW - Groundwater AQ - Aqueous											
Relinquished By:	Date:	Received By:	Date:	WW - Wastewater SS - Soil / Solid											
Company:	Time:	Company:	Time:	SW - Stormwater OT - Other											
Relinquished By:	Date:	Received For OCA By: 	Date: 2-20-23	Sample Integrity: 2.0+0.2.0.2											
Company:	Time:	Company: OCA, CA	Time: 1611	Intact: _____ On Ice: (Yes) / No @ 1243C											

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



## Sample Receipt Report

Laboratory Reference NAM 27693

Logged in by HC

Received: 02/20/23 16:11

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

57 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>2</u>	Thermometer ID: <u>IR#3</u>	Adjusted Temp.: <u>2+0=2</u>	
Shipping Intact	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

### Notes

Client Notified \_\_\_\_\_

By \_\_\_\_\_

On \_\_\_\_\_



## LA Testing

5431 Industrial Drive, Huntington Beach, CA 92649

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

<http://www.LATesting.com>

[gardengrovelab@latestesting.com](mailto:gardengrovelab@latestesting.com)

LA Testing Order: 332303094

CustomerID: 32ORAN77

CustomerPO:

ProjectID:

Attn: **Mark Noorani**  
**Orange Coast Analytical, Inc.**  
**3002 Dow Avenue**  
**Suite 532**  
**Tustin, CA 92780**

Phone: (714) 832-0064  
Fax: (714) 832-0067  
Received: 2/22/2023 10:35 AM  
Analysis Date: 2/28/2023  
Collected: 2/18/2023

### Test Report: Asbestos Analysis via Polarized Light Microscopy, Qualitative

Sample	Description	Appearance	Result	Notes
1 332303094-0001	B2-0.5	Brown/Tan Non-Fibrous Heterogeneous	<b>None Detected</b>	
2 332303094-0002	B3-0.5	Brown/Tan Non-Fibrous Heterogeneous	<b>None Detected</b>	
3 332303094-0003	B5-0.5	Brown Non-Fibrous Homogeneous	<b>None Detected</b>	
4 332303094-0004	B8-0.5	Brown/White/Clear Non-Fibrous Heterogeneous	<b>None Detected</b>	
5 332303094-0005	B12-0.5	Brown/Gray Non-Fibrous Heterogeneous	<b>None Detected</b>	
6 332303094-0006	B9-0.5	Brown Non-Fibrous Homogeneous	<b>None Detected</b>	
7 332303094-0007	B14-0.5	Brown Non-Fibrous Homogeneous	<b>None Detected</b>	
8 332303094-0008	B15-0.5	Brown/Black/Orange Non-Fibrous Heterogeneous	<b>None Detected</b>	
9 332303094-0009	B18-0.5	Brown Non-Fibrous Homogeneous	<b>None Detected</b>	

Analyst(s)

Tony Salgado (5)

Thanh Nguyen (4)

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. LA Testing suggests that samples reported as none detected undergo additional analysis via TEM to avoid the possibility of false negatives.

Samples analyzed by LA Testing Huntington Beach, CA

Initial report from 02/28/2023 16:16:53



# Asbestos Chain of Custody

## LA Testing Order Number (Lab Use Only):

# #332303094

LA TESTING  
5431 INDUSTRIAL DRIVE  
HUNTINGTON BEACH, CA  
92649  
PHONE: (714)828-4999  
FAX: (714)761-2713

Company : Orange Coast Analytical		LA Testing-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 3002 Dow Ave, Ste 532		Third Party Billing requires written authorization from third party	
City: Tustin	State/Province: CA	Zip/Postal Code: 92780	Country: USA
Report To (Name): Mark Noorani		Fax #:	
Telephone #: 7148320064		Email Address: markn@ocalab.com, ocalab@sbcglobal.net	
Project Name/Number:			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: 27693	U.S. State Samples Taken: Yes
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hours <input type="checkbox"/> 6 Hours <input type="checkbox"/> 24 Hrs <input type="checkbox"/> 48 Hrs <input type="checkbox"/> 3 Days <input type="checkbox"/> 4 Days <input checked="" type="checkbox"/> 5 Days <input type="checkbox"/> 10 Days			
<small>*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with LA Testing's Terms and Conditions located in the Analytical Price Guide.</small>			
<b>PCM - Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air</b> <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <b>Other:</b> <input type="checkbox"/>	
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name:		Samplers Signature:	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1	B2-0.5		2/18/23 0850
2	B3-0.5		2/18/23 0923
3	B5-0.5		2/18/23 1102
4	B8-0.5		2/18/23 1248
5	B12-0.5		2/18/23 1302
6	B9-0.5		2/18/23 1320
7	B14-0.5		2/18/23 1340
8	B15-0.5		2/18/23 1357
Client Sample # (s):		Total # of Samples: 9	
Relinquished (Client):		Date: 2/21/23	Time: 1500
Received (Lab): Emily Mendora  (courier)		Date: 2/22/23	Time: 10:35AM
Comments/Special Instructions: PLM Qualitative			



**Asbestos Chain of Custody**  
**LA Testing Order Number** *(Lab Use Only):*LA TESTING  
5431 INDUSTRIAL DRIVE  
HUNTINGTON BEACH, CA 92649  
PHONE: (714)828-4999  
FAX: (714)761-2713*Additional Pages of the Chain of Custody are only necessary if needed for additional sample information*

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
9	B18-0.5		02/18/23 1412
<b>*Comments/Special Instructions:</b>			



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mark Noorani  
Orange Coast Analytical Inc  
3002 Dow Ave,  
Suite 532  
Tustin, California 92780

Generated 2/28/2023 10:40:10 AM

## JOB DESCRIPTION

211936010

## JOB NUMBER

570-128722-1



# Eurofins Calscience

## Job Notes

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

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



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

Generated  
2/28/2023 10:40:10 AM

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## Definitions/Glossary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

### 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: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

**Job ID: 570-128722-1**

**Laboratory: Eurofins Calscience**

## Narrative

**Job Narrative**  
**570-128722-1**

## Comments

No additional comments.

## Receipt

The samples were received on 2/22/2023 1:54 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° C.

## HPLC/IC

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

## Detection Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

**Client Sample ID: B2-05**

**Lab Sample ID: 570-128722-1**

☐ No Detections.

**Client Sample ID: B3-0.5**

**Lab Sample ID: 570-128722-2**

☐ No Detections.

**Client Sample ID: B5-0.5**

**Lab Sample ID: 570-128722-3**

☐ No Detections.

**Client Sample ID: B8-0.5**

**Lab Sample ID: 570-128722-4**

☐ No Detections.

**Client Sample ID: B12-0.5**

**Lab Sample ID: 570-128722-5**

☐ No Detections.

**Client Sample ID: B9-0.5**

**Lab Sample ID: 570-128722-6**

☐ No Detections.

**Client Sample ID: B14-0.5**

**Lab Sample ID: 570-128722-7**

☐ No Detections.

**Client Sample ID: B15-0.5**

**Lab Sample ID: 570-128722-8**

☐ No Detections.

**Client Sample ID: B18-0.5**

**Lab Sample ID: 570-128722-9**

☐ No Detections.

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

## Method: SW846 7199 - Chromium, Hexavalent (IC)

**Client Sample ID: B2-05**  
**Date Collected: 02/18/23 08:50**  
**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-1**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 06:19	10

**Client Sample ID: B3-0.5**  
**Date Collected: 02/18/23 09:23**  
**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-2**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 06:31	10

**Client Sample ID: B5-0.5**  
**Date Collected: 02/18/23 11:02**  
**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 06:43	10

**Client Sample ID: B8-0.5**  
**Date Collected: 02/18/23 12:48**  
**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 06:55	10

**Client Sample ID: B12-0.5**  
**Date Collected: 02/18/23 13:02**  
**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 07:07	10

**Client Sample ID: B9-0.5**  
**Date Collected: 02/18/23 13:20**  
**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-6**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 07:19	10

**Client Sample ID: B14-0.5**  
**Date Collected: 02/18/23 13:40**  
**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 07:55	10

**Client Sample ID: B15-0.5**  
**Date Collected: 02/18/23 13:57**  
**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-8**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 08:07	10

**Client Sample ID: B18-0.5**  
**Date Collected: 02/18/23 14:12**  
**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-9**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 08:19	10

Eurofins Calscience

# QC Sample Results

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

## Method: 7199 - Chromium, Hexavalent (IC)

Lab Sample ID: MB 570-307132/1-A

Matrix: Solid

Analysis Batch: 307133

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 307132

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 03:36	10

Lab Sample ID: LCS 570-307132/2-A

Matrix: Solid

Analysis Batch: 307133

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 307132

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	20100	19250		ug/Kg		96	80 - 120

Lab Sample ID: LCSD 570-307132/3-A

Matrix: Solid

Analysis Batch: 307133

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 307132

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	20000	22350		ug/Kg		112	80 - 120	15	20



# QC Association Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

## HPLC/IC

### Prep Batch: 307132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-128722-1	B2-05	Total/NA	Solid	3060A	
570-128722-2	B3-0.5	Total/NA	Solid	3060A	
570-128722-3	B5-0.5	Total/NA	Solid	3060A	
570-128722-4	B8-0.5	Total/NA	Solid	3060A	
570-128722-5	B12-0.5	Total/NA	Solid	3060A	
570-128722-6	B9-0.5	Total/NA	Solid	3060A	
570-128722-7	B14-0.5	Total/NA	Solid	3060A	
570-128722-8	B15-0.5	Total/NA	Solid	3060A	
570-128722-9	B18-0.5	Total/NA	Solid	3060A	
MB 570-307132/1-A	Method Blank	Total/NA	Solid	3060A	
LCS 570-307132/2-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSD 570-307132/3-A	Lab Control Sample Dup	Total/NA	Solid	3060A	

### Analysis Batch: 307133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-128722-1	B2-05	Total/NA	Solid	7199	307132
570-128722-2	B3-0.5	Total/NA	Solid	7199	307132
570-128722-3	B5-0.5	Total/NA	Solid	7199	307132
570-128722-4	B8-0.5	Total/NA	Solid	7199	307132
570-128722-5	B12-0.5	Total/NA	Solid	7199	307132
570-128722-6	B9-0.5	Total/NA	Solid	7199	307132
570-128722-7	B14-0.5	Total/NA	Solid	7199	307132
570-128722-8	B15-0.5	Total/NA	Solid	7199	307132
570-128722-9	B18-0.5	Total/NA	Solid	7199	307132
MB 570-307132/1-A	Method Blank	Total/NA	Solid	7199	307132
LCS 570-307132/2-A	Lab Control Sample	Total/NA	Solid	7199	307132
LCSD 570-307132/3-A	Lab Control Sample Dup	Total/NA	Solid	7199	307132

# Lab Chronicle

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

**Client Sample ID: B2-05**

**Date Collected: 02/18/23 08:50**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.51 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 06:19	YO8L	EET CAL 4
Instrument ID: IC33										

**Client Sample ID: B3-0.5**

**Date Collected: 02/18/23 09:23**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.53 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 06:31	YO8L	EET CAL 4
Instrument ID: IC33										

**Client Sample ID: B5-0.5**

**Date Collected: 02/18/23 11:02**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.52 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 06:43	YO8L	EET CAL 4
Instrument ID: IC33										

**Client Sample ID: B8-0.5**

**Date Collected: 02/18/23 12:48**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.47 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 06:55	YO8L	EET CAL 4
Instrument ID: IC33										

**Client Sample ID: B12-0.5**

**Date Collected: 02/18/23 13:02**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-5**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.48 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 07:07	YO8L	EET CAL 4
Instrument ID: IC33										

# Lab Chronicle

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

**Client Sample ID: B9-0.5**

**Date Collected: 02/18/23 13:20**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-6**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.48 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 07:19	YO8L	EET CAL 4
Instrument ID: IC33										

**Client Sample ID: B14-0.5**

**Date Collected: 02/18/23 13:40**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-7**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.49 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 07:55	YO8L	EET CAL 4
Instrument ID: IC33										

**Client Sample ID: B15-0.5**

**Date Collected: 02/18/23 13:57**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-8**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.50 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 08:07	YO8L	EET CAL 4
Instrument ID: IC33										

**Client Sample ID: B18-0.5**

**Date Collected: 02/18/23 14:12**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128722-9**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.51 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 08:19	YO8L	EET CAL 4
Instrument ID: IC33										

## Laboratory References:

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

Accreditation/Certification Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

Method	Method Description	Protocol	Laboratory
7199	Chromium, Hexavalent (IC)	SW846	EET CAL 4
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	EET CAL 4

### Protocol References:

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: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128722-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-128722-1	B2-05	Solid	02/18/23 08:50	02/22/23 13:54
570-128722-2	B3-0.5	Solid	02/18/23 09:23	02/22/23 13:54
570-128722-3	B5-0.5	Solid	02/18/23 11:02	02/22/23 13:54
570-128722-4	B8-0.5	Solid	02/18/23 12:48	02/22/23 13:54
570-128722-5	B12-0.5	Solid	02/18/23 13:02	02/22/23 13:54
570-128722-6	B9-0.5	Solid	02/18/23 13:20	02/22/23 13:54
570-128722-7	B14-0.5	Solid	02/18/23 13:40	02/22/23 13:54
570-128722-8	B15-0.5	Solid	02/18/23 13:57	02/22/23 13:54
570-128722-9	B18-0.5	Solid	02/18/23 14:12	02/22/23 13:54





## Login Sample Receipt Checklist

Client: Orange Coast Analytical Inc

Job Number: 570-128722-1

**Login Number: 128722**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Patel, Jayesh**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27693A

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 3/1/2023

Date Reported: 3/9/2023

Chain of Custody Received: ☒

Analytical Method: 8082, 6010B, 1311/6010B,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 2°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B1-0.5	27693-003	2/20/2023	2/18/2023	Soil
B3-0.5	27693-005	2/20/2023	2/18/2023	Soil
B3-2.5	27693-006	2/20/2023	2/18/2023	Soil
B4-0.5	27693-007	2/20/2023	2/18/2023	Soil
B4-2.5	27693-008	2/20/2023	2/18/2023	Soil
B22-0.5	27693-009	2/20/2023	2/18/2023	Soil
B22-2.5	27693-010	2/20/2023	2/18/2023	Soil
B7-0.5	27693-024	2/20/2023	2/18/2023	Soil
B11-0.5	27693-028	2/20/2023	2/18/2023	Soil
B11-2.5	27693-029	2/20/2023	2/18/2023	Soil
B13-0.5	27693-032	2/20/2023	2/18/2023	Soil
B13-2.5	27693-033	2/20/2023	2/18/2023	Soil
B16-0.5	27693-040	2/20/2023	2/18/2023	Soil
B16-2.5	27693-041	2/20/2023	2/18/2023	Soil
B10-0.5	27693-044	2/20/2023	2/18/2023	Soil
B10-2.5	27693-045	2/20/2023	2/18/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B1-0.5	27693-003	2/20/2023 16:11	2/18/2023 9:02	3/3/2023 9:40	3/3/2023 17:16	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	94	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B22-0.5	27693-009	2/20/2023 16:11	2/18/2023 9:38	3/3/2023 9:40	3/3/2023 17:30	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<75		Decachlorobiphenyl	81	
PCB-1221	11104-28-2	<75				
PCB-1232	11141-16-5	<75		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<75		<u>Dilution Factor:</u> 3		
PCB-1248	12672-29-6	<75		<u>Data Qualifiers:</u> D1,		
PCB-1254	11097-69-1	<75				
PCB-1260	11096-82-5	<75				
B7-0.5	27693-024	2/20/2023 16:11	2/18/2023 12:54	3/3/2023 9:40	3/3/2023 17:45	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	89	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B16-0.5	27693-040	2/20/2023 16:11	2/18/2023 14:09	3/3/2023 9:40	3/3/2023 18:00	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	107	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B10-0.5	27693-044	2/20/2023 16:11	2/18/2023 14:20	3/3/2023 9:40	3/3/2023 18:14	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	91	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
Method Blank	MBVV0303231			3/3/2023 9:40	3/3/2023 16:03	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	94	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				

Mr. Dennis Fee  
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475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID			Lab Sample Number	Date Received		Date Sampled		Matrix	
B3-2.5			27693-006	2/20/2023	16:11	2/18/2023	9:25	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Arsenic	6010B	<2.0	mg/kg	03/02/23 11:20	03/06/23 11:53		--	1
B4-0.5			27693-007	2/20/2023	16:11	2/18/2023	9:31	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	TCLP Arsenic	6010B	22	mg/l	03/07/23 17:00	03/08/23 14:26		--	1
B4-2.5			27693-008	2/20/2023	16:11	2/18/2023	9:32	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Arsenic	6010B	130	mg/kg	03/02/23 11:20	03/06/23 12:01		--	1
B22-2.5			27693-010	2/20/2023	16:11	2/18/2023	9:40	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Arsenic	6010B	2.0	mg/kg	03/02/23 11:20	03/06/23 12:06		--	1
B11-2.5			27693-029	2/20/2023	16:11	2/18/2023	13:09	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Lead	6010B	5.2	mg/kg	03/02/23 11:20	03/06/23 12:08		--	1
B13-2.5			27693-033	2/20/2023	16:11	2/18/2023	13:38	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Lead	6010B	3.1	mg/kg	03/02/23 11:20	03/06/23 12:10		--	1

Mr. Dennis Fee  
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Lab Reference #: NAM 27693A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B16-2.5		27693-041	2/20/2023	16:11	2/18/2023	14:10	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Lead	6010B	6.1	mg/kg	03/02/23 11:20	03/06/23 12:16	--	1	
B10-2.5		27693-045	2/20/2023	16:11	2/18/2023	14:22	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Lead	6010B	4.3	mg/kg	03/02/23 11:20	03/06/23 12:18	--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBIR0307236	TCLP Arsenic	6010B	<0.080	mg/l	03/07/23 17:00	03/08/23 13:41	--	1	
B3-0.5		27693-005	2/20/2023	16:11	2/18/2023	9:23	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Arsenic	6010B	2.5	mg/L	03/07/23 17:00	03/08/23 12:50	--	1	
B4-0.5		27693-007	2/20/2023	16:11	2/18/2023	9:31	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Arsenic	6010B	53	mg/L	03/07/23 17:00	03/08/23 13:03	--	1	
B22-0.5		27693-009	2/20/2023	16:11	2/18/2023	9:38	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Arsenic	6010B	2.8	mg/L	03/07/23 17:00	03/08/23 13:06	--	1	



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B11-0.5		27693-028	2/20/2023	16:11	2/18/2023	13:07	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Lead	6010B	1.8	mg/L	03/07/23 17:00	03/08/23 13:09	--	1	
B13-0.5		27693-032	2/20/2023	16:11	2/18/2023	13:36	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Lead	6010B	1.6	mg/L	03/07/23 17:00	03/08/23 13:11	--	1	
B16-0.5		27693-040	2/20/2023	16:11	2/18/2023	14:09	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Lead	6010B	1.7	mg/L	03/07/23 17:00	03/08/23 13:14	--	1	
B10-0.5		27693-044	2/20/2023	16:11	2/18/2023	14:20	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Lead	6010B	3.6	mg/L	03/07/23 17:00	03/08/23 13:17	--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBIR0307237	STLC Arsenic	6010B	<0.20	mg/L	03/07/23 17:00	03/08/23 12:43	--	1	
MBIR0307237	STLC Lead	6010B	<0.20	mg/L	03/07/23 17:00	03/08/23 12:43	--	1	

**QA/QC Report**  
**for**  
**Polychlorinated Biphenyl's (EPA 8082)**  
Reporting units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 3/3/2023 9:40

Date of Analysis: 3/3/2023 16:47

Dup Date of Analysis: 3/3/2023 17:01

Laboratory Sample #: 27693-003

MS/MSD Qualifiers: None

Reference #: NAM 27693A

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
PCB-1016	0.00	150	178	165	119	110	8	28-130	28	<input type="checkbox"/>
PCB-1260	0.00	150	167	162	111	108	3	36-132	20	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual
Decachlorobiphenyl	99	95	<input type="checkbox"/>

LCS	LCSD	Qual
97	102	<input type="checkbox"/>

ACP % RC
35-130

**Laboratory Control Sample**

Date of Extraction: 3/3/2023 9:40

Date of Analysis: 3/3/2023 16:18

Dup Date of Analysis: 3/3/2023 16:32

Laboratory Sample #: VV0303231

LCS Qualifiers: L1,

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
PCB-1016	150	189	207	126	138	9	14-130	31	<input checked="" type="checkbox"/>
PCB-1260	150	161	175	107	117	8	42-130	20	<input type="checkbox"/>

**QA/QC Report  
for  
Metals**

Reference #: NAM 27693A

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ 6010B

Laboratory Sample #: 27688-007

Date of Extraction: 03/07/23 17:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
TCLP Arsenic	03/08/23 13:51	03/08/23 13:54	0.00	0.400	0.398	0.413	99	103	4	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ 6010B

Laboratory Sample #: IR0307236

Date of Extraction: 03/07/23 17:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
TCLP Arsenic	03/08/23 13:43	03/08/23 13:46	--	0.400	0.418	0.416	105	104	0	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ STLC CCR

Laboratory Sample #: 27693-005

Date of Extraction: 03/07/23 17:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
STLC Arsenic	03/08/23 12:52	03/08/23 12:55	2.50	1.00	3.40	3.48	90	98	2	75-125	20	--
STLC Lead	03/08/23 12:52	03/08/23 12:55	1.60	1.00	2.50	2.58	90	98	3	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ STLC CCR

Laboratory Sample #: IR0307237

Date of Extraction: 03/07/23 17:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
STLC Arsenic	03/08/23 12:45	03/08/23 12:47	--	1.00	0.968	1.00	97	100	3	80-120	20	--
STLC Lead	03/08/23 12:45	03/08/23 12:47	--	1.00	0.989	0.990	99	99	0	80-120	20	--

# Data Qualifier Definitions

## Qualifier

D1 = Sample required dilution due to matrix.

L1 = The associated blank spike recovery was above laboratory acceptance limits.

VV0303231

8082

PCB-1016

LCSD

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

# Analysis Request & Chain of Custody Record



**ORANGE COAST ANALYTICAL, INC.**

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Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.:

27093

Page:

1

of

4

## ANALYSIS REQUEST / PRESERVATION

### REQUESTED TURN-AROUND-TIME

Standard: X

72 Hour: \_\_\_\_\_


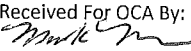
48 Hour: \_\_\_\_\_

24 Hour: \_\_\_\_\_

### REMARKS / INSTRUCTIONS

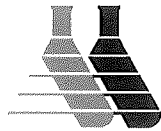
CUSTOMER INFORMATION		PROJECT INFORMATION					Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	PCs by EPA 8260B	TPH-g,d,o by EPA 8015B	TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA															Standard: <u>X</u>	
Send Report To: Dennis Fee		Project Number: 211936010															72 Hour: _____	
Email: dfee@ninyoandmoore.com		PO #:															48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA															24 Hour: _____	
Phone: (949) 753-7070 Fax:		Sampled By: EAC/AC																
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type												REMARKS / INSTRUCTIONS
B2-0.5		1	2/18/23	0850	soil	9oz jar	X	X	C1		X	X	X	X	X	X		C1=composite group 1 u
B2-2.5		1		0854					C2									C2=composite group 2 u
B1-0.5				0902			X	X	C1									
B1-2.5				0904					C2									
B3-0.5				0923			X	X	C1		X	X	X	X				
B3-2.5				0925					C2									
B4-0.5				0931			X	X	C3									C3=composite group 3 u
B4-2.5				0932					C4									C4=composite group 4 i
B22-0.5				0938			X	X										
B22-2.5				0940														HOLD
B22-5		↓		0942		↓												HOLD
B42-2.5		5		0958		9oz jar 4 VOAs									X	X		
B42-5		↓		1000		↓												HOLD
B41-2.5		↓	↓	1011	↓	↓									X	X		

No. of Samples: 14 Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO<sub>3</sub> 4 = H<sub>2</sub>SO<sub>4</sub> 5 = NaOH 6 = Other

Relinquished By: 	Date: 2/20/23	Received By:	Date:	Sample Matrix:	DW - Drinking Water
Company: N & M	Time: 1611	Company:	Time:	GW - Groundwater	AQ - Aqueous
Relinquished By:	Date:	Received By:	Date:	WW - Wastewater	SS - Soil / Solid
Company:	Time:	Company:	Time:	SW - Stormwater	OT - Other
Relinquished By:	Date:	Received For OCA By: 	Date: 2-26-23	Sample Integrity:	2.0 + 0.2 = 2.2
Company:	Time:	Company: OCA, CA	Time: 1611	Intact: _____ On Ice: (Yes) / No @ 27.3°C	

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

# Analysis Request & Chain of Custody Record



**ORANGE COAST ANALYTICAL, INC.**

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4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

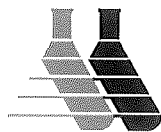
Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.: 27093 Page: 2 of 4

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					<div style="display: flex; flex-direction: row-reverse;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Lead by EPA 6010B</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Arsenic by EPA 6010B</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">OCs by EPA 8081A</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PCBs by EPA 8082</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Title 22 Metals by EPA 6010B/7471A</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Hexavalent Chromium by EPA 7199</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Asbestos by PLM</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PAHs by EPA 8270-SIM</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">VOCs by EPA 8260B</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH-g.d.o by EPA 8015B</div> </div>										Standard: <u>X</u>	
Send Report To: Dennis Fee		Project Number: 211936010															72 Hour: _____	
Email: <u>dfee@ninyoandmoore.com</u>		PO #:															48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA															24 Hour: _____	
Phone: (949) 753-7070 Fax: _____		Sampled By: <u>EAC/AC</u>																
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type											REMARKS / INSTRUCTIONS	
15	B41-5	5	2/18/23	1014	soil	9 oz jar 4 VOAS												HOLD
16	B40-2.5	↓		1039		↓												
17	B5-0.5	1		1102		9 oz jar	X	X	C3		X	X	X	X	X			
18	B5-2.5	1		1104		↓			C4									
19	B6-0.5	↓		1111		↓	X	X	C3									
20	B6-2.5	↓		1113		↓			C4									
21	B40-5	5		1126		9 oz jar 4 VOAS			C5									HOLD
22	B8-0.5	1		1248		9 oz jar	X	X	C5		X	X	X	X				C5=composite group 5
23	B8-2.5	1		1250		↓			C6									C6=composite group 6
24	B7-0.5	↓		1254		↓	X	X	C5									
25	B7-2.5	↓		1255		↓			C6									
26	B12-0.5	↓		1302		↓	X	X	C7		X	X	X	X				C7=composite group 7
27	B12-2.5	↓		1304		↓			C8									C8=composite group 8
28	B11-0.5	↓		1307		↓	X	X	C7									
No. of Samples: <u>14</u>		Method of Shipment:			Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other													
Relinquished By: <u>[Signature]</u>		Date: <u>2/20/23</u>		Received By:		Date:		Sample Matrix:		DW - Drinking Water								
Company: <u>N&amp;M</u>		Time: <u>1611</u>		Company:		Time:		GW - Groundwater		AQ - Aqueous								
Relinquished By:		Date:		Received By:		Date:		WW - Wastewater		SS - Soil / Solid								
Company:		Time:		Company:		Time:		SW - Stormwater		OT - Other								
Relinquished By:		Date:		Received For OCA By: <u>[Signature]</u>		Date: <u>2-20-23</u>		Sample Integrity:		2.0 to 2.0 °C								
Company:		Time:		Company: <u>OCA, LP</u>		Time: <u>1611</u>		Intact: _____ On Ice: <u>(Yes)</u> No @ <u>3</u> °C										

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# Analysis Request & Chain of Custody Record



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Lab Job No.: 27693

Page: 3 of 4

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA	
Send Report To: Dennis Fee		Project Number: 211936010	
Email: dfee@ninyoandmoore.com		PO #:	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA	
Phone: (949) 753-7070 Fax:		EDD Required:	
		Sampled By: <u>EAC/AC</u>	

Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type
29 B11-2.5	1	2/18/23	1309	Soil	902 jar
30 B9-0.5			1320		
31 B9-2.5			1322		
32 B13-0.5			1336		
33 B13-2.5			1338		
34 B14-0.5			1340		
35 B14-2.5			1342		
36 B17-0.5			1351		
37 B17-2.5			1353		
38 B15-0.5			1357		
39 B15-2.5			1359		
40 B16-0.5			1409		
41 B16-2.5			1410		
42 B18-0.5	✓	✓	1412	✓	✓

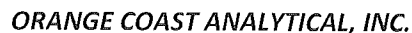
ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g,d,o by EPA 8015B	Standard: <u>X</u>	
										72 Hour: _____	
										48 Hour: _____	
										24 Hour: _____	
										REMARKS / INSTRUCTIONS	
		C8									
X	X	C5		X	X	X	X				
X	X	C6									
X	X	C9								C9=composite group 9	
		C10								C10=composite group 11	
X	X	C9		X	X	X	X				
		C10									
X	X	C11								C11=composite group 11	
		C12								C12=composite group 12	
X	X	C9		X	X	X	X				
		C10									
X	X	C11									
		C12									
X	X	C11		X	X	X	X				

No. of Samples: <u>14</u>		Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other	
Relinquished By: <u>[Signature]</u>	Date: <u>2/20/23</u>	Received By:	Date:	Sample Matrix:	DW - Drinking Water
Company: <u>N&amp;M</u>	Time: <u>1611</u>	Company:	Time:	GW - Groundwater	AQ - Aqueous
Relinquished By:	Date:	Received By:	Date:	WW - Wastewater	SS - Soil / Solid
Company:	Time:	Company:	Time:	SW - Stormwater	OT - Other
Relinquished By:	Date:	Received For OCA By: <u>[Signature]</u>	Date: <u>2-20-23</u>	Sample Integrity:	<u>2.0+0.2.1°C</u>
Company:	Time:	Company: <u>OCA, CA</u>	Time: <u>1611</u>	Intact: _____ On Ice: <u>Yes</u> No @ _____ °C	<u>2/16/23</u>

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### 1 of Custody Record



4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.: 27693

Page: 4 of 4

[illegible]

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## Miriam Molina

---

**From:** Dennis Fee <dfee@ninyoandmoore.com>  
**Sent:** Wednesday, March 01, 2023 12:46 PM  
**To:** Orange Coast Analytical  
**Cc:** Miriam Molina  
**Subject:** RE: Report, EDD and Invoice NAM 27693 LAUSD 49th Street PEA Rev1.0

Please also conduct the following lead and arsenic analysis for some of the 2.5' samples on hold:

**Lead by 6010B - 27693**

- B10-2.5'-045
- B11-2.5'-029
- B13-2.5'-033
- B16-2.5'-041

**Arsenic by 6010B - 27693**

- B3-2.5'-006
- B4-2.5'-008
- B22-2.5'-010 - credit

Thanks,



Ninyo & Moore

**Dennis Fee, EIT**  
Senior Project Engineer  
**Ninyo & Moore** | Geotechnical & Environmental Sciences Consultants  
475 Goddard, Suite 200 | Irvine, CA 92618  
949.753.7070 (x12210) | 714.926.4048 (Cell)  
35+ Years of Quality Service | [ninyoandmoore.com](http://ninyoandmoore.com)



**From:** Dennis Fee  
**Sent:** Wednesday, March 1, 2023 11:54 AM  
**To:** Orange Coast Analytical <ocalab@sbcglobal.net>  
**Cc:** Miriam Molina <miriamm@ocalab.com>; NM Accounts Payable <nmaccountspayable@ninyoandmoore.com>  
**Subject:** RE: Report, EDD and Invoice NAM 27693 LAUSD 49th Street PEA Rev1.0

Hello,

Thank you for providing these results.

Please conduct additional laboratory analysis as followed:

**PCBs by EPA 8082 - 27693**

- B1-0.5'-003
- B7-0.5'-024
- B10-0.5'-044
- B16-0.5'-040
- B22-0.5'-009

## Sample Receipt Report

Laboratory Reference NAM 27693

Logged in by HC

Received: 02/20/23 16:11

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

57 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>2</u>	Thermometer ID: <u>IR#3</u>	Adjusted Temp.: <u>2+0=2</u>	
Shipping Intact	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

### Notes

Client Notified

By

On



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27694

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 2/20/2023

Date Reported: 3/6/2023

Chain of Custody Received: ☒

Analytical Method: 8015B, 8081A, 8082, 8260B, 8270C, 6010B,  
7471A,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 4°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

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475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27694  
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***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B31-0.5	27694-001	2/20/2023	2/20/2023	Soil
B31-02.5	27694-002	2/20/2023	2/20/2023	Soil
B20-0.5	27694-003	2/20/2023	2/20/2023	Soil
B20-2.5	27694-004	2/20/2023	2/20/2023	Soil
B20-5	27694-005	2/20/2023	2/20/2023	Soil
B21-0.5	27694-006	2/20/2023	2/20/2023	Soil
B21-2.5	27694-007	2/20/2023	2/20/2023	Soil
B21-5	27694-008	2/20/2023	2/20/2023	Soil
B19-0.5	27694-009	2/20/2023	2/20/2023	Soil
B19-2.5	27694-010	2/20/2023	2/20/2023	Soil
B19-5	27694-011	2/20/2023	2/20/2023	Soil
B23-0.5	27694-012	2/20/2023	2/20/2023	Soil
B23-2.5	27694-013	2/20/2023	2/20/2023	Soil
B23-5	27694-014	2/20/2023	2/20/2023	Soil
B24-0.5	27694-015	2/20/2023	2/20/2023	Soil
B24-2.5	27694-016	2/20/2023	2/20/2023	Soil
B24-5	27694-017	2/20/2023	2/20/2023	Soil
B25-0.5	27694-018	2/20/2023	2/20/2023	Soil
B25-2.5	27694-019	2/20/2023	2/20/2023	Soil
B25-5	27694-020	2/20/2023	2/20/2023	Soil
B26-0.5	27694-021	2/20/2023	2/20/2023	Soil
B26-2.5	27694-022	2/20/2023	2/20/2023	Soil
B26-5	27694-023	2/20/2023	2/20/2023	Soil
B30-0.5	27694-024	2/20/2023	2/20/2023	Soil
B30-2.5	27694-025	2/20/2023	2/20/2023	Soil
B30-5	27694-026	2/20/2023	2/20/2023	Soil
B29-0.5	27694-027	2/20/2023	2/20/2023	Soil
B29-2.5	27694-028	2/20/2023	2/20/2023	Soil
B29-5	27694-029	2/20/2023	2/20/2023	Soil
B28-0.5	27694-030	2/20/2023	2/20/2023	Soil
B28-2.5	27694-031	2/20/2023	2/20/2023	Soil
B28-5	27694-032	2/20/2023	2/20/2023	Soil
B27-0.5	27694-033	2/20/2023	2/20/2023	Soil
B27-2.5	27694-034	2/20/2023	2/20/2023	Soil
B27-5	27694-035	2/20/2023	2/20/2023	Soil
B32-2.5	27694-036	2/20/2023	2/20/2023	Soil
B32-5	27694-037	2/20/2023	2/20/2023	Soil
B32-10	27694-038	2/20/2023	2/20/2023	Soil

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***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B33-2.5	27694-039	2/20/2023	2/20/2023	Soil
B33-5	27694-040	2/20/2023	2/20/2023	Soil
B33-10	27694-041	2/20/2023	2/20/2023	Soil
B34-2.5	27694-042	2/20/2023	2/20/2023	Soil

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**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B32-2.5	27694-036	2/20/2023 16:16	2/20/2023 12:52	2/22/2023 11:30	2/23/2023 0:24	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	107	
<u>Dilution Factor:</u>	1			* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u>	None					
B32-2.5	27694-036	2/20/2023 16:16	2/20/2023 12:52	2/22/2023 11:30	2/23/2023 0:24	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	120			Octacosane	107	
<u>Dilution Factor:</u>	1			* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u>	None					
B32-5	27694-037	2/20/2023 16:16	2/20/2023 12:56	2/22/2023 11:30	2/23/2023 1:07	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	76	
<u>Dilution Factor:</u>	1			* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u>	None					
B32-5	27694-037	2/20/2023 16:16	2/20/2023 12:56	2/22/2023 11:30	2/23/2023 1:07	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	76	
<u>Dilution Factor:</u>	1			* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u>	None					
B33-2.5	27694-039	2/20/2023 16:16	2/20/2023 13:39	2/22/2023 11:30	2/23/2023 1:51	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	112	
<u>Dilution Factor:</u>	1			* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u>	None					



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**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B33-2.5	27694-039	2/20/2023 16:16	2/20/2023 13:39	2/22/2023 11:30	2/23/2023 1:51	Soil

ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      112

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B33-5	27694-040	2/20/2023 16:16	2/20/2023 13:42	2/22/2023 11:30	2/23/2023 2:34	Soil
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ANALYTE                      mg/kg

DROs                              <10

Surrogate:                      % RC\*

Octacosane                      92

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B33-5	27694-040	2/20/2023 16:16	2/20/2023 13:42	2/22/2023 11:30	2/23/2023 2:34	Soil
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ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      92

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B34-2.5	27694-042	2/20/2023 16:16	2/20/2023 14:19	2/22/2023 11:30	2/23/2023 3:18	Soil
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ANALYTE                      mg/kg

DROs                              <10

Surrogate:                      % RC\*

Octacosane                      103

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B34-2.5	27694-042	2/20/2023 16:16	2/20/2023 14:19	2/22/2023 11:30	2/23/2023 3:18	Soil
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ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      103

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

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***Extractable Fuel Hydrocarbons (EPA 8015B)***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBRC0222231			2/22/2023 11:30	2/22/2023 15:00	Soil

ANALYTE                      mg/kg

DROs                              <10

Surrogate:                      % RC\*

Octacosane                      103

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

Method Blank	MBRC0222231			2/22/2023 11:30	2/22/2023 15:00	Soil
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ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      103

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

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**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B32-2.5	27694-036	2/20/2023 16:16	2/20/2023 12:52	2/20/2023 12:52	2/22/2023 13:45	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	97		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B32-5	27694-037	2/20/2023 16:16	2/20/2023 12:56	2/20/2023 12:56	2/22/2023 14:04	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	98		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B33-2.5	27694-039	2/20/2023 16:16	2/20/2023 13:39	2/20/2023 13:39	2/22/2023 14:24	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	96		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B33-5	27694-040	2/20/2023 16:16	2/20/2023 13:42	2/20/2023 13:42	2/22/2023 14:44	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	86		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B34-2.5	27694-042	2/20/2023 16:16	2/20/2023 14:19	2/20/2023 14:19	2/22/2023 15:04	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	92		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

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***Gasoline Range Organics - GROs (EPA 8015B)***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBLY0222231			2/22/2023 10:00	2/22/2023 11:25	Soil

<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
GROs <sup>1</sup>	<0.20	$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	103
<u>Dilution Factor:</u> 1		* Acceptable Recovery: 32-153 %	
<u>Data Qualifiers:</u> None			

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

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**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B32-2.5	27694-036	2/20/2023 16:16	2/20/2023 12:52	2/21/2023 10:30	2/24/2023 15:14	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>		<u>% RC*</u>	
Aldrin	309-00-2	<2.0	Decachlorobiphenyl		73	
alpha-BHC	319-84-6	<5.0	* Acceptable Recovery: 35-130 %			
beta-BHC	319-85-7	<5.0				
gamma-BHC (Lindane)	58-89-9	<5.0	<u>Dilution Factor:</u> 1			
delta-BHC	319-86-8	<10				
Chlordane	57-74-9	<30	<u>Data Qualifiers:</u> None			
4,4'-DDD	72-54-8	<10				
4,4'-DDE	72-55-9	<5.0				
4,4'-DDT	50-29-3	<10				
Dieldrin	60-57-1	<2.0				
Endosulfan I	959-98-8	<10				
Endosulfan II	33213-65-9	<5.0				
Endosulfan sulfate	1031-07-8	<10				
Endrin	72-20-8	<10				
Endrin aldehyde	7421-93-4	<10				
Endrin ketone	53494-70-5	<5.0				
Heptachlor	76-44-8	<2.0				
Heptachlor epoxide	1024-57-3	<5.0				
Methoxychlor	72-43-5	<10				
Toxaphene	8001-35-2	<40				

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**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B32-5	27694-037	2/20/2023 16:16	2/20/2023 12:56	2/21/2023 10:30	2/24/2023 15:29	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:                      % RC\*

Decachlorobiphenyl      71

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B33-2.5	27694-039	2/20/2023 16:16	2/20/2023 13:39	2/21/2023 10:30	2/28/2023 12:24	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
Aldrin	309-00-2	<2.0		Decachlorobiphenyl	87	
alpha-BHC	319-84-6	<5.0				
beta-BHC	319-85-7	<5.0				
gamma-BHC (Lindane)	58-89-9	<5.0				
delta-BHC	319-86-8	<10				
Chlordane	57-74-9	<30				
4,4'-DDD	72-54-8	<10				
4,4'-DDE	72-55-9	<5.0				
4,4'-DDT	50-29-3	<10				
Dieldrin	60-57-1	<2.0				
Endosulfan I	959-98-8	<10				
Endosulfan II	33213-65-9	<5.0				
Endosulfan sulfate	1031-07-8	<10				
Endrin	72-20-8	<10				
Endrin aldehyde	7421-93-4	<10				
Endrin ketone	53494-70-5	<5.0				
Heptachlor	76-44-8	<2.0				
Heptachlor epoxide	1024-57-3	<5.0				
Methoxychlor	72-43-5	<10				
Toxaphene	8001-35-2	<40				

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B33-5	27694-040	2/20/2023 16:16	2/20/2023 13:42	2/21/2023 10:30	2/28/2023 12:39	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:                      % RC\*

Decachlorobiphenyl      84

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None



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**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B34-2.5	27694-042	2/20/2023 16:16	2/20/2023 14:19	2/21/2023 10:30	2/28/2023 12:53	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
Aldrin	309-00-2	<2.0		Decachlorobiphenyl	81	
alpha-BHC	319-84-6	<5.0				
beta-BHC	319-85-7	<5.0				
gamma-BHC (Lindane)	58-89-9	<5.0				
delta-BHC	319-86-8	<10				
Chlordane	57-74-9	<30				
4,4'-DDD	72-54-8	<10				
4,4'-DDE	72-55-9	<5.0				
4,4'-DDT	50-29-3	<10				
Dieldrin	60-57-1	<2.0				
Endosulfan I	959-98-8	<10				
Endosulfan II	33213-65-9	<5.0				
Endosulfan sulfate	1031-07-8	<10				
Endrin	72-20-8	<10				
Endrin aldehyde	7421-93-4	<10				
Endrin ketone	53494-70-5	<5.0				
Heptachlor	76-44-8	<2.0				
Heptachlor epoxide	1024-57-3	<5.0				
Methoxychlor	72-43-5	<10				
Toxaphene	8001-35-2	<40				

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBVV0221231			2/21/2023 10:30	2/24/2023 10:52	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
Aldrin	309-00-2	<2.0		Decachlorobiphenyl	86	
alpha-BHC	319-84-6	<5.0				
beta-BHC	319-85-7	<5.0				
gamma-BHC (Lindane)	58-89-9	<5.0				
delta-BHC	319-86-8	<10				
Chlordane	57-74-9	<30				
4,4'-DDD	72-54-8	<10				
4,4'-DDE	72-55-9	<5.0				
4,4'-DDT	50-29-3	<10				
Dieldrin	60-57-1	<2.0				
Endosulfan I	959-98-8	<10				
Endosulfan II	33213-65-9	<5.0				
Endosulfan sulfate	1031-07-8	<10				
Endrin	72-20-8	<10				
Endrin aldehyde	7421-93-4	<10				
Endrin ketone	53494-70-5	<5.0				
Heptachlor	76-44-8	<2.0				
Heptachlor epoxide	1024-57-3	<5.0				
Methoxychlor	72-43-5	<10				
Toxaphene	8001-35-2	<40				

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B31-0.5	27694-001	2/20/2023 16:16	2/20/2023 7:30	2/21/2023 9:23	2/21/2023 12:57	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<200		Decachlorobiphenyl	42	
PCB-1221	11104-28-2	<200				
PCB-1232	11141-16-5	<200		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<200		<u>Dilution Factor:</u> 8		
PCB-1248	12672-29-6	<200		<u>Data Qualifiers:</u> D1,		
PCB-1254	11097-69-1	<200				
PCB-1260	11096-82-5	<200				
B21-0.5	27694-006	2/20/2023 16:16	2/20/2023 8:03	2/21/2023 9:23	2/21/2023 13:12	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<50		Decachlorobiphenyl	59	
PCB-1221	11104-28-2	<50				
PCB-1232	11141-16-5	<50		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<50		<u>Dilution Factor:</u> 2		
PCB-1248	12672-29-6	<50		<u>Data Qualifiers:</u> D1,		
PCB-1254	11097-69-1	<50				
PCB-1260	11096-82-5	<50				
B29-0.5	27694-027	2/20/2023 16:16	2/20/2023 10:55	2/21/2023 9:23	2/21/2023 13:26	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<200		Decachlorobiphenyl	52	
PCB-1221	11104-28-2	<200				
PCB-1232	11141-16-5	<200		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<200		<u>Dilution Factor:</u> 8		
PCB-1248	12672-29-6	<200		<u>Data Qualifiers:</u> D1,		
PCB-1254	11097-69-1	<200				
PCB-1260	11096-82-5	<200				

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***Polychlorinated Biphenyl's (EPA 8082)***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBVV0220231			2/20/2023 10:00	2/21/2023 10:02	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
PCB-1016	12674-11-2	<25	Decachlorobiphenyl	68
PCB-1221	11104-28-2	<25		
PCB-1232	11141-16-5	<25		
PCB-1242	53469-21-9	<25		
PCB-1248	12672-29-6	<25		
PCB-1254	11097-69-1	<25		
PCB-1260	11096-82-5	<25		

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B32-2.5	27694-036	2/20/2023	2/20/2023	2/20/2023	2/22/2023	Soil
		16:16	12:52	12:52	16:01	

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	113	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	85	58-130 %	
4-Bromofluorobenzene:	79	40-135 %	

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**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B32-5	27694-037	2/20/2023 16:16	2/20/2023 12:56	2/20/2023 12:56	2/22/2023 16:23	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
Surrogate:	% RC	Acceptable % RC	Dilution Factor:	1		
Dibromofluoromethane:	114	65-130 %	Data Qualifiers:	None		
Toluene-d8:	85	58-130 %				
4-Bromofluorobenzene:	77	40-135 %				

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
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**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B33-2.5	27694-039	2/20/2023 16:16	2/20/2023 13:39	2/20/2023 13:39	2/22/2023 16:44	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
Surrogate:	% RC	Acceptable % RC	Dilution Factor: 1			
Dibromofluoromethane:	111	65-130 %	Data Qualifiers: None			
Toluene-d8:	87	58-130 %				
4-Bromofluorobenzene:	76	40-135 %				

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**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B33-5	27694-040	2/20/2023 16:16	2/20/2023 13:42	2/20/2023 13:42	2/22/2023 17:06	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
Surrogate:	% RC	Acceptable % RC	Dilution Factor: 1			
Dibromofluoromethane:	114	65-130 %	Data Qualifiers: None			
Toluene-d8:	87	58-130 %				
4-Bromofluorobenzene:	79	40-135 %				



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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B34-2.5	27694-042	2/20/2023 16:16	2/20/2023 14:19	2/20/2023 14:19	2/22/2023 17:27	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
Surrogate:	% RC	Acceptable % RC	Dilution Factor: 1			
Dibromofluoromethane:	115	65-130 %	Data Qualifiers: None			
Toluene-d8:	86	58-130 %				
4-Bromofluorobenzene:	75	40-135 %				

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT0221233			2/21/2023 15:00	2/22/2023 10:55	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	111	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	86	58-130 %				
4-Bromofluorobenzene:	77	40-135 %				

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Polynuclear Aromatic Hydrocarbons by SIM (EPA 8270C)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B20-0.5	27694-003	2/20/2023 16:16	2/20/2023 7:50	2/21/2023 10:20	2/21/2023 22:14	Soil

ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	64
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

B23-0.5	27694-012	2/20/2023 16:16	2/20/2023 8:42	2/21/2023 10:20	2/21/2023 22:45	Soil
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ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<200	Nitrobenzene-d5	Diluted
Acenaphthylene:	208-96-8	<200		
Anthracene:	120-12-7	<200	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<200		
Benzo(a)pyrene:	50-32-8	<200	Dilution Factor:	4
Benzo(b)fluoranthene:	205-99-2	<200	Data Qualifiers:	D1, S8,
Benzo(k)fluoranthene:	207-08-9	<200		
Benzo(g,h,i)perylene:	191-24-2	<200		
Chrysene:	218-01-9	<200		
Dibenz(a,h)anthracene:	53-70-3	<240		
Fluoranthene:	206-44-0	<260		
Pyrene:	129-00-0	<260		
Fluorene:	86-73-7	<200		
Phenanthrene:	85-01-8	<200		
Indeno(1,2,3-cd)pyrene:	193-39-5	<200		
Naphthalene:	91-20-3	<200		

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Polynuclear Aromatic Hydrocarbons by SIM (EPA 8270C)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B25-0.5	27694-018	2/20/2023 16:16	2/20/2023 9:38	2/21/2023 10:20	2/21/2023 23:17	Soil

ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	72
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

B26-0.5	27694-021	2/20/2023 16:16	2/20/2023 10:05	2/21/2023 10:20	2/21/2023 23:49	Soil
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ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<500	Nitrobenzene-d5	Diluted
Acenaphthylene:	208-96-8	<500		
Anthracene:	120-12-7	<500	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<500		
Benzo(a)pyrene:	50-32-8	<500	Dilution Factor:	10
Benzo(b)fluoranthene:	205-99-2	<500	Data Qualifiers:	D1, S8,
Benzo(k)fluoranthene:	207-08-9	<500		
Benzo(g,h,i)perylene:	191-24-2	<500		
Chrysene:	218-01-9	<500		
Dibenz(a,h)anthracene:	53-70-3	<600		
Fluoranthene:	206-44-0	<650		
Pyrene:	129-00-0	<650		
Fluorene:	86-73-7	<500		
Phenanthrene:	85-01-8	<500		
Indeno(1,2,3-cd)pyrene:	193-39-5	<500		
Naphthalene:	91-20-3	<500		

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Polynuclear Aromatic Hydrocarbons by SIM (EPA 8270C)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBGS0221231			2/21/2023 10:20	2/21/2023 14:46	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	117
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	<u>Dilution Factor:</u> 1	
Benzo(b)fluoranthene:	205-99-2	<50	<u>Data Qualifiers:</u> None	
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

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Irvine, CA, 92618

Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B20-0.5		27694-003	2/20/2023	16:16	2/20/2023	7:50	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Arsenic	6010B	3.2	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Barium	6010B	62	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Chromium	6010B	13	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Cobalt	6010B	7.0	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Copper	6010B	12	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Lead	6010B	18	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Mercury	7471A	<0.10	mg/kg	02/21/23 17:00	02/23/23 13:54	--	1		
Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Nickel	6010B	11	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Vanadium	6010B	25	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
Zinc	6010B	75	mg/kg	02/21/23 09:40	02/23/23 15:22	--	1		
B21-0.5		27694-006	2/20/2023	16:16	2/20/2023	8:03	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Arsenic	6010B	38	mg/kg	02/21/23 10:15	02/23/23 12:36	--	1		
Lead	6010B	42	mg/kg	02/21/23 10:15	02/23/23 12:36	--	1		

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix			
B19-0.5		27694-009	2/20/2023	16:16	2/20/2023	8:20	Soil			
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	2.4	mg/kg	02/21/23 10:15	02/23/23 12:39		--	1	
	Lead	6010B	63	mg/kg	02/21/23 10:15	02/23/23 12:39		--	1	
B23-0.5		27694-012	2/20/2023	16:16	2/20/2023	8:42	Soil			
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>	
	Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Barium	6010B	55	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Chromium	6010B	7.1	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Cobalt	6010B	5.0	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Copper	6010B	11	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Lead	6010B	38	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Mercury	7471A	0.24	mg/kg	02/21/23 17:00	02/23/23 13:56		--	1	
	Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Nickel	6010B	5.9	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Vanadium	6010B	20	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	
	Zinc	6010B	54	mg/kg	02/21/23 09:40	02/23/23 15:25		--	1	

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Irvine, CA, 92618

Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID			Lab Sample Number	Date Received	Date Sampled		Matrix		
B24-0.5			27694-015	2/20/2023 16:16	2/20/2023 9:00		Soil		
<u>ANALYTE</u>			<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Arsenic			6010B	<2.0	mg/kg	02/21/23 10:15	02/23/23 12:41	--	1
Lead			6010B	66	mg/kg	02/21/23 10:15	02/23/23 12:41	--	1
B25-0.5			27694-018	2/20/2023 16:16	2/20/2023 9:38		Soil		
<u>ANALYTE</u>			<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony			6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Arsenic			6010B	3.6	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Barium			6010B	86	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Beryllium			6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Cadmium			6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Chromium			6010B	15	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Cobalt			6010B	8.1	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Copper			6010B	14	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Lead			6010B	21	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Mercury			7471A	0.11	mg/kg	02/21/23 17:00	02/23/23 13:58	--	1
Molybdenum			6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Nickel			6010B	9.8	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Selenium			6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Silver			6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Thallium			6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Vanadium			6010B	32	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1
Zinc			6010B	56	mg/kg	02/21/23 09:40	02/23/23 15:28	--	1



Mr. Dennis Fee  
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475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B26-0.5		27694-021	2/20/2023	16:16	2/20/2023	10:05	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Arsenic	6010B	2.8	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Barium	6010B	83	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Chromium	6010B	15	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Cobalt	6010B	18	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Copper	6010B	18	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Lead	6010B	34	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Mercury	7471A	<0.10	mg/kg	02/21/23 17:00	02/23/23 14:00	--	1		
Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Nickel	6010B	10	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Vanadium	6010B	30	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
Zinc	6010B	98	mg/kg	02/21/23 09:40	02/23/23 15:31	--	1		
B30-0.5		27694-024	2/20/2023	16:16	2/20/2023	10:25	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Arsenic	6010B	<2.0	mg/kg	02/21/23 10:15	02/23/23 12:50	--	1		
Lead	6010B	11	mg/kg	02/21/23 10:15	02/23/23 12:50	--	1		

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number		Date Received		Date Sampled		Matrix		
B29-0.5	27694-027		2/20/2023 16:16		2/20/2023 10:55		Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	2.0	mg/kg	02/21/23 10:15	02/23/23 12:52	--	1	
	Lead	6010B	34	mg/kg	02/21/23 10:15	02/23/23 12:52	--	1	
B28-0.5	27694-030		2/20/2023 16:16		2/20/2023 11:58		Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	2.5	mg/kg	02/21/23 10:15	02/23/23 12:55	--	1	
	Lead	6010B	5.5	mg/kg	02/21/23 10:15	02/23/23 12:55	--	1	
B27-0.5	27694-033		2/20/2023 16:16		2/20/2023 12:19		Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	2.5	mg/kg	02/21/23 10:15	02/23/23 12:57	--	1	
	Lead	6010B	4.6	mg/kg	02/21/23 10:15	02/23/23 12:57	--	1	

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Lab Reference # NAM 27694  
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Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B32-2.5		27694-036	2/20/2023	16:16	2/20/2023	12:52	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Barium	6010B	130	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Chromium	6010B	19	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Cobalt	6010B	12	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Copper	6010B	19	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Lead	6010B	6.0	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Mercury	7471A	0.11	mg/kg	02/21/23 17:00	02/23/23 14:01	--	1		
Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Nickel	6010B	12	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Vanadium	6010B	44	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		
Zinc	6010B	60	mg/kg	02/21/23 09:40	02/23/23 15:34	--	1		

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B32-5	27694-037	2/20/2023 16:16	2/20/2023 12:56	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Barium	6010B	130	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Chromium	6010B	19	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Cobalt	6010B	13	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Copper	6010B	17	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Lead	6010B	4.6	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Mercury	7471A	0.15	mg/kg	02/21/23 17:00	02/23/23 14:06	--	1
Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Nickel	6010B	12	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Vanadium	6010B	49	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1
Zinc	6010B	64	mg/kg	02/21/23 09:40	02/23/23 15:37	--	1

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B33-2.5	27694-039	2/20/2023 16:16	2/20/2023 13:39	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Arsenic	6010B	3.9	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Barium	6010B	160	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Beryllium	6010B	0.58	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Chromium	6010B	24	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Cobalt	6010B	16	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Copper	6010B	23	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Lead	6010B	6.7	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Mercury	7471A	0.11	mg/kg	02/21/23 17:00	02/23/23 14:05	--	1
Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Nickel	6010B	17	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Vanadium	6010B	55	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1
Zinc	6010B	77	mg/kg	02/21/23 09:40	02/23/23 15:40	--	1

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B33-5	27694-040	2/20/2023 16:16	2/20/2023 13:42	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Barium	6010B	150	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Beryllium	6010B	0.57	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Chromium	6010B	22	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Cobalt	6010B	15	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Copper	6010B	22	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Lead	6010B	5.3	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Mercury	7471A	<0.10	mg/kg	02/21/23 17:00	02/23/23 14:10	--	1
Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Nickel	6010B	15	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Vanadium	6010B	52	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1
Zinc	6010B	71	mg/kg	02/21/23 09:40	02/23/23 15:43	--	1

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B34-2.5	27694-042	2/20/2023 16:16	2/20/2023 14:19	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Barium	6010B	140	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Chromium	6010B	19	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Cobalt	6010B	12	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Copper	6010B	18	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Lead	6010B	24	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Mercury	7471A	0.12	mg/kg	02/21/23 17:00	02/23/23 14:12	--	1
Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Nickel	6010B	12	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Vanadium	6010B	41	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1
Zinc	6010B	120	mg/kg	02/21/23 09:40	02/23/23 15:46	--	1

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Lab Reference # NAM 27694  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID			Lab Sample Number	Date Received	Date Sampled		Matrix		
Method Blank							Soil		
MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF	
MBHV0221231	Antimony	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Arsenic	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Barium	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Beryllium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Cadmium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Chromium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Cobalt	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Copper	6010B	<5.0	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Lead	6010B	<0.80	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221233	Mercury	7471A	<0.10	mg/kg	02/21/23 17:00	02/23/23 13:23	--	1	
MBHV0221231	Molybdenum	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Nickel	6010B	<1.0	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Selenium	6010B	<4.8	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Silver	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Thallium	6010B	<2.0	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Vanadium	6010B	<0.50	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
MBHV0221231	Zinc	6010B	<5.0	mg/kg	02/21/23 09:40	02/23/23 14:17	--	1	
Method Blank							Soil		
MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF	
MBHV0221232	Arsenic	6010B	<2.0	mg/kg	02/21/23 10:15	02/23/23 11:49	--	1	
MBHV0221232	Lead	6010B	<0.80	mg/kg	02/21/23 10:15	02/23/23 11:49	--	1	



**QA/QC Report**  
for  
**Extactable Fuel Hydrocarbons (EPA 8015B/8015M)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/22/2023 11:30

Date of Analysis: 2/22/2023 16:26

Dup Date of Analysis: 2/22/2023 16:48

Laboratory Sample #: 27690-007

MS/MSD Qualifiers: None

Reference #: NAM 27694

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
EFH as Diesel	250	1000	989	849	74	60	15	8-193	20	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Octacosane	146	129	<input type="checkbox"/>	103	100	<input type="checkbox"/>	40-160

**Laboratory Control Sample**

Date of Extraction: 2/22/2023 11:30

Date of Analysis: 2/22/2023 15:44

Dup Date of Analysis: 2/22/2023 16:05

Laboratory Sample #: RC0222231

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
EFH as Diesel	1000	813	744	81	74	9	17-180	42	<input type="checkbox"/>

**QA/QC Report**  
for  
**Volatile Fuel Hydrocarbons (EPA 8015B)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/22/2023 10:00

Date of Analysis: 2/22/2023 12:33

Dup Date of Analysis: 2/22/2023 12:52

Laboratory Sample #: 27691-001

MS/MSD Qualifiers: None

Reference #: NAM 27694

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
VFH as Gasoline	0.00	0.250	0.187	0.169	75	68	10	20-144	50	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	97	89	<input type="checkbox"/>	90	108	<input type="checkbox"/>	32-153

**Laboratory Control Sample**

Date of Extraction: 2/22/2023 10:00

Date of Analysis: 2/22/2023 11:44

Dup Date of Analysis: 2/22/2023 12:13

Laboratory Sample #: LY0222231

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
VFH as Gasoline	0.250	0.193	0.198	77	79	3	38-130	27	<input type="checkbox"/>

**QA/QC Report**  
for  
**Organochlorine Pesticides (EPA 8081A)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/22/2023 9:20

Date of Analysis: 2/24/2023 11:36

Dup Date of Analysis: 2/24/2023 11:50

Laboratory Sample #: 27693-047

MS/MSD Qualifiers: None

Reference #: NAM 27694

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Aldrin	0.00	20.0	10.3	9.95	51	50	3	14-130	28	--
alpha-BHC	0.00	20.0	10.2	10.1	51	50	1	13-130	29	--
beta-BHC	0.00	20.0	11.7	11.4	58	57	3	13-140	26	--
gamma-BHC (Lindane)	0.00	20.0	10.8	10.6	54	53	2	15-130	26	--
4,4'-DDD	0.00	20.0	15.5	15.5	77	77	0	18-169	20	--
4,4'-DDE	0.00	20.0	14.5	14.8	73	74	2	30-165	20	--
4,4'-DDT	0.00	20.0	16.0	15.9	80	79	1	34-170	20	--
delta-BHC	0.00	20.0	12.9	13.0	64	65	1	18-143	27	--
Dieldrin	0.00	20.0	12.7	12.9	63	64	2	24-147	20	--
Endosulfan I	0.00	20.0	11.9	12.0	59	60	1	13-158	23	--
Endosulfan II	0.00	20.0	12.9	12.6	64	63	2	19-143	29	--
Endosulfan sulfate	0.00	20.0	11.9	11.2	59	56	6	D-158	59	--
Endrin	0.00	20.0	13.7	13.9	69	69	1	26-156	25	--
Endrin Aldehyde	0.00	20.0	10.1	9.20	50	46	9	D-148	59	--
Endrin ketone	0.00	20.0	11.4	10.9	57	54	4	D-147	36	--
Heptachlor	0.00	20.0	9.79	9.43	49	47	4	10-130	30	--
Heptachlor epoxide	0.00	20.0	11.5	11.6	57	58	1	19-134	24	--
Methoxychlor	0.00	20.0	14.0	14.1	70	71	1	12-165	32	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Decachlorobiphenyl	84	84	<input type="checkbox"/>	88	79	<input type="checkbox"/>	35-130

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 2/21/2023 10:30

Date of Analysis: 2/24/2023 11:06

Dup Date of Analysis: 2/24/2023 11:21

Laboratory Sample #: VV0221231

LCS/LCSD Qualifiers: R7,

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Aldrin	20.0	11.6	9.32	58	47	22	7-130	31	--
alpha-BHC	20.0	11.6	9.13	58	46	24	10-130	25	--
beta-BHC	20.0	12.1	9.84	61	49	21	12-137	23	--
gamma-BHC (Lindane)	20.0	11.8	9.40	59	47	23	14-130	22	R7,
4,4'-DDD	20.0	16.2	14.6	81	73	10	25-161	20	--
4,4'-DDE	20.0	15.4	12.9	77	64	18	20-154	20	--

**QA/QC Report**  
**for**  
**Organochlorine Pesticides (EPA 8081A)**  
Reporting Units: ppb

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
4,4'-DDT	20.0	16.9	14.7	84	74	14	26-164	20	--
delta-BHC	20.0	13.2	11.6	66	58	13	17-137	24	--
Dieldrin	20.0	13.6	11.5	68	57	17	18-138	21	--
Endosulfan I	20.0	13.8	10.4	69	52	28	14-142	23	R7,
Endosulfan II	20.0	14.3	13.4	72	67	6	18-148	20	--
Endosulfan sulfate	20.0	13.1	13.3	66	67	2	11-159	32	--
Endrin	20.0	14.5	12.2	73	61	17	22-141	21	--
Endrin Aldehyde	20.0	10.9	10.6	54	53	3	2-140	40	--
Endrin ketone	20.0	12.8	12.4	64	62	3	12-145	22	--
Heptachlor	20.0	11.3	8.91	56	45	24	5-130	29	--
Heptachlor epoxide	20.0	12.4	10.1	62	50	20	14-130	22	--
Methoxychlor	20.0	15.4	12.2	77	61	23	29-157	20	R7,

**QA/QC Report**  
**for**  
**Polychlorinated Biphenyl's (EPA 8082)**  
Reporting units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/20/2023 10:00

Date of Analysis: 2/21/2023 10:46

Dup Date of Analysis: 2/21/2023 11:00

Laboratory Sample #: 27671-005

MS/MSD Qualifiers: None

Reference #: NAM 27694

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
PCB-1016	0.00	150	131	119	87	79	10	28-130	28	<input type="checkbox"/>
PCB-1260	0.00	150	138	132	92	88	4	36-132	20	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual
Decachlorobiphenyl	67	63	<input type="checkbox"/>

LCS	LCSD	Qual
74	75	<input type="checkbox"/>

ACP % RC
35-130

**Laboratory Control Sample**

Date of Extraction: 2/20/2023 10:00

Date of Analysis: 2/21/2023 10:16

Dup Date of Analysis: 2/21/2023 10:31

Laboratory Sample #: VV0220231

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
PCB-1016	150	119	117	79	78	2	14-130	31	<input type="checkbox"/>
PCB-1260	150	136	148	91	99	8	42-130	20	<input type="checkbox"/>

**QA/QC Report**  
for  
**Volatile Organic Compounds (8260B)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/22/2023 9:26

Date of Analysis: 2/22/2023 12:23

Dup Date of Analysis: 2/22/2023 12:45

Laboratory Sample #: 27690-006

MS/MSD Qualifiers: None

Reference #: NAM 27694

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Benzene	0.00	10.0	9.84	9.57	98	96	3	70-138	20	--
Chlorobenzene	0.00	10.0	11.0	10.6	110	106	4	70-132	20	--
1,1-Dichloroethene	0.00	10.0	6.13	6.29	61	63	3	46-130	20	--
Toluene	0.00	10.0	9.84	9.23	98	92	6	70-130	20	--
Trichloroethene	0.00	10.0	10.2	9.85	102	99	3	70-135	20	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Dibromofluoromethane	113	111	<input type="checkbox"/>	112	109	<input type="checkbox"/>	65-130
Toluene-d8	89	86	<input type="checkbox"/>	90	84	<input type="checkbox"/>	58-130
4-Bromofluorobenzene	78	80	<input type="checkbox"/>	86	74	<input type="checkbox"/>	40-135

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 2/22/2023 9:26

Date of Analysis: 2/22/2023 11:39

Dup Date of Analysis: 2/22/2023 12:01

Laboratory Sample #: HT0222231

LCS/LCSD Qualifiers: None

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Benzene	10.0	10.5	9.80	105	98	7	70-134	20	--
Chlorobenzene	10.0	11.6	10.8	116	108	7	70-130	20	--
1,1-Dichloroethene	10.0	7.24	6.73	72	67	7	48-130	20	--
Toluene	10.0	10.3	9.49	103	95	8	70-130	20	--
Trichloroethene	10.0	10.9	10.3	109	103	6	70-132	20	--

**QA/QC Report**  
for  
**Semi-Volatile Organic Compounds (8270C)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 2/21/2023 10:20

Date of Analysis: 2/21/2023 16:23

Dup Date of Analysis: 2/21/2023 16:54

Laboratory Sample #: 27693-026

MS/MSD Qualifiers: M2, M2, S1,

Reference #: NAM 27694

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Acenaphthene	0.00	20.0	12.6	12.5	63	63	1	11-138	20	--
Acenaphthylene	0.00	20.0	12.1	12.2	61	61	1	54-130	32	--
Anthracene	0.00	20.0	10.5	10.3	52	51	2	43-130	30	--
Benz(a)anthracene	0.00	20.0	12.7	12.0	63	60	6	42-133	30	--
Benzo(a)pyrene	0.00	20.0	12.9	12.5	64	63	3	32-148	30	--
Benzo(b)fluoranthene	0.00	20.0	17.5	17.2	88	86	2	42-140	30	--
Benzo(g,h,i)perylene	0.00	20.0	14.8	14.4	74	72	3	D-195	30	--
Benzo(k)fluoranthene	0.00	20.0	19.4	20.5	97	102	6	25-146	30	--
Chrysene	0.00	20.0	14.7	14.6	74	73	1	44-140	35	--
Dibenz(a,h)anthracene	0.00	20.0	13.5	13.2	68	66	2	D-200	35	--
Fluoranthene	0.00	20.0	13.6	13.2	68	66	3	43-130	30	--
Fluorene	0.00	20.0	11.9	11.7	59	58	2	70-130	30	M2,
Indeno(1,2,3-cd)pyrene	0.00	20.0	13.7	13.3	69	67	3	D-151	30	--
Naphthalene	0.00	20.0	12.0	11.9	60	59	1	36-130	30	--
Phenanthrene	0.00	20.0	12.1	11.6	61	58	4	70-130	30	M2,
Pyrene	0.00	20.0	15.8	15.6	79	78	1	25-145	20	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Nitrobenzene-d5	133	138	✓	145	136	✓	8-134

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 2/21/2023 10:20

Date of Analysis: 2/21/2023 15:19

Dup Date of Analysis: 2/21/2023 15:51

Laboratory Sample #: GS0221231

LCS/LCSD Qualifiers: L2, S1,

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Acenaphthene	20.0	14.4	13.8	72	69	4	24-137	20	--
Acenaphthylene	20.0	14.9	14.0	75	70	6	54-126	32	--
Anthracene	20.0	13.4	12.7	67	63	5	43-118	27	--
Benz(a)anthracene	20.0	15.0	14.3	75	72	5	42-133	21	--

**QA/QC Report**  
**for**  
**Semi-Volatile Organic Compounds (8270C)**  
Reporting Units: ppb

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Benzo(a)pyrene	20.0	14.0	13.9	70	69	1	32-148	26	--
Benzo(b)fluoranthene	20.0	20.9	19.9	104	100	5	42-140	28	--
Benzo(g,h,i)perylene	20.0	16.0	16.1	80	81	1	D-195	30	--
Benzo(k)fluoranthene	20.0	19.8	20.4	99	102	3	25-146	22	--
Chrysene	20.0	16.5	16.1	82	81	2	44-140	35	--
Dibenz(a,h)anthracene	20.0	15.1	15.2	75	76	1	D-200	35	--
Fluoranthene	20.0	15.7	15.2	78	76	3	43-121	27	--
Fluorene	20.0	14.1	13.2	71	66	7	72-108	20	L2,
Indeno(1,2,3-cd)pyrene	20.0	15.4	15.4	77	77	0	D-151	30	--
Naphthalene	20.0	13.6	13.3	68	67	2	36-120	25	--
Phenanthrene	20.0	14.4	14.0	72	70	3	70-130	20	--
Pyrene	20.0	17.2	16.7	86	84	3	27-154	20	--



**QA/QC Report  
for  
Metals**

Reference #: NAM 27694

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B/7471A**

Laboratory Sample #: 27693-001

Date of Extraction: 02/21/23 09:40

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Antimony	02/23/23 14:33	02/23/23 14:42	0.00	20.0	3.01	3.30	15	16	9	75-125	20	M2,
Arsenic	02/23/23 14:33	02/23/23 14:42	0.00	20.0	18.8	19.0	94	95	1	75-125	20	--
Barium	02/23/23 14:33	02/23/23 14:42	84.0	20.0	101	100	85	80	1	75-125	20	--
Beryllium	02/23/23 14:33	02/23/23 14:42	0.00	20.0	17.5	17.7	88	89	1	75-125	20	--
Cadmium	02/23/23 14:33	02/23/23 14:42	0.00	20.0	16.4	16.7	82	84	2	75-125	20	--
Chromium	02/23/23 14:33	02/23/23 14:42	12.0	20.0	30.9	31.5	94	98	2	75-125	20	--
Cobalt	02/23/23 14:33	02/23/23 14:42	6.90	20.0	24.2	24.8	87	89	2	75-125	20	--
Copper	02/23/23 14:33	02/23/23 14:42	9.70	20.0	27.7	28.2	90	93	2	75-125	20	--
Lead	02/23/23 14:33	02/23/23 14:42	17.0	20.0	34.8	36.5	89	98	5	75-125	20	--
Molybdenum	02/23/23 14:33	02/23/23 14:42	0.00	20.0	16.0	16.2	80	81	1	75-125	20	--
Nickel	02/23/23 14:33	02/23/23 14:42	7.10	20.0	24.5	25.2	87	91	3	75-125	20	--
Selenium	02/23/23 14:33	02/23/23 14:42	0.00	20.0	17.1	16.8	86	84	2	75-125	20	--
Silver	02/23/23 14:33	02/23/23 14:42	0.00	20.0	18.6	18.8	93	94	1	75-125	20	--
Thallium	02/23/23 14:33	02/23/23 14:42	0.00	20.0	13.8	14.0	69	70	1	75-125	20	M2,
Vanadium	02/23/23 14:33	02/23/23 14:42	28.0	20.0	46.8	47.8	94	99	2	75-125	20	--
Zinc	02/23/23 14:33	02/23/23 14:42	48.0	20.0	69.9	70.2	110	111	0	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: HV0221231

Date of Extraction: 02/21/23 09:40

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Antimony	02/23/23 14:20	02/23/23 14:30	--	20.0	17.3	20.1	86	101	15	80-120	20	--
Arsenic	02/23/23 14:20	02/23/23 14:30	--	20.0	17.1	19.7	86	99	14	80-120	20	--
Barium	02/23/23 14:20	02/23/23 14:30	--	20.0	17.5	20.6	88	103	16	80-120	20	--
Beryllium	02/23/23 14:20	02/23/23 14:30	--	20.0	16.7	19.7	84	99	16	80-120	20	--
Cadmium	02/23/23 17:52	02/23/23 14:30	--	20.0	18.4	18.8	92	94	2	80-120	20	--
Chromium	02/23/23 14:20	02/23/23 14:30	--	20.0	17.6	20.9	88	104	17	80-120	20	--
Cobalt	02/23/23 14:20	02/23/23 14:30	--	20.0	17.4	21.5	87	108	21	80-120	20	R2,
Copper	02/23/23 14:20	02/23/23 14:30	--	20.0	16.4	20.1	82	101	20	80-120	20	--
Lead	02/23/23 14:20	02/23/23 14:30	--	20.0	17.8	20.4	89	102	14	80-120	20	--
Molybdenum	02/23/23 14:20	02/23/23 14:30	--	20.0	16.9	19.5	84	98	14	80-120	20	--
Nickel	02/23/23 14:20	02/23/23 14:30	--	20.0	18.4	21.5	92	108	16	80-120	20	--
Selenium	02/23/23 14:20	02/23/23 14:30	--	20.0	16.1	19.1	81	96	17	80-120	20	--
Silver	02/23/23 14:20	02/23/23 14:30	--	20.0	19.4	20.8	97	104	7	80-120	20	--
Thallium	02/23/23 14:20	02/23/23 14:30	--	20.0	17.8	19.8	89	99	11	80-120	20	--
Vanadium	02/23/23 14:20	02/23/23 14:30	--	20.0	16.3	19.1	81	96	16	80-120	20	--
Zinc	02/23/23 14:20	02/23/23 14:30	--	20.0	17.5	20.2	88	101	14	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B/7471A**

Laboratory Sample #: 27693-003

Date of Extraction: 02/21/23 10:15

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Arsenic	02/23/23 11:56	02/23/23 12:15	0.00	20.0	19.1	20.3	96	101	6	75-125	20	--
Lead	02/23/23 11:56	02/23/23 12:15	5.60	20.0	22.1	23.9	83	91	8	75-125	20	--

**QA/QC Report  
for  
Metals**

Reference #: NAM 27694

Reporting units: ppm

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: HV0221232

Date of Extraction: 02/21/23 10:15

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Arsenic	02/23/23 11:51	02/23/23 11:53	--	20.0	18.1	17.8	91	89	2	80-120	20	--
Lead	02/23/23 11:51	02/23/23 11:53	--	20.0	19.3	19.0	96	95	2	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B/7471A**

Laboratory Sample #: 27693-001

Date of Extraction: 02/21/23 17:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Mercury	02/23/23 13:34	02/23/23 12:35	0.22	1.00	0.827	0.830	61	61	0	80-120	20	M2,

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: HV0221233

Date of Extraction: 02/21/23 17:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Mercury	02/27/23 15:13	02/27/23 15:14	--	1.00	1.13	1.13	113	113	0	80-120	20	--

# Data Qualifier Definitions

## Qualifier

D1 = Sample required dilution due to matrix.

L2 = The associated blank spike recovery was below laboratory acceptance limits.

GS0221231	8270C	Fluorene	LCS/LCSD
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M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

27693-001	6010B	Antimony	MS/MSD
27693-001	6010B	Mercury	MS/MSD
27693-001	6010B	Thallium	MS/MSD
27693-026	8270C	Phenanthrene	MS/MSD

M2 = Matrix spike recovery was low.

27693-026	8270C	Fluorene	MS/MSD
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R2 = RPD/RSD exceeded the laboratory acceptance limit.

HV0221231	6010B	Cobalt	LCS/LCSD
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R7 = LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

VV0221231	8081A	Endosulfan I	LCS/LCSD
VV0221231	8081A	gamma-BHC (Lindane)	LCS/LCSD
VV0221231	8081A	Methoxychlor	LCS/LCSD

S1 = Surrogate recovery was above laboratory acceptance limits.

27693-026	8270C	Nitrobenzene-d5	MSD
GS0221231	8270C	Nitrobenzene-d5	LCS/LCSD

S8 = The analysis of the sample required a dilution such that the surrogate recovery calculation does not provide any useful information. The associated blank spike recovery was acceptable.

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

## Analysis Request &amp; Chain of Custody Record

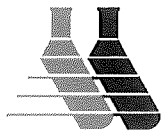
Lab Job No.:

270914

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## ORANGE COAST ANALYTICAL, INC.

3002 Dow Avenue, Suite 532

Tustin, CA 92780

Phone: (714) 832-0064 Fax: (714) 832-0067

www.ocalab.com

4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION						ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA						<div style="display: flex; flex-direction: row-reverse;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Lead by EPA 6010B</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Arsenic by EPA 6010B</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">OCPs by EPA 8081A</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PCBs by EPA 8082</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Title 22 Metals by EPA 6010B/7471A</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Hexavalent Chromium by EPA 7199</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Asbestos by PLM</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PAHs by EPA 8270-SIM</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">VOCs by EPA 8260B</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH-g.d.o by EPA 8015B</div> </div>										Standard: <u>X</u>	
Send Report To: Dennis Fee		Project Number: 211936010																72 Hour: _____	
Email: dfee@ninyoandmoore.com		PO #:																48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA																24 Hour: _____	
Phone: (949) 753-7070 Fax:		Sampled By: <u>FAC</u>																	
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type											REMARKS / INSTRUCTIONS		
1	B31-0.5	1	2/20/23	0730	SS	9oz jar													
2	B31-2.5			0732														Hold	
3	B20-0.5			0750				X	X			X	X	X	X				
4	B20-2.5			0752														Hold	
5	B20-5			0758														Hold	
6	B21-0.5			0803				X	X		X								
7	B21-2.5			0805														Hold	
8	B21-5			0808														Hold	
9	B19-0.5			0820				X	X										
10	B19-2.5			0825														Hold	
11	B19-5			0829														Hold	
12	B23-0.5			0842				X	X		X	X	X	X					
13	B23-2.5			0844														Hold	
14	B23-5			0847														Hold	
No. of Samples: 14		Method of Shipment: Hand delivered				Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other													
Relinquished By: <u>[Signature]</u>		Date: 2/20/23		Received By: <u>[Signature]</u>		Date: _____		Sample Matrix: DW - Drinking Water											
Time: 10:16/16				Company: Ninyo & Moore		Time: _____		GW - Groundwater		AQ - Aqueous									
Relinquished By: _____		Date: _____		Received By: _____		Date: _____		WW - Wastewater		SS - Soil / Solid									
Time: _____				Company: _____		Time: _____		SW - Stormwater		OT - Other									
Relinquished By: _____		Date: _____		Received For OCA By: <u>[Signature]</u>		Date: 2-20-23		Sample Integrity: _____		4.0 to 4.5 °C									
Time: _____				Company: OCA, CA		Time: 1616		Intact: _____ On Ice Yes/No @ 3 °C											

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

## Analysis Request &amp; Chain of Custody Record

Lab Job No.:

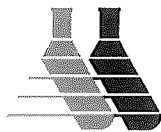
27094

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ORANGE COAST ANALYTICAL, INC.

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3002 Dow Avenue, Suite 532

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Phoenix, AZ 85040

Phone: (714) 832-0064 Fax: (714) 832-0067

Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION						ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA						<div style="display: flex; flex-direction: column; align-items: center;"> <div>Lead by EPA 6010B</div> <div>Arsenic by EPA 6010B</div> <div>OCPs by EPA 8081A</div> <div>PCBs by EPA 8082</div> <div>Title 22 Metals by EPA 6010B/7471A</div> <div>Hexavalent Chromium by EPA 7199</div> <div>Asbestos by PLM</div> <div>PAHs by EPA 8270-SIM</div> <div>VOCs by EPA 8260B</div> <div>TPH-g.d.o by EPA 8015B</div> </div>										Standard: X	
Send Report To: Dennis Fee		Project Number: 211936010																72 Hour: _____	
Email: dfee@ninyoandmoore.com		PO #:																48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA																24 Hour: _____	
Phone: (949) 753-7070 Fax:		Sampled By: EAC																	
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type											REMARKS / INSTRUCTIONS		
15	B24-0.5	1	2/20/23	0900	SS	9oz jar	X	X											
16	B24-2.5			0905														Hold	
17	B24-5			0910														Hold	
18	B25-0.5			0938			X	X		X	X	X	X						
19	B25-2.5			0940														Hold	
20	B25-5			0947														Hold	
21	B26-0.5			1005			X	X		X	X	X	X						
22	B26-2.5			1009														Hold	
23	B26-5			1012														Hold	
24	B30-0.5			1025			X	X											
25	B30-2.5			1028														Hold	
26	B30-5			1031														Hold	
27	B29-0.5			1055			X	X		X									
28	B29-2.5			1100														Hold	
No. of Samples: 14		Method of Shipment: Hand delivered				Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other													
Relinquished By:		Date: 2/20/23		Received By:		Date:		Sample Matrix: DW - Drinking Water											
Time: 1616						Time:		GW - Groundwater AQ - Aqueous											
Company: Ninyo + Moore				Company:				WW - Wastewater SS - Soil / Solid											
Relinquished By:		Date:		Received By:		Date:		SW - Stormwater OT - Other											
Time:						Time:													
Company:				Company:															
Relinquished By:		Date:		Received For OCA By:		Date: 2-20-23		Sample Integrity: 4.0 + 0.0 4.0											
Time:						Time: 1616		Intact: _____ On Ice: (Yes) No @ 22.3°C											
Company:				Company: OCA, LA															

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

## Analysis Request &amp; Chain of Custody Record

Lab Job No.:

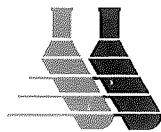
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Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION						ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA						Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.o by EPA 8015B	Standard: X	
Send Report To: Dennis Fee		Project Number: 211936010																72 Hour: _____	
Email: dfee@ninyoandmoore.com		PO #:																48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA																24 Hour: _____	
Phone: (949) 753-7070 Fax: _____		Sampled By: EAC																REMARKS / INSTRUCTIONS	
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type													
29	B29-5	1	2/20/23	1103	SS	902 jar												Hold	
30	B28-0.5			1158			X	X											
31	B28-2.5			1203														Hold	
32	B28-5			1204														Hold	
33	B27-0.5			1219			X	X											
34	B27-2.5			1221														Hold	
25	B27-5			1223														Hold	
30	B32-2.5	5		1252		902 jar / 400As			X	X					X	X			
37	B32-5	5		1256		902 jar / 400As			X	X					X	X			
38	B32-10			1304		902 jar												Hold	
39	B33-2.5	5		1339		902 jar / 400As			X	X					X	X			
40	B33-5	5		1342		I			X	X					X	X			
41	B33-10			1356		902 jar												Hold	
42	B34-2.5	5		1419		902 jar / 400As			X	X					X	X			

No. of Samples: 14		Method of Shipment: Hand delivered		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other	
Relinquished By: _____	Date: 2/20/23	Received By: _____	Date: _____	Sample Matrix: _____	DW - Drinking Water
Company: Ninyo & Moore	Time: 1616	Company: _____	Time: _____	GW - Groundwater	AQ - Aqueous
Relinquished By: _____	Date: _____	Received By: _____	Date: _____	WW - Wastewater	SS - Soil / Solid
Company: _____	Time: _____	Company: _____	Time: _____	SW - Stormwater	OT - Other
Relinquished By: _____	Date: _____	Received For OCA By: _____	Date: 2-20-23	Sample Integrity: _____	4.0 + 0.24, 3.2
Company: _____	Time: _____	Company: OCA, CA	Time: 1616	Intact: _____	On Ice: Yes / No @ 12:30 C

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

# Sample Receipt Report

Laboratory Reference NAM 27694

Logged in by HC

Received: 02/20/23 16:16

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

42 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>4</u>	Thermometer ID: <u>IR#3</u>	Adjusted Temp.: <u>4+0=4</u>	
Shipping Intact	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

## Notes

Client Notified

By

On





## LA Testing

5431 Industrial Drive, Huntington Beach, CA 92649

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

<http://www.LATesting.com>

[gardengrovelab@latesting.com](mailto:gardengrovelab@latesting.com)

LA Testing Order: 332303090

CustomerID: 32ORAN77

CustomerPO:

ProjectID:

Attn: **Mark Noorani**  
**Orange Coast Analytical, Inc.**  
**3002 Dow Avenue**  
**Suite 532**  
**Tustin, CA 92780**

Phone: (714) 832-0064  
Fax: (714) 832-0067  
Received: 2/22/2023 10:35 AM  
Analysis Date: 2/28/2023  
Collected: 2/20/2023

### Test Report: Asbestos Analysis via Polarized Light Microscopy, Qualitative

Sample	Description	Appearance	Result	Notes
1 332303090-0001	B20-0.5	Brown/White Fibrous Heterogeneous	<b>Chrysotile</b>	
2 332303090-0002	B23-0.5	Brown/Black/Clear Fibrous Heterogeneous	<b>None Detected</b>	
3 332303090-0003	B25-0.5	Brown/Gray Non-Fibrous Heterogeneous	<b>None Detected</b>	
4 332303090-0004	B26-0.5	Brown/Red/Black Non-Fibrous Heterogeneous	<b>None Detected</b>	

Analyst(s)

Rammy Nasry (2)

Tony Salgado (2)

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. LA Testing suggests that samples reported as none detected undergo additional analysis via TEM to avoid the possibility of false negatives.

Samples analyzed by LA Testing Huntington Beach, CA

Initial report from 02/28/2023 14:19:09



# Asbestos Chain of Custody

## LA Testing Order Number (Lab Use Only):

#332303090

LA TESTING  
5431 INDUSTRIAL DRIVE  
HUNTINGTON BEACH, CA  
92649  
PHONE: (714)828-4999  
FAX: (714)761-2713

Company : Orange Coast Analytical		LA Testing-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 3002 Dow Ave, Ste 532		Third Party Billing requires written authorization from third party	
City: Tustin	State/Province: CA	Zip/Postal Code: 92780	Country: USA
Report To (Name): Mark Noorani		Fax #:	
Telephone #: 7148320064		Email Address: markn@ocalab.com, ocalab@sbcglobal.net	
Project Name/Number:			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: 27694	U.S. State Samples Taken: Yes
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hours <input type="checkbox"/> 6 Hours <input type="checkbox"/> 24 Hrs <input type="checkbox"/> 48 Hrs <input type="checkbox"/> 3 Days <input type="checkbox"/> 4 Days <input checked="" type="checkbox"/> 5 Days <input type="checkbox"/> 10 Days			
*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with LA Testing's Terms and Conditions located in the Analytical Price Guide.			
<b>PCM - Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air</b> <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <b>Other:</b> <input type="checkbox"/>	
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name:		Samplers Signature:	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1	B20-0.5		2/20/23 0750
2	B23-0.5		2/20/23 0842
3	B25-0.5		2/20/23 00938
4	B26-0.5		2/20/23 1005
Client Sample # (s):		Total # of Samples: 4	
Relinquished (Client):		Date: 2/21/23	Time: 1500
Received (Lab): Emily Mendonça		Date: 2/22/23	Time: 10:35 AM
Comments/Special Instructions: PLM Qualitative			





# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mark Noorani  
Orange Coast Analytical Inc  
3002 Dow Ave,  
Suite 532  
Tustin, California 92780

Generated 2/28/2023 10:43:53 AM

## JOB DESCRIPTION

211936010

## JOB NUMBER

570-128723-1

# Eurofins Calscience

## Job Notes

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

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



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

Generated  
2/28/2023 10:43:53 AM

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## Definitions/Glossary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128723-1

### Qualifiers

#### HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128723-1

**Job ID: 570-128723-1**

**Laboratory: Eurofins Calscience**

## Narrative

**Job Narrative**  
**570-128723-1**

## Comments

No additional comments.

## Receipt

The samples were received on 2/22/2023 1:54 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° C.

## HPLC/IC

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

## Detection Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128723-1

**Client Sample ID: B20-0.5**

**Lab Sample ID: 570-128723-1**

No Detections.

**Client Sample ID: B23-0.5**

**Lab Sample ID: 570-128723-2**

No Detections.

**Client Sample ID: B25-0.5**

**Lab Sample ID: 570-128723-3**

No Detections.

**Client Sample ID: B26-0.5**

**Lab Sample ID: 570-128723-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium, hexavalent	230	J	400	190	ug/Kg	10		7199	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience



# Client Sample Results

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128723-1

## Method: SW846 7199 - Chromium, Hexavalent (IC)

Client Sample ID: B20-0.5  
Date Collected: 02/20/23 07:50  
Date Received: 02/22/23 13:54

Lab Sample ID: 570-128723-1  
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 04:19	10

Client Sample ID: B23-0.5  
Date Collected: 02/20/23 08:42  
Date Received: 02/22/23 13:54

Lab Sample ID: 570-128723-2  
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 05:44	10

Client Sample ID: B25-0.5  
Date Collected: 02/20/23 09:38  
Date Received: 02/22/23 13:54

Lab Sample ID: 570-128723-3  
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 05:55	10

Client Sample ID: B26-0.5  
Date Collected: 02/20/23 10:05  
Date Received: 02/22/23 13:54

Lab Sample ID: 570-128723-4  
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	230	J	400	190	ug/Kg		02/27/23 01:30	02/27/23 06:07	10

# QC Sample Results

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128723-1

## Method: 7199 - Chromium, Hexavalent (IC)

Lab Sample ID: MB 570-307132/1-A

Matrix: Solid

Analysis Batch: 307133

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 307132

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		02/27/23 01:30	02/27/23 03:36	10

Lab Sample ID: LCS 570-307132/2-A

Matrix: Solid

Analysis Batch: 307133

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 307132

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	20100	19250		ug/Kg		96	80 - 120

Lab Sample ID: LCSD 570-307132/3-A

Matrix: Solid

Analysis Batch: 307133

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 307132

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	20000	22350		ug/Kg		112	80 - 120	15	20

Lab Sample ID: 570-128723-1 MS

Matrix: Solid

Analysis Batch: 307133

Client Sample ID: B20-0.5

Prep Type: Total/NA

Prep Batch: 307132

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	ND		19900	21790		ug/Kg		109	75 - 125

Lab Sample ID: 570-128723-1 MSD

Matrix: Solid

Analysis Batch: 307133

Client Sample ID: B20-0.5

Prep Type: Total/NA

Prep Batch: 307132

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	ND		20200	18180		ug/Kg		90	75 - 125	18	25

# QC Association Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128723-1

## HPLC/IC

### Prep Batch: 307132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-128723-1	B20-0.5	Total/NA	Solid	3060A	
570-128723-2	B23-0.5	Total/NA	Solid	3060A	
570-128723-3	B25-0.5	Total/NA	Solid	3060A	
570-128723-4	B26-0.5	Total/NA	Solid	3060A	
MB 570-307132/1-A	Method Blank	Total/NA	Solid	3060A	
LCS 570-307132/2-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSD 570-307132/3-A	Lab Control Sample Dup	Total/NA	Solid	3060A	
570-128723-1 MS	B20-0.5	Total/NA	Solid	3060A	
570-128723-1 MSD	B20-0.5	Total/NA	Solid	3060A	

### Analysis Batch: 307132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-128723-1	B20-0.5	Total/NA	Solid	7199	307132
570-128723-2	B23-0.5	Total/NA	Solid	7199	307132
570-128723-3	B25-0.5	Total/NA	Solid	7199	307132
570-128723-4	B26-0.5	Total/NA	Solid	7199	307132
MB 570-307132/1-A	Method Blank	Total/NA	Solid	7199	307132
LCS 570-307132/2-A	Lab Control Sample	Total/NA	Solid	7199	307132
LCSD 570-307132/3-A	Lab Control Sample Dup	Total/NA	Solid	7199	307132
570-128723-1 MS	B20-0.5	Total/NA	Solid	7199	307132
570-128723-1 MSD	B20-0.5	Total/NA	Solid	7199	307132

# Lab Chronicle

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128723-1

**Client Sample ID: B20-0.5**

**Date Collected: 02/20/23 07:50**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128723-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.53 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 04:19	YO8L	EET CAL 4
Instrument ID: IC33										

**Client Sample ID: B23-0.5**

**Date Collected: 02/20/23 08:42**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128723-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.52 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 05:44	YO8L	EET CAL 4
Instrument ID: IC33										

**Client Sample ID: B25-0.5**

**Date Collected: 02/20/23 09:38**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128723-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.49 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 05:55	YO8L	EET CAL 4
Instrument ID: IC33										

**Client Sample ID: B26-0.5**

**Date Collected: 02/20/23 10:05**

**Date Received: 02/22/23 13:54**

**Lab Sample ID: 570-128723-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.51 g	100 mL	307132	02/27/23 01:30	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	307133	02/27/23 06:07	YO8L	EET CAL 4
Instrument ID: IC33										

## Laboratory References:

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

Accreditation/Certification Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128723-1

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128723-1

Method	Method Description	Protocol	Laboratory
7199	Chromium, Hexavalent (IC)	SW846	EET CAL 4
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	EET CAL 4

### Protocol References:

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: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-128723-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-128723-1	B20-0.5	Solid	02/20/23 07:50	02/22/23 13:54
570-128723-2	B23-0.5	Solid	02/20/23 08:42	02/22/23 13:54
570-128723-3	B25-0.5	Solid	02/20/23 09:38	02/22/23 13:54
570-128723-4	B26-0.5	Solid	02/20/23 10:05	02/22/23 13:54





## Login Sample Receipt Checklist

Client: Orange Coast Analytical Inc

Job Number: 570-128723-1

**Login Number: 128723**

**List Number: 1**

**Creator: Patel, Jayesh**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27694B

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 3/29/2023

Date Reported: 4/6/2023

Chain of Custody Received: ☒

Analytical Method: 8082,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27694B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 4°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27694B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B21-0.5	27694-006	2/20/2023	2/20/2023	Soil
B19-0.5	27694-009	2/20/2023	2/20/2023	Soil
B23-0.5	27694-012	2/20/2023	2/20/2023	Soil
B24-0.5	27694-015	2/20/2023	2/20/2023	Soil
B28-0.5	27694-030	2/20/2023	2/20/2023	Soil
B27-0.5	27694-033	2/20/2023	2/20/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27694B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B21-0.5	27694-006	2/20/2023 16:16	2/20/2023 8:03	3/29/2023 12:52	3/31/2023 20:31	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<100		Decachlorobiphenyl	93	
PCB-1221	11104-28-2	<100				
PCB-1232	11141-16-5	<100		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<100		<u>Dilution Factor:</u> 4		
PCB-1248	12672-29-6	<100		<u>Data Qualifiers:</u> D1,		
PCB-1254	11097-69-1	<100				
PCB-1260	11096-82-5	<100				
B19-0.5	27694-009	2/20/2023 16:16	2/20/2023 8:20	3/29/2023 12:52	3/31/2023 18:49	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	420		Decachlorobiphenyl	97	
PCB-1221	11104-28-2	<75				
PCB-1232	11141-16-5	<75		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<75		<u>Dilution Factor:</u> 3		
PCB-1248	12672-29-6	<75		<u>Data Qualifiers:</u> D2,		
PCB-1254	11097-69-1	250				
PCB-1260	11096-82-5	97				
B23-0.5	27694-012	2/20/2023 16:16	2/20/2023 8:42	3/29/2023 12:52	3/31/2023 20:45	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<200		Decachlorobiphenyl	70	
PCB-1221	11104-28-2	<200				
PCB-1232	11141-16-5	<200		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<200		<u>Dilution Factor:</u> 8		
PCB-1248	12672-29-6	<200		<u>Data Qualifiers:</u> D1,		
PCB-1254	11097-69-1	<200				
PCB-1260	11096-82-5	<200				

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27694B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B24-0.5	27694-015	2/20/2023 16:16	2/20/2023 9:00	3/29/2023 12:52	3/31/2023 21:00	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<200		Decachlorobiphenyl	69	
PCB-1221	11104-28-2	<200				
PCB-1232	11141-16-5	<200		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<200		<u>Dilution Factor:</u> 8		
PCB-1248	12672-29-6	<200		<u>Data Qualifiers:</u> D1,		
PCB-1254	11097-69-1	<200				
PCB-1260	11096-82-5	<200				
B28-0.5	27694-030	2/20/2023 16:16	2/20/2023 11:58	3/29/2023 12:52	3/31/2023 21:14	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	84	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B27-0.5	27694-033	2/20/2023 16:16	2/20/2023 12:19	3/29/2023 12:52	3/31/2023 21:29	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	88	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27694B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Polychlorinated Biphenyl's (EPA 8082)***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBVV0329231			3/29/2023 12:52	3/31/2023 17:36	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
PCB-1016	12674-11-2	<25	Decachlorobiphenyl	89
PCB-1221	11104-28-2	<25		
PCB-1232	11141-16-5	<25		
PCB-1242	53469-21-9	<25		
PCB-1248	12672-29-6	<25		
PCB-1254	11097-69-1	<25		
PCB-1260	11096-82-5	<25		

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

**QA/QC Report**  
**for**  
**Polychlorinated Biphenyl's (EPA 8082)**  
Reporting units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 3/29/2023 12:52

Date of Analysis: 3/31/2023 18:20

Dup Date of Analysis: 3/31/2023 18:34

Laboratory Sample #: 27694-009

MS/MSD Qualifiers: None

Reference #: NAM 27694B

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
PCB-1016	420	150	472	483	35	42	2	28-130	28	<input type="checkbox"/>
PCB-1260	97.0	150	222	212	83	77	5	36-132	20	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual
Decachlorobiphenyl	92	103	<input type="checkbox"/>

LCS	LCSD	Qual
93	99	<input type="checkbox"/>

ACP % RC
35-130

**Laboratory Control Sample**

Date of Extraction: 3/29/2023 12:52

Date of Analysis: 3/31/2023 17:50

Dup Date of Analysis: 3/31/2023 18:05

Laboratory Sample #: VV0329231

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
PCB-1016	150	108	108	72	72	0	14-130	31	<input type="checkbox"/>
PCB-1260	150	118	124	79	83	5	42-130	20	<input type="checkbox"/>



# Data Qualifier Definitions

## Qualifier

D1 = Sample required dilution due to matrix.

D2 = Sample required dilution due to high concentration of target analyte.

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

## Analysis Request &amp; Chain of Custody Record

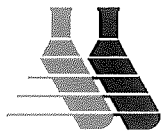
Lab Job No.:

270914

Page:

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3



## ORANGE COAST ANALYTICAL, INC.

3002 Dow Avenue, Suite 532

Tustin, CA 92780

Phone: (714) 832-0064 Fax: (714) 832-0067

www.ocalab.com

4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION						ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA						Lead by EPA 6010B	Arsenic by EPA 6010B	OCPs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.o by EPA 8015B	Standard: <u>X</u>	
Send Report To: Dennis Fee		Project Number: 211936010																72 Hour: _____	
Email: dfee@ninyoandmoore.com		PO #:																48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA																24 Hour: _____	
Phone: (949) 753-7070 Fax:		Sampled By: <u>FAC</u>																REMARKS / INSTRUCTIONS	
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type													
1	B31-0.5	1	2/20/23	0730	SS	9oz jar					X								
2	B31-2.5			0732														Hold	
3	B20-0.5			0750			X	X			X	X	X	X					
4	B20-2.5			0752														Hold	
5	B20-5			0758														Hold	
6	B21-0.5			0803			X	X		X									
7	B21-2.5			0805														Hold	
8	B21-5			0808														Hold	
9	B19-0.5			0820			X	X											
10	B19-2.5			0825														Hold	
11	B19-5			0829														Hold	
12	B23-0.5			0842			X	X			X	X	X	X					
13	B23-2.5			0844														Hold	
14	B23-5			0847														Hold	

No. of Samples: 14 Method of Shipment: Hand delivered Preservative: 1 = Ice 2 = HCl 3 = HNO<sub>3</sub> 4 = H<sub>2</sub>SO<sub>4</sub> 5 = NaOH 6 = Other

Relinquished By: <u>[Signature]</u> Date: <u>2/20/23</u> Time: <u>1616</u> Company: <u>Ninyo &amp; Moore</u>	Received By: _____ Date: _____ Time: _____ Company: _____	Sample Matrix: _____ DW - Drinking Water GW - Groundwater AQ - Aqueous WW - Wastewater SS - Soil / Solid SW - Stormwater OT - Other
Relinquished By: _____ Date: _____ Time: _____ Company: _____	Received For OCA By: <u>[Signature]</u> Date: <u>2-20-23</u> Time: <u>1616</u> Company: <u>OCA, CA</u>	Sample Integrity: _____ Intact: _____ On Ice <u>Yes</u> / No <u>4.0 to 4.5°C</u>

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

## Analysis Request &amp; Chain of Custody Record

Lab Job No.:

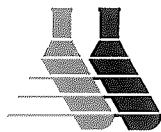
27094

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Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION						ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA						Lead by EPA 6010B Arsenic by EPA 6010B OCPs by EPA 8081A PCBs by EPA 8082 Title 22 Metals by EPA 6010B/7471A Hexavalent Chromium by EPA 7199 Asbestos by PLM PAHs by EPA 8270-SIM VOCs by EPA 8260B TPH-g.d.o by EPA 8015B										Standard: X	
Send Report To: Dennis Fee		Project Number: 211936010																72 Hour: _____	
Email: dfee@ninyoandmoore.com		PO #:																48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA																24 Hour: _____	
Phone: (949) 753-7070 Fax:		Sampled By: EAC																REMARKS / INSTRUCTIONS	
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type													
15	B24-0.5	1	2/20/23	0900	SS	9oz jar	X	X											
16	B24-2.5			0905														Hold	
17	B24-5			0910														Hold	
18	B25-0.5			0938			X	X		X	X	X	X						
19	B25-2.5			0940														Hold	
20	B25-5			0947														Hold	
21	B26-0.5			1005			X	X		X	X	X	X						
22	B26-2.5			1009														Hold	
23	B26-5			1012														Hold	
24	B30-0.5			1025			X	X											
25	B30-2.5			1028														Hold	
26	B30-5			1031														Hold	
27	B29-0.5			1055			X	X		X									
28	B29-2.5			1100														Hold	
No. of Samples: 14		Method of Shipment: Hand delivered				Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other													
Relinquished By: _____		Date: 2/20/23		Received By: _____		Date: _____		Sample Matrix: DW - Drinking Water											
Time: 1616						Time: _____		GW - Groundwater AQ - Aqueous											
Company: Ninyo + Moore				Company: _____				WW - Wastewater SS - Soil / Solid											
Relinquished By: _____		Date: _____		Received By: _____		Date: _____		SW - Stormwater OT - Other											
Time: _____						Time: _____													
Company: _____				Company: _____															
Relinquished By: _____		Date: _____		Received For OCA By: _____		Date: 2-20-23		Sample Integrity: 4.0 + 0.0 4.0											
Time: _____						Time: 1616		Intact: _____ On Ice: (Yes) No @ 22.3°C											
Company: _____				Company: OCA, LA															

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## Analysis Request &amp; Chain of Custody Record

Lab Job No.:

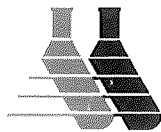
27094

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CUSTOMER INFORMATION		PROJECT INFORMATION						ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA						<div style="display: flex; flex-direction: column; align-items: center;"> <div>Lead by EPA 6010B</div> <div>Arsenic by EPA 6010B</div> <div>OCPs by EPA 8081A</div> <div>PCBs by EPA 8082</div> <div>Title 22 Metals by EPA 6010B/7471A</div> <div>Hexavalent Chromium by EPA 7199</div> <div>Asbestos by PLM</div> <div>PAHs by EPA 8270-SIM</div> <div>VOCs by EPA 8260B</div> <div>TPH-g.d.o by EPA 8015B</div> </div>										Standard: <u>X</u>	
Send Report To: Dennis Fee		Project Number: 211936010																72 Hour: _____	
Email: dfee@ninyoandmoore.com		PO #:																48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA																24 Hour: _____	
Phone: (949) 753-7070 Fax:		Sampled By: EAC																REMARKS / INSTRUCTIONS	
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type													
29	B29-5	1	2/20/23	1103	SS	902 jar												Hold	
30	B28-0.5			1158			X	X											
31	B28-2.5			1203														Hold	
32	B28-5			1204														Hold	
33	B27-0.5			1219			X	X											
34	B27-2.5			1221														Hold	
25	B27-5			1223														Hold	
30	B32-2.5	5		1252		902 jar / 400As			X	X					X	X			
37	B32-5	5		1256		902 jar / 400As			X	X					X	X			
38	B32-10			1304		902 jar												Hold	
39	B33-2.5	5		1339		902 jar / 400As			X	X					X	X			
40	B33-5	5		1342		I			X	X					X	X			
41	B33-10			1356		902 jar												Hold	
42	B34-2.5	5		1419		902 jar / 400As			X	X					X	X			
No. of Samples: 14		Method of Shipment: Hand delivered				Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other													
Relinquished By:		Date: 2/20/23		Received By:		Date:		Sample Matrix:											
Time: 1616								DW - Drinking Water											
Company: Ninyo & Moore				Company:				GW - Groundwater											
								AQ - Aqueous											
Relinquished By:		Date:		Received By:		Date:		WW - Wastewater											
Time:								SS - Soil / Solid											
Company:				Company:				SW - Stormwater											
								OT - Other											
Relinquished By:		Date:		Received For OCA By:		Date: 2-20-23		Sample Integrity:											
Time:						Time: 1616		Intact: _____ On Ice: Yes/No @ 4.0 + 0.24, 3.2											
Company:				Company: OCA, CA				I2A3C											

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

# Sample Receipt Report

Laboratory Reference NAM 27694

Logged in by HC

Received: 02/20/23 16:16

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

42 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>4</u>	Thermometer ID: <u>IR#3</u>	Adjusted Temp.: <u>4+0=4</u>	
Shipping Intact	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

## Notes

Client Notified

By

On



## LA Testing

5431 Industrial Drive, Huntington Beach, CA 92649

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

<http://www.LATesting.com>

[gardengrovelab@latestesting.com](mailto:gardengrovelab@latestesting.com)

LA Testing Order: 332305791  
CustomerID: 32ORAN77  
CustomerPO: 27694B  
ProjectID:

Attn: **Mark Noorani**  
**Orange Coast Analytical, Inc.**  
**3002 Dow Avenue**  
**Suite 532**  
**Tustin, CA 92780**

Phone: (714) 832-0064  
Fax: (714) 832-0067  
Received: 3/30/2023 10:35 AM  
Analysis Date: 4/6/2023  
Collected: 2/20/2023

Project: 211936010

### Test Report: Asbestos Analysis via Polarized Light Microscopy, Qualitative

Sample	Description	Appearance	Result	Notes
B21-0.5 332305791-0001		Brown/Gray/Tan Non-Fibrous Heterogeneous	<b>None Detected</b>	
B19-0.5 332305791-0002		Brown/Gray/Tan Non-Fibrous Heterogeneous	<b>None Detected</b>	
B23-0.5 332305791-0003		Brown/Tan/Black Non-Fibrous Heterogeneous	<b>None Detected</b>	
B24-0.5 332305791-0004		Brown/Gray/Black Non-Fibrous Heterogeneous	<b>None Detected</b>	
B28-0.5 332305791-0005		Brown Non-Fibrous Homogeneous	<b>None Detected</b>	
B27-0.5 332305791-0006		Brown Non-Fibrous Homogeneous	<b>None Detected</b>	

Analyst(s)

Alexis Rodriguez (4)  
Tony Salgado (2)

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. LA Testing suggests that samples reported as none detected undergo additional analysis via TEM to avoid the possibility of false negatives.  
Samples analyzed by LA Testing Huntington Beach, CA

Initial report from 04/06/2023 09:25:43





# Asbestos Chain of Custody

## LA Testing Order Number (lab use only):

#332305791

LA TESTING

5431 INDUSTRIAL DRIVE

HUNTINGTON BEACH, CA

92649

PHONE: (714)828-4999

FAX: (714)761-2713

Company Name : Orange Coast Analytical, Inc.		LA Testing Customer ID:	
Street: 3002 Dow Ave. #532		City: Tustin	State or Province: CA
Zip/Postal Code: 92780	Country: USA	Telephone #: 7148320064	Fax #:
Report To (Name): Mark Noorani		Please Provide Results via: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
email Address: ocalab@sbcglobal.net/markn@ocalab.com		Purchase Order Number: 27694B	
Client Project ID: 211936010		LA Testing Project ID (internal use only):	
State or Province Collected: CA		CT only <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	
LAT Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different - If bill to is different note instructions in comment. Third party billing requires written authorization.			
Turnaround Time (TAT) Options Please Check			
<input type="checkbox"/> 3 Hr <sup>1</sup>	<input type="checkbox"/> 4-4.5Hr <sup>1</sup> <small>AHERA Only</small>	<input type="checkbox"/> 6 Hr <sup>1</sup>	<input type="checkbox"/> 24 Hr
<input type="checkbox"/> 32 Hr <sup>2</sup>	<input type="checkbox"/> 48 Hr	<input type="checkbox"/> 72 Hr	<input type="checkbox"/> 96 Hr
<input checked="" type="checkbox"/> 1 Week	<input type="checkbox"/> 2 Week		
<sup>1</sup> Premium Service Charge applies for 3 Hour TEM AHERA or EPA Level II TAT - you will be asked to sign an authorization form. TEM Air 3-6 Hour, please call ahead to schedule			
<sup>2</sup> 32 Hour TAT available for select tests only; samples must be submitted by 11:30 am.			
<b>PCM - Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) <b>Point Count</b> <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <b>Point Count w/Gravimetric</b> <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable - NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NYS 198.8 SOF-V <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air<sup>1</sup></b> <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%)* <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM- Settled Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil - Rock - Vermiculite (reporting limit)</b> <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%) <input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%)* <input type="checkbox"/> TEM Qualitative via Filtration Prep <input type="checkbox"/> TEM Qualitative via Drop Mount Prep <input type="checkbox"/> Cincinnati Method EPA 600/R-04/004 - PLM/TEM *Lower reporting limits available on request	
		<b>Other test (please specify):</b>	
<input type="checkbox"/> Stop At First Positive (clearly identify homogenous areas below)		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Sampler's Name:		Sampler's Signature:	
Sample #	Sample Description/Location	Volume, Area or Homogenous Area	Date/Time Sampled
	B21-0.5		2/20/23 @ 0803
	B19-0.5		2/20/23 @ 0820
	B23-0.5		2/20/23 @ 0842
	B24-0.5		2/20/23 @ 0900
	B28-0.5		2/20/23 @ 1158
Client Sample # (s):		Total # of Samples: 6	
Relinquished by (Client): <i>[Signature]</i>		Date: 3/29/23 Time: 1200	
Received by (Lab): <i>Donathan Ferber (Laurie)</i>		Date: 3/30/23 Time: 10:35a	
Comments/Special Instructions:			
PLM QUALITATIVE			

Controlled Document - COC-04 Asbestos LA Testing R4

LA Testing's Laboratory Terms and Conditions are incorporated into this chain of custody by reference in their entirety. Submission of samples to LA Testing Inc. constitutes acceptance and acknowledgment of all terms and conditions.

Page 1 of 2 pages



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*Additional Pages of the Chain of Custody are only necessary if needed for additional sample information*

[illegible]

PLM QUALITATIVE



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27815A

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 4/13/2023

Date Reported: 4/21/2023

Chain of Custody Received: ☒

Analytical Method: 8015B, 6010B, 1311/6010B,

---

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### **Case Narrative**

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 3°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Client Sample Summary**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B45-0.5	27815-001	4/3/2023	4/3/2023	Soil
B45-2.5	27815-002	4/3/2023	4/3/2023	Soil
B4-E2-0.5	27815-012	4/3/2023	4/3/2023	Soil
B4-E-2.5	27815-016	4/3/2023	4/3/2023	Soil
B4-W-2.5	27815-019	4/3/2023	4/3/2023	Soil
B4-W2-0.5	27815-021	4/3/2023	4/3/2023	Soil
B4-5	27815-033	4/3/2023	4/3/2023	Soil
B42A-0.5	27815-038	4/3/2023	4/3/2023	Soil
B42A-2.5	27815-039	4/3/2023	4/3/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix	
B45-0.5		27815-001	4/3/2023	16:47	4/3/2023	8:00	Soil	
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
TCLP Lead	6010B	0.11	mg/l	04/19/23 10:35	04/20/23 10:55	--	1	
B45-2.5		27815-002	4/3/2023	16:47	4/3/2023	8:05	Soil	
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
Lead	6010B	2.5	mg/kg	04/18/23 10:30	04/18/23 16:14	--	1	
B4-E2-0.5		27815-012	4/3/2023	16:47	4/3/2023	10:55	Soil	
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
Arsenic	6010B	46	mg/kg	04/18/23 10:30	04/18/23 15:50	--	1	
B4-E-2.5		27815-016	4/3/2023	16:47	4/3/2023	11:05	Soil	
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
Arsenic	6010B	3.1	mg/kg	04/18/23 10:30	04/18/23 15:56	--	1	
B4-W-2.5		27815-019	4/3/2023	16:47	4/3/2023	11:14	Soil	
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
Arsenic	6010B	130	mg/kg	04/18/23 10:30	04/18/23 16:06	--	1	
B4-W2-0.5		27815-021	4/3/2023	16:47	4/3/2023	11:26	Soil	
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
Arsenic	6010B	180	mg/kg	04/18/23 10:30	04/18/23 16:08	--	1	

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B4-5		27815-033	4/3/2023	16:47	4/3/2023	12:35	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	3.9	mg/kg	04/18/23 10:30	04/18/23 16:10	--	1	
B42A-2.5		27815-039	4/3/2023	16:47	4/3/2023	13:46	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	2.3	mg/kg	04/18/23 10:30	04/18/23 16:12	--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBHV0418231	Arsenic	6010B	<2.0	mg/kg	04/18/23 10:30	04/18/23 15:36	--	1	
MBHV0418231	Lead	6010B	<0.80	mg/kg	04/18/23 10:30	04/18/23 15:36	--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBIR0419232	TCLP Lead	6010B	<0.080	mg/l	04/19/23 10:35	04/20/23 10:35	--	1	
B45-0.5		27815-001	4/3/2023	16:47	4/3/2023	8:00	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Lead	6010B	4.7	mg/L	04/17/23 08:30	04/18/23 14:40	--	1	
B42A-0.5		27815-038	4/3/2023	16:47	4/3/2023	13:44	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Arsenic	6010B	2.4	mg/L	04/17/23 08:30	04/18/23 14:43	--	1	

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received	Date Sampled	Matrix				
Method Blank					Soil				
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBIR0417231	STLC Arsenic	6010B	<0.20	mg/L	04/17/23 08:30	04/18/23 16:16	--	1	
MBIR0417231	STLC Lead	6010B	<0.20	mg/L	04/17/23 08:30	04/18/23 16:16	--	1	

**QA/QC Report  
for  
Metals**

Reference #: NAM 27815A

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ 6010B

Laboratory Sample #: 27815-012

Date of Extraction: 04/18/23 10:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Arsenic	04/18/23 15:44	04/18/23 15:47	46.0	20.0	64.3	65.2	92	96	1	75-125	20	--
Lead	04/18/23 15:44	04/18/23 15:47	3.90	20.0	18.5	19.0	73	75	3	75-125	20	M2,

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ 6010B

Laboratory Sample #: HV0418231

Date of Extraction: 04/18/23 10:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Arsenic	04/18/23 15:39	04/18/23 15:42	--	20.0	18.3	18.2	91	91	1	80-120	20	--
Lead	04/18/23 15:39	04/18/23 15:42	--	20.0	18.2	18.3	91	91	1	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ 6010B

Laboratory Sample #: 27827-001

Date of Extraction: 04/19/23 10:35

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
TCLP Lead	04/20/23 10:43	04/20/23 10:46	0.19	0.400	0.587	0.569	99	95	3	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ 6010B

Laboratory Sample #: IR0419232

Date of Extraction: 04/19/23 10:35

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
TCLP Lead	04/20/23 10:37	04/20/23 10:40	--	0.400	0.387	0.379	97	95	2	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ STLC CCR

Laboratory Sample #: 27844-001

Date of Extraction: 04/17/23 08:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
STLC Arsenic	04/18/23 16:22	04/18/23 16:24	0.00	1.00	1.01	1.01	101	101	0	75-125	20	--
STLC Lead	04/18/23 16:22	04/18/23 16:24	0.00	1.00	1.01	0.990	101	99	2	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ STLC CCR

Laboratory Sample #: IR0417231

Date of Extraction: 04/17/23 08:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
STLC Arsenic	04/18/23 16:18	04/18/23 16:20	--	1.00	0.924	0.952	92	95	3	80-120	20	--
STLC Lead	04/18/23 16:18	04/18/23 16:20	--	1.00	0.829	0.861	83	86	4	80-120	20	--



# Data Qualifier Definitions

## Qualifier

M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

27815-012

6010B

Lead

MS

Preliminary

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27827A

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 4/18/2023

Date Reported: 4/24/2023

Chain of Custody Received: ☒

Analytical Method: 6010B, 1311/6010B,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27827A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at °C, on ice.  
2 coolers at 3 and 1 °C IR#3 correction =+0 °C

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27827A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B34-2.5	27827-001	4/5/2023	4/5/2023	Soil

Mr. Dennis Fee  
 Ninyo & Moore  
 475 Goddard Ste 200  
 Irvine, CA, 92618

Lab Reference #: NAM 27827A  
 Project Name: LAUSD 49th Street PEA  
 Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B34-2.5		27827-001	4/5/2023	17:51	4/5/2023	8:00	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	TCLP Lead	6010B	0.19	mg/l	04/19/23 10:35	04/20/23 10:49	--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBIR0419232	TCLP Lead	6010B	<0.080	mg/l	04/19/23 10:35	04/20/23 10:35	--	1	
B34-2.5		27827-001	4/5/2023	17:51	4/5/2023	8:00	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Lead	6010B	11	mg/L	04/20/23 17:00	04/24/23 14:19	--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBIR0420234	STLC Lead	6010B	<0.20	mg/L	04/20/23 17:00	04/24/23 14:06	--	1	

**QA/QC Report  
for  
Metals**

Reference #: NAM 27827A

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ 6010B

Laboratory Sample #: 27827-001

Date of Extraction: 04/19/23 10:35

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
TCLP Lead	04/20/23 10:43	04/20/23 10:46	0.19	0.400	0.587	0.569	99	95	3	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ 6010B

Laboratory Sample #: IR0419232

Date of Extraction: 04/19/23 10:35

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
TCLP Lead	04/20/23 10:37	04/20/23 10:40	--	0.400	0.387	0.379	97	95	2	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ STLC CCR

Laboratory Sample #: 27827-001

Date of Extraction: 04/20/23 17:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
STLC Lead	04/24/23 14:14	04/24/23 14:17	11.0	1.00	11.3	11.7	30	70	3	75-125	20	M3,

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ STLC CCR

Laboratory Sample #: IR0420234

Date of Extraction: 04/20/23 17:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
STLC Lead	04/24/23 14:09	04/24/23 14:11	--	1.00	0.889	0.898	89	90	1	80-120	20	--

# Data Qualifier Definitions

## Qualifier

M3 = The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

27827-001

STLC CCR

STLC Lead

MS/MSD



## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

# Analysis Request & Chain of Custody Record



**ORANGE COAST ANALYTICAL, INC.**

3002 Dow Avenue, Suite 532

Tustin, CA 92780

Phone: (714) 832-0064 Fax: (714) 832-0067

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4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.:

27827

Page:

1

of

3

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					<div>Lead by EPA 60108</div> <div>Arsenic by EPA 60108</div> <div>OCs by EPA 8081A</div> <div>PCBs by EPA 8082</div> <div>Title 22 Metals by EPA 60108/7471A</div> <div>Hexavalent Chromium by EPA 7199</div> <div>Asbestos by PLM</div> <div>PAHs by EPA 8270-SIM</div> <div>VOCs by EPA 8260B</div> <div>TPH-g.d.mo by EPA 8015B</div>										Standard: X	
Send Report To: Dennis Fee		Project Number: 211936010															72 Hour:	
Email: dfee@ninyoandmoore.com		PO #:					48 Hour:											
Address: 475 Goddard		Address (City / State): Los Angeles, CA					24 Hour:											
Irvine, CA 92618		EDD Required:					REMARKS / INSTRUCTIONS											
Phone: (949) 753-7070 Fax:		Sampled By: Aileen Chea / Skylar Lee																
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type													
1 B34-2.5	5	4/5/23	0800	SS	902 jar / 4 VOAS													
2 B34-5	1		0820												HOLD			
3 B34-10	1		0830												AC 4/5/23			
4 B35-2.5	1		0910															
5 B35-5	1		0923		6" sleeve / 4 VOAS										HOLD			
6 B35-10	1		0925												AC 4/5/23			
7 B46-0.5	1		0958		902 jar													
8 B46-2.5	5		1000		902 jar / 4 VOAS													
9 B46-5	1		1013		6" sleeve / 4 VOAS										AC 4/5/23			
10 B46-10	1		1015												AC 4/5/23			
11 B46-15	1		1025												HOLD			
12 B39-0.5	1		1049		902 jar													
13 B39-2.5	5		1052		902 jar / 4 VOAS													
14 B39-5	1		1100		6" sleeve / 4 VOAS													
No. of Samples: 14		Method of Shipment:					Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other											
Relinquished By:		Date:		Received By:		Date:		Sample Matrix:										
Time:				Time:				DW - Drinking Water										
Company:				Company:				GW - Groundwater										
								AQ - Aqueous										
Relinquished By:		Date:		Received By:		Date:		WW - Wastewater										
Time:				Time:				SS - Soil / Solid										
Company:				Company:				SW - Stormwater										
								OT - Other										
Relinquished By:		Date: 4/5/23		Received For OCA By:		Date: 4/5/23		Sample Integrity:										
Time: 1751				Time: 1751				Intact: <input checked="" type="checkbox"/> On Ice: <input checked="" type="checkbox"/> Yes No @ 3.1°C										
Company: Ninyo & Moore				Company: OCA				2 coolers @ 3.1°C										

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

## Analysis Request & Chain of Custody Record



4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.: 27827

Page: 2 of 3

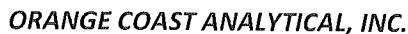
ANALYSIS REQUEST / PRESERVATION												
Lead by EPA 6010B												
Arsenic by EPA 6010B												
OCPs by EPA 8081A												
PCBs by EPA 8082												
Title 22 Metals by EPA 6010B/7471A												
Hexavalent Chromium by EPA 7199												
Asbestos by PLM												
PAHs by EPA 8270-SIM												
VOCs by EPA 8260B												
TPH-g,d,mo by EPA 8015B												
<div> <div>REQUESTED</div> <div>TURN-AROUND-TIME</div> </div> <div> <div>Standard: X</div> <div>72 Hour:</div> <div>48 Hour:</div> <div>24 Hour:</div> </div> <div>REMARKS / INSTRUCTIONS</div>												

CUSTOMER INFORMATION		PROJECT INFORMATION				
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA				
Send Report To: Dennis Fee		Project Number: 211936010				
Email: <a href="mailto:dfee@ninyoandmoore.com">dfee@ninyoandmoore.com</a>		PO #:				
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA				
		EDD Required:				
Phone: (949) 753-7070 Fax:		Sampled By: Aileen Chea / Skylar Lee				
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type	
15 B39-10	5	4/5/23	1102	SS	6" sleeve / 4 VOAS	
16 B39-15	↓		1105		↓	
17 B38-0.5	1		1237		902 jar	
18 B38-2.5	5		1239		902 jar / 4 VOAS	
19 B38-5	↓		<del>1253</del> 1253		6" sleeve / 4 VOAS	
20 B38-10	↓		1255		↓	
21 B38-15	↓		1258		↓	
22 B37-0.5	1		1326		902 jar	
23 B37-2.5	5		1332		902 jar / 4 VOAS	
24 B37-5	↓		1342		6" sleeve / 4 VOAS	
25 B37-10	↓		1344		↓	
26 B37-15	↓		1346		902 Jar / 4 VOAS	
27 B36-0.5	6		1420		902 & 402 jar / 4 VOAS	
28 B36-2.5	↓	↓	1423	↓	↓	

No. of Samples: 14		Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other	
Relinquished By:	Date:	Received By:	Date:	Sample Matrix:	DW - Drinking Water
	Time:		Time:	GW - Groundwater	AQ - Aqueous
Company:		Company:		WW - Wastewater	SS - Soil / Solid
Relinquished By:	Date:	Received By:	Date:	SW - Stormwater	OT - Other
	Time:		Time:		
Company:		Company:			
Relinquished By:	Date: 4/5/23	Received For OCA By:	Date: 4/5/23	Sample Integrity:	
	Time: 1751		Time: 1751	Intact: _____ On Ice: Yes / No @ _____ °C	
Company: Nmyo & Moore		Company: OCA			

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

### n of Custody Record



4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.: 77821

Page: 3 of 3

ANALYSIS REQUEST / PRESERVATION									
									Lead by EPA 6010B
									Arsenic by EPA 6010B
									OCPs by EPA 8081A
			X	X	X				PCBs by EPA 8082
			X	X	X				Title 22 Metals by EPA 6010B/7471A
									Hexavalent Chromium by EPA 7199
									Asbestos by PLM
									PAHs by EPA 8270-SIM
			X	X	X				VOCs by EPA 8260B
			X	X	X				TPH-g,d,mo by EPA 8015B

REQUESTED TURN-AROUND-TIME	NUMBER OF SUBMITTERS	NUMBER OF SOLUTIONS	NUMBER OF PROBLEMS
10	1	1	1
20	1	1	1
30	1	1	1
40	1	1	1
50	1	1	1
60	1	1	1
70	1	1	1
80	1	1	1
90	1	1	1
100	1	1	1
110	1	1	1
120	1	1	1
130	1	1	1
140	1	1	1
150	1	1	1
160	1	1	1
170	1	1	1
180	1	1	1
190	1	1	1
200	1	1	1
210	1	1	1
220	1	1	1
230	1	1	1
240	1	1	1
250	1	1	1
260	1	1	1
270	1	1	1
280	1	1	1
290	1	1	1
300	1	1	1
310	1	1	1
320	1	1	1
330	1	1	1
340	1	1	1
350	1	1	1
360	1	1	1
370	1	1	1
380	1	1	1
390	1	1	1
400	1	1	1
410	1	1	1
420	1	1	1
430	1	1	1
440	1	1	1
450	1	1	1
460	1	1	1
470	1	1	1
480	1	1	1
490	1	1	1
500	1	1	1
510	1	1	1
520	1	1	1
530	1	1	1
540	1	1	1
550	1	1	1
560	1	1	1
570	1	1	1
580	1	1	1
590	1	1	1
600	1	1	1
610	1	1	1
620	1	1	1
630	1	1	1
640	1	1	1
650	1	1	1
660	1	1	1
670	1	1	1
680	1	1	1
690	1	1	1
700	1	1	1
710	1	1	1
720	1	1	1
730	1	1	1
740	1	1	1
750	1	1	1
760	1	1	1
770	1	1	1
780	1	1	1
790	1	1	1
800	1	1	1
810	1	1	1
820	1	1	1
830	1	1	1
840	1	1	1
850	1	1	1
860	1	1	1
870	1	1	1
880	1	1	1
890	1	1	1
900	1	1	1
910	1	1	1
920	1	1	1
930	1	1	1
940	1	1	1
950	1	1	1
960	1	1	1
970	1	1	1
980	1	1	1
990	1	1	1
1000	1	1	1

Standard: X

72 Hour:

48 Hour:

24 Hour: \_\_\_\_\_

REMARKS / INSTRUCTIONS

fold

HOLD

1000

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

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$$7 = \text{NaOH} \quad 6 = \text{OH}$$

---

DW = Drinking Water

AO - Aqueous

S - Soil / Solid

OT - Other

---

s / No @ °C

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

# Sample Receipt Report

Laboratory Reference NAM 27827

Logged in by MM

Received: 04/05/23 17:51

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 2

Project #: 211936010

Sample Quantity

35 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): _____	Thermometer ID: _____	Adjusted Temp.: _____	
Shipping Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

## Notes

2 coolers at 3 and 1 °C IR#3 correction =+0 °C

Client Notified \_\_\_\_\_

By \_\_\_\_\_

On \_\_\_\_\_



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2025

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27693C

Project Name: LAUSD 49th Street PEA

Project Number: 2119366010

Date Received: 5/1/2023

Date Reported: 5/3/2023

Chain of Custody Received: ☒

Analytical Method: 6010B,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693C  
Project Name: LAUSD 49th Street PEA  
Project #: 2119366010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 2°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693C  
Project Name: LAUSD 49th Street PEA  
Project #: 2119366010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B41-2.5	27693-014	2/20/2023	2/18/2023	Soil
B40-2.5	27693-016	2/20/2023	2/18/2023	Soil



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27693C  
Project Name: LAUSD 49th Street PEA  
Project #: 2119366010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B41-2.5		27693-014	2/20/2023	16:11	2/18/2023	10:11	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>	
Arsenic	6010B	2.2	mg/kg	05/01/23 15:35	05/02/23 16:29		--	1	
B40-2.5		27693-016	2/20/2023	16:11	2/18/2023	10:39	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>	
Arsenic	6010B	<2.0	mg/kg	05/01/23 15:35	05/02/23 16:20		--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBHV0501231	Arsenic	6010B	<2.0	mg/kg	05/01/23 16:30	05/02/23 12:10	--	1	

**QA/QC Report  
for  
Metals**

Reference #: NAM 27693C

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B**

Laboratory Sample #: AZ13973-003

Date of Extraction: 05/01/23 16:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Arsenic	05/02/23 12:20	05/02/23 12:23	4.70	20.0	22.3	23.1	88	92	4	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B**

Laboratory Sample #: HV0501231

Date of Extraction: 05/01/23 16:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Arsenic	05/02/23 12:14	05/02/23 12:17	--	20.0	18.2	17.3	91	86	5	80-120	20	--

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

## Analysis Request &amp; Chain of Custody Record



ORANGE COAST ANALYTICAL, INC.

3002 Dow Avenue, Suite 532

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Lab Job No.:

27093

Page:

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of

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CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA				Lead by EPA 6010B	Arsenic by EPA 6010B	OCPs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	POCs by EPA 8260B	TPH-g.d.o by EPA 8015B	Standard:	X
Send Report To:	Dennis Fee	Project Number:	211936010														72 Hour:	
Email:	dfec@ninyoandmoore.com	PO #:															48 Hour:	
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA														24 Hour:	
Phone:	(949) 753-7070 Fax:	Sampled By:	EAC/AC															
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type												REMARKS / INSTRUCTIONS	
1 B2-0.5	1	2/18/23	0850	soil	9oz jar	X	X	C1		X	X	X	X	X	X	X	C1=composite group 1	
2 B2-2.5	1		0854					C2									C2=composite group 2	
3 B1-0.5	1		0902			X	X	C1										
4 B1-2.5	1		0904					C2										
5 B3-0.5	1		0923			X	X	C1		X	X	X	X					
6 B3-2.5	1		0925					C2										
7 B4-0.5	1		0931			X	X	C3									C3=composite group 3	
8 B4-2.5	1		0932					C4									C4=composite group 4	
9 B22-0.5	1		0938			X	X											
10 B22-2.5	1		0940														HOLD	
11 B22-5	1		0942														HOLD	
12 B42-2.5	5		0958		9oz jar									X	X			
13 B42-5	1		1000														HOLD	
14 B41-2.5	1		1011											X	X			
No. of Samples: 14		Method of Shipment:		Preservative:		1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other												
Relinquished By:	Date: 2/20/23	Received By:	Date:	Sample Matrix:		DW - Drinking Water												
Company: NEM	Time: 1611	Company:	Time:	GW - Groundwater		AQ - Aqueous												
Relinquished By:	Date:	Received By:	Date:	WW - Wastewater		SS - Soil / Solid												
Company:	Time:	Company:	Time:	SW - Stormwater		OT - Other												
Relinquished By:	Date:	Received For OCA By:	Date: 2-26-23	Sample Integrity:		2.0 to 2.2 °C												
Company:	Time:	Company: OCA, CA	Time: 1611	Intact:		On Ice: Yes No @ 27.3 °C												

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



## Analysis Request &amp; Chain of Custody Record



ORANGE COAST ANALYTICAL, INC.

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Phone: (714) 832-0064 Fax: (714) 832-0067

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Lab Job No.:

271093

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of

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CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME		
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA				Lead by EPA 6010B	Arsenic by EPA 6010B	OCPs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.o by EPA 8015B	Standard:	X	
Send Report To:	Dennis Fee	Project Number:	211936010														72 Hour:		
Email:	dfee@ninyoandmoore.com	PO #:															48 Hour:		
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA														24 Hour:		
Phone:	(949) 753-7070	Fax:																	
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type											REMARKS / INSTRUCTIONS		
15 B41-5	5	2/18/23	1014	soil	9 oz jar 4 VOAS												HOLD		
16 B40-2.5	↓		1039		↓														
17 B5-0.5	1		1102		9 oz jar		X	X	C3		X	X	X	X					
18 B5-2.5	1		1104		↓				C4										
19 B6-0.5	↓		1111		↓		X	X	C3										
20 B6-2.5	↓		1113		↓				C4										
21 B40-5	5		1126		9 oz jar 4 VOAS												HOLD		
22 B8-0.5	1		1248		9 oz jar		X	X	C5		X	X	X	X			C5=composite group 5		
23 B8-2.5	1		1250		↓				C6								C6=composite group 6		
24 B7-0.5	↓		1254		↓		X	X	C5										
25 B7-2.5	↓		1255		↓				C6										
26 B12-0.5	↓		1302		↓		X	X	C7		X	X	X	X			C7=composite group 7		
27 B12-2.5	↓		1304		↓				C8								C8=composite group 8		
28 B11-0.5	↓	↓	1307		↓		X	X	C7										
No. of Samples: 14		Method of Shipment:		Preservative:		1 = Ice    2 = HCl    3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH    6 = Other													
Relinquished By:		Date: 2/24/23		Received By:		Date:		Sample Matrix:		DW - Drinking Water									
Company: NEM		Time: 1611		Company:		Time:		GW - Groundwater		AQ - Aqueous									
Relinquished By:		Date:		Received By:		Date:		WW - Wastewater		SS - Soil / Solid									
Company:		Time:		Company:		Time:		SW - Stormwater		OT - Other									
Relinquished By:		Date:		Received For OCA By:		Date: 2-20-23		Sample Integrity:		2.0+0.2.0°C									
Company:		Time:		Company: OCA, LP		Time: 1611		Intact: _____		On Ice: Yes No @ 3°C									

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.





4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.:

27693

Page: 3 of 4

CUSTOMER INFORMATION		PROJECT INFORMATION					TURN-AROUND TIME											
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					Lead by EPA 6010B	Arsenic by EPA 6010B	OC's by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g,d,o by EPA 8015B	Standard: <u>X</u>	
Send Report To: Dennis Fee		Project Number: 211936010				72 Hour: _____												
Email: <a href="mailto:dfee@ninyoandmoore.com">dfee@ninyoandmoore.com</a>		PO #:				48 Hour: _____												
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA				24 Hour: _____												
Phone: (949) 753-7070 Fax:		EDD Required:																
		Sampled By: <u>EAC/AC</u>																REMARKS / INSTRUCTIONS
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type													
B11-2.5	1	2/18/23	1309	Soil	902 jar			C8										
B9-0.5			1320			XX		C5		XX	XX	XX	XX					
B9-2.5			1322					C6										
B13-0.5			1336			XX		C9										C9=Composite group 9
B13-2.5			1338					C10										C10=Composite group 1
B14-0.5			1340			XX		C9		X	X	XX	XX					
B14-2.5			1342					C10										
B17-0.5			1351			XX		C11										C11=Composite group 11
B17-2.5			1353					C12										C12=Composite group 12
B15-0.5			1357			XX		C9		X	X	XX	XX					
B15-2.5			1359					C10										
B16-0.5			1409			XX		C11										
B16-2.5			1410					C12										
B18-0.5	✓	✓	1412	✓	✓	XX		C11		X	X	XX	XX					
No. of Samples: 14		Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other														
Relinquished By:	Date: 2/20/23	Received By:	Date:	Sample Matrix: DW - Drinking Water														
Company: N & M	Time: 1611	Company:	Time:	GW - Groundwater AQ - Aqueous														
Relinquished By:	Date:	Received By:	Date:	WW - Wastewater SS - Soil / Solid														
Company:	Time:	Company:	Time:	SW - Stormwater OT - Other														
Relinquished By:	Date:	Received For OCA By:	Date: 2-20-23	Sample Integrity: 2.0 to 2.1 °C														
Company:	Time:	Company: OCA, LA	Time: 1611	Intact: _____ On Ice: <u>Yes</u> / No @ _____ °C														

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

Analysis Request & Chain of Custody Record	
--	--



Phone: (480) 736-0960 Fax: (480) 736-0970

~~AC 2/18/23~~

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



# Sample Receipt Report

Laboratory Reference NAM 27693

Logged in by HC

Received: 02/20/23 16:11

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

57 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>2</u>	Thermometer ID: <u>IR#3</u>	Adjusted Temp.: <u>2+0=2</u>	
Shipping Intact	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

## Notes

Client Notified

By

On





**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27814

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 4/3/2023

Date Reported: 4/5/2023

Chain of Custody Received: ☒

Analytical Method: 6010B,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27814  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 3°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27814  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
S1	27814-001	4/3/2023	4/3/2023	Soil
S2	27814-002	4/3/2023	4/3/2023	Soil
S3	27814-003	4/3/2023	4/3/2023	Soil
S4	27814-004	4/3/2023	4/3/2023	Soil
S5	27814-005	4/3/2023	4/3/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27814  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
S1		27814-001	4/3/2023	16:47	4/3/2023	9:54	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	3.7	mg/kg	04/03/23 17:35	04/04/23 14:14	--	1	
S2		27814-002	4/3/2023	16:47	4/3/2023	10:00	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	31	mg/kg	04/03/23 17:35	04/04/23 14:17	--	1	
S3		27814-003	4/3/2023	16:47	4/3/2023	10:03	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	14	mg/kg	04/03/23 17:35	04/04/23 14:19	--	1	
S4		27814-004	4/3/2023	16:47	4/3/2023	10:08	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	24	mg/kg	04/03/23 17:35	04/04/23 14:22	--	1	
S5		27814-005	4/3/2023	16:47	4/3/2023	10:12	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	6.9	mg/kg	04/03/23 17:35	04/04/23 14:24	--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBHV0403231	Arsenic	6010B	<2.0	mg/kg	04/03/23 13:30	04/04/23 12:49	--	1	

**QA/QC Report  
for  
Metals**

Reference #: NAM 27814

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B**

Laboratory Sample #: AZ13927-001

Date of Extraction: 04/03/23 13:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Arsenic	04/04/23 13:00	04/04/23 13:03	0.00	20.0	19.1	18.7	96	94	2	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B**

Laboratory Sample #: HV0403231

Date of Extraction: 04/03/23 13:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Arsenic	04/04/23 12:53	04/04/23 12:56	--	20.0	18.5	18.8	93	94	2	80-120	20	--

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

## Analysis Request &amp; Chain of Custody Record

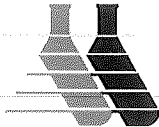
Lab Job No.:

27814

Page:

of

1



ORANGE COAST ANALYTICAL, INC.

www.ocalab.com

3002 Dow Avenue, Suite 532

4620 East Elwood Street, Suite 4

Tustin, CA 92780

Phoenix, AZ 85040

Phone: (714) 832-0064 Fax: (714) 832-0067

Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION				ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA				Lead by EPA 6010B	Arsenic by EPA 6010B / 1	OCPS by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.o by EPA 8015B	Standard: <u>360</u>	
Send Report To: Dennis Fee		Project Number: 211936010														72 Hour: _____	
Email: <u>dfree@ninyoandmoore.com</u>		PO #:														48 Hour: <u>X</u>	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA														24 Hour: _____	
Phone: (949) 753-7070 Fax: _____		Sampled By: <u>Aileen Chea</u>														REMARKS / INSTRUCTIONS	
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type												
S1	1	4/3/23	0954	SS	9oz jar	X											
S2	↓	↓	1000	↓	↓	X											
S3	↓	↓	1003	↓	↓	X											
S4	↓	↓	1008	↓	↓	X											
SS	↓	↓	1012	↓	↓	X											
EAC 4/3/23																	
No. of Samples: <u>5</u> Method of Shipment: <u>HAND DELIVERED</u> Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other																	
Relinquished By: <u>Aileen Chea / Aileen</u>		Date: <u>4/3/2023</u>		Received By: <u>Ed Chavez</u>		Date: <u>4/3/2023</u>		Sample Matrix: _____ DW - Drinking Water GW - Groundwater AQ - Aqueous WW - Wastewater SS - Soil / Solid SW - Stormwater OT - Other									
Company: <u>Ninyo &amp; Moore</u>		Time: <u>1503</u>		Company: <u>Ninyo &amp; Moore</u>		Time: <u>1503</u>											
Relinquished By: <u>Ed Chavez</u>		Date: <u>4/3/23</u>		Received By: _____		Date: _____											
Company: <u>Ninyo &amp; Moore</u>		Time: <u>1647</u>		Company: _____		Time: _____		Sample Integrity: <u>3+0 3 C IR 3</u> Intact: _____ On Ice: <u>(yes)</u> No @ _____ °C									
Relinquished By: _____		Date: _____		Received For OCA By: <u>Rebecca Cardillo</u>		Date: <u>4/3/23</u>											
Company: _____		Time: _____		Company: <u>OCA</u>		Time: <u>1647</u>											

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

# Sample Receipt Report

Laboratory Reference NAM 27814

Logged in by HC

Received: 04/03/23 16:47

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

5 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>3</u>	Thermometer ID: <u>#3</u>	Adjusted Temp.: <u>3</u>	
Shipping Intact	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

## Notes

Client Notified

By

On





**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27815

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 4/3/2023

Date Reported: 4/11/2023

Chain of Custody Received: ☒

Analytical Method: 8015B, 8260B, 6010B, 7471A,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27815  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 3°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27815  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B45-0.5	27815-001	4/3/2023	4/3/2023	Soil
B45-2.5	27815-002	4/3/2023	4/3/2023	Soil
B45-5	27815-003	4/3/2023	4/3/2023	Soil
B45-10	27815-004	4/3/2023	4/3/2023	Soil
B45-15	27815-005	4/3/2023	4/3/2023	Soil
B20-W-0.5	27815-006	4/3/2023	4/3/2023	Soil
B20-W-2.5	27815-007	4/3/2023	4/3/2023	Soil
B20-E-0.5	27815-008	4/3/2023	4/3/2023	Soil
B20-E-2.5	27815-009	4/3/2023	4/3/2023	Soil
B21-W-0.5	27815-010	4/3/2023	4/3/2023	Soil
B21-W-2.5	27815-011	4/3/2023	4/3/2023	Soil
B4-E2-0.5	27815-012	4/3/2023	4/3/2023	Soil
B4-E2-2.5	27815-013	4/3/2023	4/3/2023	Soil
B4-E2-5	27815-014	4/3/2023	4/3/2023	Soil
B4-E-0.5	27815-015	4/3/2023	4/3/2023	Soil
B4-E-2.5	27815-016	4/3/2023	4/3/2023	Soil
B4-E-5	27815-017	4/3/2023	4/3/2023	Soil
B4-W-0.5	27815-018	4/3/2023	4/3/2023	Soil
B4-W-2.5	27815-019	4/3/2023	4/3/2023	Soil
B4-W-5	27815-020	4/3/2023	4/3/2023	Soil
B4-W2-0.5	27815-021	4/3/2023	4/3/2023	Soil
B4-W2-2.5	27815-022	4/3/2023	4/3/2023	Soil
B4-W2-5	27815-023	4/3/2023	4/3/2023	Soil
B4-N-0.5	27815-024	4/3/2023	4/3/2023	Soil
B4-N-2.5	27815-025	4/3/2023	4/3/2023	Soil
B4-N-5	27815-026	4/3/2023	4/3/2023	Soil
B4-N2-0.5	27815-027	4/3/2023	4/3/2023	Soil
B4-N2-2.5	27815-028	4/3/2023	4/3/2023	Soil
B4-N2-5	27815-029	4/3/2023	4/3/2023	Soil
B4A-0.5	27815-030	4/3/2023	4/3/2023	Soil
B4A-2.5	27815-031	4/3/2023	4/3/2023	Soil
B4A-5	27815-032	4/3/2023	4/3/2023	Soil
B4-5	27815-033	4/3/2023	4/3/2023	Soil
B4-7.5	27815-034	4/3/2023	4/3/2023	Soil
B2-N-0.5	27815-035	4/3/2023	4/3/2023	Soil
B2-N-2.5	27815-036	4/3/2023	4/3/2023	Soil
B2-N-5	27815-037	4/3/2023	4/3/2023	Soil
B42A-0.5	27815-038	4/3/2023	4/3/2023	Soil

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Irvine, CA, 92618

Lab Reference #: NAM 27815  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B42A-2.5	27815-039	4/3/2023	4/3/2023	Soil
B42A-5	27815-040	4/3/2023	4/3/2023	Soil
B44-0.5	27815-041	4/3/2023	4/3/2023	Soil
B44-2.5	27815-042	4/3/2023	4/3/2023	Soil
B44-5	27815-043	4/3/2023	4/3/2023	Soil
B14-E-0.5	27815-044	4/3/2023	4/3/2023	Soil
B14-E-2.5	27815-045	4/3/2023	4/3/2023	Soil
B14-S-0.5	27815-046	4/3/2023	4/3/2023	Soil
B14-S-2.5	27815-047	4/3/2023	4/3/2023	Soil

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Lab Reference #: NAM 27815  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B45-0.5	27815-001	4/3/2023 16:47	4/3/2023 8:00	4/6/2023 15:00	4/10/2023 23:10	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	490			Octacosane	191	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B45-0.5	27815-001	4/3/2023 16:47	4/3/2023 8:00	4/6/2023 15:00	4/10/2023 23:10	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	1900			Octacosane	191	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B45-15	27815-005	4/3/2023 16:47	4/3/2023 8:35	4/6/2023 15:00	4/10/2023 23:54	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	163	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B45-15	27815-005	4/3/2023 16:47	4/3/2023 8:35	4/6/2023 15:00	4/10/2023 23:54	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	163	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B44-0.5	27815-041	4/3/2023 16:47	4/3/2023 14:16	4/6/2023 15:00	4/11/2023 0:38	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	125	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					

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Project Name: LAUSD 49th Street PEA  
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**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B44-0.5	27815-041	4/3/2023 16:47	4/3/2023 14:16	4/6/2023 15:00	4/11/2023 0:38	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	125	
<u>Dilution Factor:</u> 1				* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u> None						
B44-2.5	27815-042	4/3/2023 16:47	4/3/2023 14:18	4/6/2023 15:00	4/11/2023 1:22	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	130	
<u>Dilution Factor:</u> 1				* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u> None						
B44-2.5	27815-042	4/3/2023 16:47	4/3/2023 14:18	4/6/2023 15:00	4/11/2023 1:22	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	130	
<u>Dilution Factor:</u> 1				* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u> None						
Method Blank	MBLY0406232			4/6/2023 15:00	4/10/2023 20:19	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	108	
<u>Dilution Factor:</u> 1				* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u> None						
Method Blank	MBLY0406232			4/6/2023 15:00	4/10/2023 20:19	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	108	
<u>Dilution Factor:</u> 1				* Acc Recovery: 40-160 %		
<u>Data Qualifiers:</u> None						

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**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B45-0.5	27815-001	4/3/2023 16:47	4/3/2023 8:00	4/5/2023 13:00	4/5/2023 15:53	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	0.67		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	106		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B45-15	27815-005	4/3/2023 16:47	4/3/2023 8:35	4/5/2023 13:00	4/5/2023 16:13	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	0.67		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	70		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B44-0.5	27815-041	4/3/2023 16:47	4/3/2023 14:16	4/5/2023 13:00	4/5/2023 16:33	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	0.71		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	80		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B44-2.5	27815-042	4/3/2023 16:47	4/3/2023 14:18	4/5/2023 13:00	4/5/2023 16:54	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	0.58		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	53		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
Method Blank	MBLY0405231			4/5/2023 13:00	4/5/2023 13:38	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	91		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

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**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B45-0.5	27815-001	4/3/2023 16:47	4/3/2023 8:00	4/3/2023 8:00	4/4/2023 14:52	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1	
Dibromofluoromethane:	86	65-130 %	<u>Data Qualifiers:</u>	None	
Toluene-d8:	87	58-130 %			
4-Bromofluorobenzene:	91	40-135 %			



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**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B45-15	27815-005	4/3/2023 16:47	4/3/2023 8:35	4/3/2023 8:35	4/4/2023 15:13	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	<u>1</u>	
Dibromofluoromethane:	86	65-130 %	<u>Data Qualifiers:</u>	None	
Toluene-d8:	84	58-130 %			
4-Bromofluorobenzene:	88	40-135 %			

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Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B44-0.5	27815-041	4/3/2023 16:47	4/3/2023 14:16	4/3/2023 14:16	4/4/2023 15:33	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	<u>1</u>	
Dibromofluoromethane:	89	65-130 %	<u>Data Qualifiers:</u>	None	
Toluene-d8:	88	58-130 %			
4-Bromofluorobenzene:	92	40-135 %			

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27815  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B44-2.5	27815-042	4/3/2023 16:47	4/3/2023 14:18	4/3/2023 14:18	4/4/2023 15:54	Soil

ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			
Surrogate:	% RC	Acceptable % RC	Dilution Factor:	1	
Dibromofluoromethane:	87	65-130 %	Data Qualifiers:	None	
Toluene-d8:	85	58-130 %			
4-Bromofluorobenzene:	88	40-135 %			

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Irvine, CA, 92618

Lab Reference #: NAM 27815  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT0404231			4/4/2023 9:30	4/4/2023 14:31	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1			
Dibromofluoromethane:	86	65-130 %	<u>Data Qualifiers:</u> None			
Toluene-d8:	87	58-130 %				
4-Bromofluorobenzene:	91	40-135 %				

Mr. Dennis Fee  
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Irvine, CA, 92618

Lab Reference #: NAM 27815  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B45-0.5		27815-001	4/3/2023	16:47	4/3/2023	8:00	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Arsenic	6010B	3.3	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Barium	6010B	120	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Beryllium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Cadmium	6010B	0.56	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Chromium	6010B	13	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Cobalt	6010B	8.5	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Copper	6010B	36	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Lead	6010B	200	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Mercury	7471A	0.26	mg/kg	04/03/23 17:00	04/04/23 14:44	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Nickel	6010B	14	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Selenium	6010B	<4.8	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Silver	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Thallium	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Vanadium	6010B	32	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		
Zinc	6010B	250	mg/kg	04/04/23 09:10	04/04/23 14:52	--	1		

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Irvine, CA, 92618

Lab Reference #: NAM 27815  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix			
B45-15		27815-005	4/3/2023	16:47	4/3/2023	8:35	Soil			
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF			
Antimony	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Arsenic	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Barium	6010B	72	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Beryllium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Cadmium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Chromium	6010B	9.0	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Cobalt	6010B	7.6	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Copper	6010B	7.9	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Lead	6010B	2.0	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Mercury	7471A	<0.10	mg/kg	04/03/23 17:00	04/04/23 14:46	--	1			
Molybdenum	6010B	<1.0	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Nickel	6010B	6.3	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Selenium	6010B	<4.8	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Silver	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Thallium	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Vanadium	6010B	25	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
Zinc	6010B	36	mg/kg	04/04/23 09:10	04/04/23 14:55	--	1			
B20-W-0.5		27815-006	4/3/2023	16:47	4/3/2023	9:39	Soil			
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF			
Arsenic	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 15:05	--	1			

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Lab Reference #: NAM 27815  
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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B20-E-0.5		27815-008	4/3/2023	16:47	4/3/2023	9:57	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Arsenic	6010B	3.6	mg/kg	04/04/23 09:10	04/04/23 15:09	--	1		
B21-W-0.5		27815-010	4/3/2023	16:47	4/3/2023	10:19	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Arsenic	6010B	7.6	mg/kg	04/04/23 09:10	04/04/23 15:12	--	1		
B4-E-0.5		27815-015	4/3/2023	16:47	4/3/2023	11:02	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Arsenic	6010B	26	mg/kg	04/04/23 09:10	04/04/23 15:16	--	1		
B4-W-0.5		27815-018	4/3/2023	16:47	4/3/2023	11:12	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Arsenic	6010B	720	mg/kg	04/04/23 09:10	04/04/23 15:26	--	1		
B4-N-0.5		27815-024	4/3/2023	16:47	4/3/2023	11:32	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Arsenic	6010B	35	mg/kg	04/04/23 09:10	04/04/23 15:29	--	1		
B2-N-0.5		27815-035	4/3/2023	16:47	4/3/2023	13:07	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Arsenic	6010B	3.9	mg/kg	04/04/23 09:10	04/04/23 15:31	--	1		

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Irvine, CA, 92618

Lab Reference #: NAM 27815  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B42A-0.5		27815-038	4/3/2023	16:47	4/3/2023	13:44	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Arsenic	6010B	63	mg/kg	04/04/23 09:10	04/04/23 15:34	--	1		

B44-0.5		27815-041	4/3/2023	16:47	4/3/2023	14:16	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Arsenic	6010B	3.1	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Barium	6010B	130	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Beryllium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Cadmium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Chromium	6010B	20	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Cobalt	6010B	12	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Copper	6010B	17	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Lead	6010B	29	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Mercury	7471A	<0.10	mg/kg	04/03/23 17:00	04/04/23 14:48	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Nickel	6010B	13	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Selenium	6010B	<4.8	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Silver	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Thallium	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Vanadium	6010B	42	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		
Zinc	6010B	100	mg/kg	04/04/23 09:10	04/04/23 14:59	--	1		



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Lab Reference #: NAM 27815  
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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix			
B44-2.5		27815-042	4/3/2023	16:47	4/3/2023	14:18	Soil			
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
	Antimony	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Arsenic	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Barium	6010B	130	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Beryllium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Cadmium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Chromium	6010B	18	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Cobalt	6010B	12	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Copper	6010B	17	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Lead	6010B	4.4	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Mercury	7471A	<0.10	mg/kg	04/03/23 17:00	04/04/23 14:50	--	1		
	Molybdenum	6010B	<1.0	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Nickel	6010B	12	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Selenium	6010B	<4.8	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Silver	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Thallium	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Vanadium	6010B	42	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
	Zinc	6010B	62	mg/kg	04/04/23 09:10	04/04/23 15:02	--	1		
B14-E-0.5		27815-044	4/3/2023	16:47	4/3/2023	14:40	Soil			
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
	Arsenic	6010B	4.6	mg/kg	04/04/23 09:10	04/04/23 15:36	--	1		

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27815  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B14-S-0.5	27815-046	4/3/2023 16:47	4/3/2023 14:45	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Arsenic	6010B	7.0	mg/kg	04/04/23 09:10	04/04/23 15:39	--	1

Method Blank	Soil
--------------	------

<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
MBHV0404231	Antimony	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Arsenic	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Barium	6010B	<1.0	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Beryllium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Cadmium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Chromium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Cobalt	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Copper	6010B	<5.0	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Lead	6010B	<0.80	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0403233	Mercury	7471A	<0.10	mg/kg	04/03/23 17:00	04/04/23 14:15	--	1
MBHV0404231	Molybdenum	6010B	<1.0	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Nickel	6010B	<1.0	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Selenium	6010B	<4.8	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Silver	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Thallium	6010B	<2.0	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Vanadium	6010B	<0.50	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1
MBHV0404231	Zinc	6010B	<5.0	mg/kg	04/04/23 09:10	04/04/23 14:28	--	1

**QA/QC Report**  
for  
**Extractable Fuel Hydrocarbons (EPA 8015B/8015M)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/6/2023 15:00

Date of Analysis: 4/10/2023 22:05

Dup Date of Analysis: 4/10/2023 22:27

Laboratory Sample #: 27812-001

MS/MSD Qualifiers: None

Reference #: NAM 27815

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
EFH as Diesel	11.0	1000	1560	1450	155	144	7	8-193	20	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Octacosane	154	142	<input type="checkbox"/>	111	102	<input type="checkbox"/>	40-160

**Laboratory Control Sample**

Date of Extraction: 4/6/2023 15:00

Date of Analysis: 4/10/2023 21:01

Dup Date of Analysis: 4/10/2023 21:22

Laboratory Sample #: LY0406232

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
EFH as Diesel	1000	1060	1020	106	102	4	17-180	42	<input type="checkbox"/>

**QA/QC Report**  
for  
**Volatile Fuel Hydrocarbons (EPA 8015B)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/5/2023 13:00  
Date of Analysis: 4/5/2023 14:50  
Dup Date of Analysis: 4/5/2023 15:11  
Laboratory Sample #: 27812-001  
MS/MSD Qualifiers: None  
Reference #: NAM 27815

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
VFH as Gasoline	0.00	0.250	0.220	0.163	88	65	30	20-144	50	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
$\alpha$ - $\alpha$ -Trifluorotoluene	98	82	<input type="checkbox"/>	98	99	<input type="checkbox"/>	32-153

**Laboratory Control Sample**

Date of Extraction: 4/5/2023 13:00  
Date of Analysis: 4/5/2023 13:59  
Dup Date of Analysis: 4/5/2023 14:18  
Laboratory Sample #: LY0405231  
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
VFH as Gasoline	0.250	0.213	0.240	85	96	12	38-130	27	<input type="checkbox"/>

**QA/QC Report**  
for  
**Volatile Organic Compounds (8260B)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/4/2023 9:59  
Date of Analysis: 4/4/2023 12:47  
Dup Date of Analysis: 4/4/2023 13:07  
Laboratory Sample #: 27812-001  
MS/MSD Qualifiers: None  
Reference #: NAM 27815

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Benzene	0.00	10.0	8.27	8.47	83	85	2	70-138	20	--
Chlorobenzene	0.00	10.0	8.71	8.88	87	89	2	70-132	20	--
1,1-Dichloroethene	0.00	10.0	6.23	6.67	62	67	7	46-130	20	--
Toluene	0.00	10.0	8.32	8.56	83	86	3	70-130	20	--
Trichloroethene	0.00	10.0	8.06	8.16	81	82	1	70-135	20	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Dibromofluoromethane	85	85	<input type="checkbox"/>	85	86	<input type="checkbox"/>	65-130
Toluene-d8	84	84	<input type="checkbox"/>	84	85	<input type="checkbox"/>	58-130
4-Bromofluorobenzene	88	86	<input type="checkbox"/>	86	88	<input type="checkbox"/>	40-135

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 4/4/2023 9:59  
Date of Analysis: 4/4/2023 12:05  
Dup Date of Analysis: 4/4/2023 12:26  
Laboratory Sample #: HT0404231  
LCS/LCSD Qualifiers: None

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Benzene	10.0	8.42	8.13	84	81	4	70-134	20	--
Chlorobenzene	10.0	8.70	8.50	87	85	2	70-130	20	--
1,1-Dichloroethene	10.0	6.48	6.08	65	61	6	48-130	20	--
Toluene	10.0	8.35	8.07	84	81	3	70-130	20	--
Trichloroethene	10.0	8.36	8.04	84	80	4	70-132	20	--

**QA/QC Report  
for  
Metals**

Reference #: NAM 27815

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

6010B/7471A

Laboratory Sample #: 27811-005

Date of Extraction: 04/03/23 17:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Mercury	04/04/23 14:22	04/04/23 14:24	0.12	1.00	1.01	0.939	89	82	7	80-120	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

6010B/7471A

Laboratory Sample #: HV0403233

Date of Extraction: 04/03/23 17:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Mercury	04/04/23 14:17	04/04/23 14:18	--	1.00	1.03	0.995	103	100	3	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

6010B/7471A

Laboratory Sample #: 27815-001

Date of Extraction: 04/04/23 09:10

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Antimony	04/04/23 14:45	04/04/23 14:49	0.00	20.0	5.55	5.26	28	26	5	75-125	20	M2,
Arsenic	04/04/23 14:45	04/04/23 14:49	3.30	20.0	19.9	20.6	83	87	3	75-125	20	--
Barium	04/04/23 14:45	04/04/23 14:49	120	20.0	187	197	335	385	5	75-125	20	M3,
Beryllium	04/04/23 14:45	04/04/23 14:49	0.00	20.0	17.7	18.3	89	91	3	75-125	20	--
Cadmium	04/04/23 14:45	04/04/23 14:49	0.560	20.0	16.6	17.2	80	83	4	75-125	20	--
Chromium	04/04/23 14:45	04/04/23 14:49	13.0	20.0	29.3	30.8	81	89	5	75-125	20	--
Cobalt	04/04/23 14:45	04/04/23 14:49	8.50	20.0	24.6	25.5	81	85	4	75-125	20	--
Copper	04/04/23 14:45	04/04/23 14:49	36.0	20.0	43.0	45.7	35	49	6	75-125	20	M3,
Lead	04/04/23 14:45	04/04/23 14:49	200	20.0	137	142	0	0	4	75-125	20	M3,
Molybdenum	04/04/23 14:45	04/04/23 14:49	0.00	20.0	16.5	17.2	83	86	4	75-125	20	--
Nickel	04/04/23 14:45	04/04/23 14:49	14.0	20.0	29.5	30.0	78	80	2	75-125	20	--
Selenium	04/04/23 14:45	04/04/23 14:49	0.00	20.0	14.5	18.0	73	90	22	75-125	20	M2, R2,
Silver	04/04/23 14:45	04/04/23 14:49	0.00	20.0	16.8	17.6	84	88	5	75-125	20	--
Thallium	04/04/23 14:45	04/04/23 14:49	0.00	20.0	14.3	14.6	72	73	2	75-125	20	M2,
Vanadium	04/04/23 14:45	04/04/23 14:49	32.0	20.0	46.1	47.9	70	80	4	75-125	20	M3,
Zinc	04/04/23 14:45	04/04/23 14:49	250	20.0	215	227	0	0	5	75-125	20	M3,

**QA/QC Report  
for  
Metals**

Reference #: NAM 27815

Reporting units: ppm

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: HV0404231

Date of Extraction: 04/04/23 09:10

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Antimony	04/04/23 14:31	04/04/23 14:34	--	20.0	17.8	17.8	89	89	0	80-120	20	--
Arsenic	04/04/23 14:31	04/04/23 14:34	--	20.0	18.1	18.1	91	91	0	80-120	20	--
Barium	04/04/23 14:31	04/04/23 14:34	--	20.0	18.8	18.5	94	93	2	80-120	20	--
Beryllium	04/04/23 14:31	04/04/23 14:34	--	20.0	18.1	18.0	91	90	1	80-120	20	--
Cadmium	04/04/23 14:31	04/04/23 14:34	--	20.0	17.8	17.8	89	89	0	80-120	20	--
Chromium	04/04/23 14:31	04/04/23 14:34	--	20.0	19.7	19.4	99	97	2	80-120	20	--
Cobalt	04/04/23 14:31	04/04/23 14:34	--	20.0	20.1	20.1	101	101	0	80-120	20	--
Copper	04/04/23 14:31	04/04/23 14:34	--	20.0	19.1	18.9	96	94	1	80-120	20	--
Lead	04/04/23 14:31	04/04/23 14:34	--	20.0	18.6	19.0	93	95	2	80-120	20	--
Molybdenum	04/04/23 14:31	04/04/23 14:34	--	20.0	18.2	18.2	91	91	0	80-120	20	--
Nickel	04/04/23 14:31	04/04/23 14:34	--	20.0	20.4	20.4	102	102	0	80-120	20	--
Selenium	04/04/23 14:31	04/04/23 14:34	--	20.0	18.2	17.8	91	89	2	80-120	20	--
Silver	04/04/23 14:31	04/04/23 14:34	--	20.0	19.4	19.2	97	96	1	80-120	20	--
Thallium	04/04/23 14:31	04/04/23 14:34	--	20.0	18.3	18.6	91	93	2	80-120	20	--
Vanadium	04/04/23 14:31	04/04/23 14:34	--	20.0	17.7	17.4	89	87	2	80-120	20	--
Zinc	04/04/23 14:31	04/04/23 14:34	--	20.0	19.7	19.6	99	98	1	80-120	20	--

# Data Qualifier Definitions

## Qualifier

M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

27815-001	6010B	Antimony	MS/MSD
27815-001	6010B	Selenium	MS
27815-001	6010B	Thallium	MS/MSD

M3 = The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

27815-001	6010B	Barium	MS/MSD
27815-001	6010B	Copper	MS/MSD
27815-001	6010B	Lead	MS/MSD
27815-001	6010B	Vanadium	MS
27815-001	6010B	Zinc	MS/MSD

R2 = RPD/RSD exceeded the laboratory acceptance limit.

27815-001	6010B	Selenium	MS/MSD
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S1 = Surrogate recovery was above laboratory acceptance limits.



## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected



Phone: (480) 736-0960 Fax: (480) 736-0970

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



## Analysis Request &amp; Chain of Custody Record

Lab Job No.:

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ORANGE COAST ANALYTICAL, INC.

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CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SJM	VOCs by EPA 8260B	TPH-g,d,o by EPA 8015B	Standard: X	
Send Report To: Dennis Fee		Project Number: 211936010															72 Hour: _____	
Email: dfee@ninyoandmoore.com		PO #:															48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA															24 Hour: _____	
Phone: (949) 753-7070 Fax:		EDD Required: Scribe EDD																
		Sampled By: EAC/AC																
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type												REMARKS / INSTRUCTIONS	
15 B4-E-0.5	1	4/3/23	1102	SS	9oz jar		X											
16 B4-E-2.5			1105														HOLD	
17 B4-E-5			1110														HOLD	
18 B4-W-0.5			1112				X											
19 B4-W-2.5			1114														HOLD	
20 B4-W-5			1116														HOLD	
21 B4-W2-0.5			1126														HOLD	
22 B4-W2-2.5			1128														HOLD	
23 B4-W2-5			1130														HOLD	
24 B4-N-0.5			1132				X											
25 B4-N-2.5			1134														HOLD	
26 B4-N-5			1136														HOLD	
27 B4-N2-0.5			1205														HOLD	
28 B4-N2-2.5			1207														HOLD	
No. of Samples: 14		Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other														
Relinquished By: Ed Chang	Date: 4/3/23	Received By:	Date:	Sample Matrix: DW - Drinking Water														
Time: 1647		Time:		GW - Groundwater		AQ - Aqueous												
Company: Ninyo & Moore		Company:		WW - Wastewater		SS - Soil / Solid												
Relinquished By:	Date:	Received By:	Date:	SW - Stormwater		OT - Other												
Time:		Time:																
Company:		Company:																
Relinquished By:	Date:	Received For OCA By: Heather Call	Date: 4/3/23	Sample Integrity: 3 HO = 3 C														
Time:		Time: 1647		Intact: _____ On Ice: (Yes/No) @ _____ °C														
Company:		Company: OCA																

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



## Analysis Request &amp; Chain of Custody Record

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27815

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ORANGE COAST ANALYTICAL, INC.

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CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA				Lead by EPA 60108	Arsenic by EPA 60108	OCPs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 60108/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.mo by EPA 8015B	Standard:	X
Send Report To:	Dennis Fee	Project Number:	211936010														72 Hour:	
Email:	dfee@ninyoandmoore.com	PO #:															48 Hour:	
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA														24 Hour:	
Phone:	(949) 753-7070	Fax:															REMARKS / INSTRUCTIONS	
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type													
29 B4-N2-5	1	4/3/23	1209	SS	9oz jar												HOLD	
30 B4A-0.5			1218				X	(EAC)									HOLD	
31 B4A-2.5			1220														HOLD	
32 B4A-5			1222														HOLD	
33 B4-5			1235														HOLD	
34 B4-7.5			1239														HOLD	
35 B2-N-0.5			1307				X											
36 B2-N-2.5			1310														HOLD	
37 B2-N-5			1313														HOLD	
38 B42A-0.5			1344				X											
39 B42A-2.5			1346														HOLD	
40 B42A-5			1348														HOLD	
41 B44-0.5	5		1416		+4 Vials					X				X	X			
42 B44-2.5			1418							X				X	X			
No. of Samples: 14		Method of Shipment:		Preservative:		1 = Ice		2 = HCl		3 = HNO <sub>3</sub>		4 = H <sub>2</sub> SO <sub>4</sub>		5 = NaOH		6 = Other		
Relinquished By: Ed Chavez		Date: 4/3/23		Received By:		Date:		Sample Matrix:		DW - Drinking Water								
Time: 1647				Company:		Time:		GW - Groundwater		AQ - Aqueous								
Company: Ninyo & Moore				Received By:		Date:		WW - Wastewater		SS - Soil / Solid								
Time:				Company:		Time:		SW - Stormwater		OT - Other								
Relinquished By:		Date:		Received For OCA By:		Date: 4/3/23		Sample Integrity:		3 HD = 3°C IR3								
Time:				Company: OCA		Time: 1647		Intact: _____		On Ice: Yes / No @ _____ °C								

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.:

27815

Page:

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of

4

## ANALYSIS REQUEST / PRESERVATION

CUSTOMER INFORMATION		PROJECT INFORMATION					TURN-AROUND-TIME										
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					Lead by EPA 6010B	Arsenic by EPA 6010B	OCPS by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g,d,mo by EPA 8015B	Standard: <u>X</u>
Send Report To: Dennis Fee		Project Number: 211936010				72 Hour: _____											
Email: <a href="mailto:dfee@ninyoandmoore.com">dfee@ninyoandmoore.com</a>		PO #:				48 Hour: _____											
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA				24 Hour: _____											
Phone: (949) 753-7070 Fax:		EDD Required:															
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type											REMARKS / INSTRUCTIONS
B44-5		5	4/3/23	1420	SS	9oz jar / 4 vials											HOLD
B14-E-0.5		1	↓	1440	↓	9oz jar		X									
B14-E-2.5		↓	↓	1441	↓	↓											HOLD
B14-S-0.5		↓	↓	1445	↓	↓		X									
B14-S-2.5		↓	↓	1447	↓	↓											HOLD
EAC 4/3/23																	
Hand delivered																	
No. of Samples: 5		Method of Shipment:		Preservative:		1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other											
Relinquished By: Ed Chavez		Date: 4/3/23		Received By:		Date:		Sample Matrix:		DW - Drinking Water							
Company: Ninyo & Moore		Time: 1647		Company:		Time:		GW - Groundwater		AQ - Aqueous							
Relinquished By:		Date:		Received By:		Date:		WW - Wastewater		SS - Soil / Solid							
Company:		Time:		Company:		Time:		SW - Stormwater		OT - Other							
Relinquished By:		Date:		Received For OCA By: Heath		Date: 4/5/23		Sample Integrity:		3rd = 3rd							
Company:		Time:		Company: OCA		Time: 1647		Intact: _____ On Ice: Yes No @ _____ °C									

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



## Sample Receipt Report

Laboratory Reference NAM 27815

Logged in by HC

Received: 04/03/23 16:47

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

47 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>3</u>	Thermometer ID: <u>#3</u>	Adjusted Temp.: <u>3</u>	
Shipping Intact	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

### Notes

Client Notified \_\_\_\_\_

By \_\_\_\_\_

On \_\_\_\_\_



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27815A

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 4/13/2023

Date Reported: 4/27/2023

Chain of Custody Received: ☒

Analytical Method: 8015B, 6010B, 1311/6010B,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 3°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B45-0.5	27815-001	4/3/2023	4/3/2023	Soil
B45-2.5	27815-002	4/3/2023	4/3/2023	Soil
B4-E2-0.5	27815-012	4/3/2023	4/3/2023	Soil
B4-E-2.5	27815-016	4/3/2023	4/3/2023	Soil
B4-W-2.5	27815-019	4/3/2023	4/3/2023	Soil
B4-W2-0.5	27815-021	4/3/2023	4/3/2023	Soil
B4-5	27815-033	4/3/2023	4/3/2023	Soil
B42A-0.5	27815-038	4/3/2023	4/3/2023	Soil
B42A-2.5	27815-039	4/3/2023	4/3/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B45-2.5	27815-002	4/3/2023 16:47	4/3/2023 8:05	4/26/2023 15:20	4/27/2023 2:41	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	102	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B45-2.5	27815-002	4/3/2023 16:47	4/3/2023 8:05	4/26/2023 15:20	4/27/2023 2:41	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	102	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
Method Blank	MBVV0426232			4/26/2023 15:20	4/26/2023 20:13	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	92	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
Method Blank	MBVV0426232			4/26/2023 15:20	4/26/2023 20:13	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	92	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID			Lab Sample Number	Date Received		Date Sampled		Matrix	
B45-0.5			27815-001	4/3/2023	16:47	4/3/2023	8:00	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	TCLP Lead	6010B	0.11	mg/l	04/19/23 10:35	04/20/23 10:55		--	1
B45-2.5			27815-002	4/3/2023	16:47	4/3/2023	8:05	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Lead	6010B	2.5	mg/kg	04/18/23 10:30	04/18/23 16:14		--	1
B4-E2-0.5			27815-012	4/3/2023	16:47	4/3/2023	10:55	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Arsenic	6010B	46	mg/kg	04/18/23 10:30	04/18/23 15:50		--	1
B4-E-2.5			27815-016	4/3/2023	16:47	4/3/2023	11:05	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Arsenic	6010B	3.1	mg/kg	04/18/23 10:30	04/18/23 15:56		--	1
B4-W-2.5			27815-019	4/3/2023	16:47	4/3/2023	11:14	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Arsenic	6010B	130	mg/kg	04/18/23 10:30	04/18/23 16:06		--	1
B4-W2-0.5			27815-021	4/3/2023	16:47	4/3/2023	11:26	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	Arsenic	6010B	180	mg/kg	04/18/23 10:30	04/18/23 16:08		--	1

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B4-5		27815-033	4/3/2023	16:47	4/3/2023	12:35	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	3.9	mg/kg	04/18/23 10:30	04/18/23 16:10	--	1	
B42A-2.5		27815-039	4/3/2023	16:47	4/3/2023	13:46	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	2.3	mg/kg	04/18/23 10:30	04/18/23 16:12	--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBHV0418231	Arsenic	6010B	<2.0	mg/kg	04/18/23 10:30	04/18/23 15:36	--	1	
MBHV0418231	Lead	6010B	<0.80	mg/kg	04/18/23 10:30	04/18/23 15:36	--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBIR0419232	TCLP Lead	6010B	<0.080	mg/l	04/19/23 10:35	04/20/23 10:35	--	1	
B45-0.5		27815-001	4/3/2023	16:47	4/3/2023	8:00	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Lead	6010B	4.7	mg/L	04/17/23 08:30	04/18/23 14:40	--	1	
B42A-0.5		27815-038	4/3/2023	16:47	4/3/2023	13:44	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	STLC Arsenic	6010B	2.4	mg/L	04/17/23 08:30	04/18/23 14:43	--	1	

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27815A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received	Date Sampled		Matrix			
Method Blank						Soil			
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBIR0417231	STLC Arsenic	6010B	<0.20	mg/L	04/17/23 08:30	04/18/23 16:16	--	1	
MBIR0417231	STLC Lead	6010B	<0.20	mg/L	04/17/23 08:30	04/18/23 16:16	--	1	

**QA/QC Report**  
for  
**Extractable Fuel Hydrocarbons (EPA 8015B/8015M)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/26/2023 15:20

Date of Analysis: 4/26/2023 21:40

Dup Date of Analysis: 4/26/2023 22:02

Laboratory Sample #: 27864-008

MS/MSD Qualifiers: None

Reference #: NAM 27815A

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
EFH as Diesel	0.00	1000	646	623	65	62	4	8-193	20	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Octacosane	100	100	<input type="checkbox"/>	99	100	<input type="checkbox"/>	40-160

**Laboratory Control Sample**

Date of Extraction: 4/26/2023 15:20

Date of Analysis: 4/26/2023 20:56

Dup Date of Analysis: 4/26/2023 21:18

Laboratory Sample #: VV0426232

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
EFH as Diesel	1000	604	656	60	66	8	17-180	42	<input type="checkbox"/>

**QA/QC Report  
for  
Metals**

Reference #: NAM 27815A

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**1311/ 6010B**

Laboratory Sample #: 27815-012

Date of Extraction: 04/18/23 10:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Arsenic	04/18/23 15:44	04/18/23 15:47	46.0	20.0	64.3	65.2	92	96	1	75-125	20	--
Lead	04/18/23 15:44	04/18/23 15:47	3.90	20.0	18.5	19.0	73	75	3	75-125	20	M2,

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**1311/ 6010B**

Laboratory Sample #: HV0418231

Date of Extraction: 04/18/23 10:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Arsenic	04/18/23 15:39	04/18/23 15:42	--	20.0	18.3	18.2	91	91	1	80-120	20	--
Lead	04/18/23 15:39	04/18/23 15:42	--	20.0	18.2	18.3	91	91	1	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**1311/ 6010B**

Laboratory Sample #: 27827-001

Date of Extraction: 04/19/23 10:35

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
TCLP Lead	04/20/23 10:43	04/20/23 10:46	0.19	0.400	0.587	0.569	99	95	3	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**1311/ 6010B**

Laboratory Sample #: IR0419232

Date of Extraction: 04/19/23 10:35

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
TCLP Lead	04/20/23 10:37	04/20/23 10:40	--	0.400	0.387	0.379	97	95	2	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**1311/ STLC CCR**

Laboratory Sample #: 27844-001

Date of Extraction: 04/17/23 08:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
STLC Arsenic	04/18/23 16:22	04/18/23 16:24	0.00	1.00	1.01	1.01	101	101	0	75-125	20	--
STLC Lead	04/18/23 16:22	04/18/23 16:24	0.00	1.00	1.01	0.990	101	99	2	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**1311/ STLC CCR**

Laboratory Sample #: IR0417231

Date of Extraction: 04/17/23 08:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
STLC Arsenic	04/18/23 16:18	04/18/23 16:20	--	1.00	0.924	0.952	92	95	3	80-120	20	--
STLC Lead	04/18/23 16:18	04/18/23 16:20	--	1.00	0.829	0.861	83	86	4	80-120	20	--

# Data Qualifier Definitions

## Qualifier

M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

27815-012

6010B

Lead

MS



## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected





## Analysis Request &amp; Chain of Custody Record

Lab Job No.:

27810

Page:

2

of

4



ORANGE COAST ANALYTICAL, INC.

www.ocalab.com

3002 Dow Avenue, Suite 532

4620 East Elwood Street, Suite 4

Tustin, CA 92780

Phoenix, AZ 85040

Phone: (714) 832-0064 Fax: (714) 832-0067

Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA				Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SJM	VOCs by EPA 8260B	TPH-g,d,o by EPA 8015B	Standard:	X
Send Report To:	Dennis Fee	Project Number:	211936010														72 Hour:	
Email:	dfee@ninyoandmoore.com	PO #:															48 Hour:	
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA														24 Hour:	
Phone:	(949) 753-7070 Fax:	Sampled By:	EAC/AC															
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type												REMARKS / INSTRUCTIONS	
B4-E-0.5	1	4/3/23	1102	SS	9oz jar		X											
B4-E-2.5			1105														HOLD	
B4-E-5			1110														HOLD	
B4-W-0.5			1112				X											
B4-W-2.5			1114														HOLD	
B4-W-5			1116														HOLD	
B4-W2-0.5			1126														HOLD	
B4-W2-2.5			1128														HOLD	
B4-W2-5			1130														HOLD	
B4-N-0.5			1132				X											
B4-N-2.5			1134														HOLD	
B4-N-5			1136														HOLD	
B4-N2-0.5			1205														HOLD	
B4-N2-2.5			1207														HOLD	
No. of Samples:	14	Method of Shipment:		Preservative:		1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other												
Relinquished By:	Date: 4/3/23 Time: 1647	Received By:		Date:		Sample Matrix:		DW - Drinking Water										
Company: Ninyo & Moore		Company:				GW - Groundwater		AQ - Aqueous										
Relinquished By:	Date:	Received By:		Date:		WW - Wastewater		SS - Soil / Solid										
Company:	Time:	Company:		Time:		SW - Stormwater		OT - Other										
Relinquished By:	Date:	Received For OCA By:		Date: 4/3/23		Sample Integrity:		3 HD = 3 C										
Company:	Time:	Company: OCA		Time: 1647		Intact:		On Ice: Yes / No @ °C										

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## Analysis Request &amp; Chain of Custody Record

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ORANGE COAST ANALYTICAL, INC.

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Phoenix, AZ 85040

Phone: (714) 832-0064 Fax: (714) 832-0067

Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME		
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA					Lead by EPA 60108	Arsenic by EPA 60108	OCPs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 60108/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.mo by EPA 8015B	Standard:	X
Send Report To:	Dennis Fee	Project Number:	211936010															72 Hour:	
Email:	dfee@ninyoandmoore.com	PO #:																48 Hour:	
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA															24 Hour:	
Phone:	(949) 753-7070	Fax:																	
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type												REMARKS / INSTRUCTIONS	
29 B4-N2-5		1	4/3/23	1209	SS	9oz jar												HOLD	
30 B4A-0.5				1218				X	(EAC)									HOLD	
31 B4A-2.5				1220														HOLD	
32 B4A-5				1222														HOLD	
33 B4-5				1235														HOLD	
34 B4-7.5				1239														HOLD	
35 B2-N-0.5				1307				X											
36 B2-N-2.5				1310														HOLD	
37 B2-N-5				1313														HOLD	
38 B42A-0.5				1344				X											
39 B42A-2.5				1346														HOLD	
40 B42A-5				1348														HOLD	
41 B44-0.5		5		1416		+4 Vials						X				X	X		
42 B44-2.5				1418								X				X	X		
No. of Samples: 14		Method of Shipment:		Preservative:		1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other													
Relinquished By: Ed Chavez		Date: 4/3/23		Received By:		Date:		Sample Matrix:											
		Time: 1647				Time:		DW - Drinking Water											
Company: Ninyo & Moore				Company:				GW - Groundwater											
Relinquished By:				Received By:				WW - Wastewater											
								SS - Soil / Solid											
Company:				Company:				SW - Stormwater											
								OT - Other											
Relinquished By:		Date:		Received For OCA By:		Date: 4/3/23		Sample Integrity:											
		Time:		Date:		Time: 1647		3 HD = 3°C IR3											
Company:				Company: OCA				Intact: On Ice: Yes / No @ °C											

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## Analysis Request &amp; Chain of Custody Record



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Lab Job No.:

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## ANALYSIS REQUEST / PRESERVATION

REQUESTED  
TURN-AROUND-TIMEStandard: X

72 Hour: \_\_\_\_\_

48 Hour: \_\_\_\_\_

24 Hour: \_\_\_\_\_

## REMARKS / INSTRUCTIONS

CUSTOMER INFORMATION		PROJECT INFORMATION				
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA			
Send Report To:	Dennis Fee	Project Number:	211936010			
Email:	dfee@ninyoandmoore.com	PO #:				
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA			
Phone:	(949) 753-7070	EDD Required:				
Fax:		Sampled By:	EAC/AC			
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type

43	B44-5	5	4/3/23	1420	SS	9oz jar / 1900AS
44	B14-E-0.5	1	↓	1440	↓	9oz jar
45	B14-E-2.5	↓	↓	1441	↓	↓
46	B14-S-0.5	↓	↓	1445	↓	↓
47	B14-S-2.5	↓	↓	1447	↓	↓
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; transform: rotate(-15deg);"></div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%);"> EAC 4/3/23 </div> </div>						

Lead by EPA 6010B	Arsenic by EPA 6010B	OCPs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g,d,m,o by EPA 8015B

HOLD
HOLD
HOLD
HOLD

No. of Samples: <u>5</u>		Method of Shipment: <u>Hand delivered</u>		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other	
Relinquished By: <u>Ed Chavez</u>	Date: <u>4/3/23</u>	Received By:	Date:	Sample Matrix:	DW - Drinking Water
Company: <u>Ninyo &amp; Moore</u>	Time: <u>1647</u>	Company:	Time:	GW - Groundwater	AQ - Aqueous
Relinquished By:	Date:	Received By:	Date:	WW - Wastewater	SS - Soil / Solid
Company:	Time:	Company:	Time:	SW - Stormwater	OT - Other
Relinquished By:	Date:	Received For OCA By: <u>Heath Cole</u>	Date: <u>4/3/23</u>	Sample Integrity:	<u>3 to 3°C</u>
Company:	Time:	Company: <u>OCALAB</u>	Time: <u>1647</u>	Intact: _____	On Ice: <u>(Yes)</u> No @ _____ °C

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## Sample Receipt Report

Laboratory Reference NAM 27815

Logged in by HC

Received: 04/03/23 16:47

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

47 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>3</u>	Thermometer ID: <u>#3</u>	Adjusted Temp.: <u>3</u>	
Shipping Intact	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

### Notes

Client Notified \_\_\_\_\_

By \_\_\_\_\_

On \_\_\_\_\_



**Orange Coast Analytical, Inc.**

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**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2025

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27815B

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 4/25/2023

Date Reported: 4/28/2023

Chain of Custody Received: ☒

Analytical Method: 6010B, 1311/6010B,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27815B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 3°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27815B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B4-W2-0.5	27815-021	4/3/2023	4/3/2023	Soil

Mr. Dennis Fee  
 Ninyo & Moore  
 475 Goddard Ste 200  
 Irvine, CA, 92618

Lab Reference # NAM 27815B  
 Project Name: LAUSD 49th Street PEA  
 Project #: 211936010

**Metals**

Client Sample ID			Lab Sample Number	Date Received		Date Sampled		Matrix	
B4-W2-0.5			27815-021	4/3/2023	16:47	4/3/2023	11:26	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	TCLP Arsenic	6010B	4.5	mg/l	04/25/23 17:00	04/28/23 11:22		--	1
Method Blank								Soil	
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
MBHV0425232	TCLP Arsenic	6010B	<0.080	mg/l	04/25/23 17:00	04/26/23 12:31		--	1
B4-W2-0.5			27815-021	4/3/2023	16:47	4/3/2023	11:26	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	STLC Arsenic	6010B	11	mg/L	04/27/23 17:35	04/28/23 11:09		--	1
Method Blank								Soil	
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
MBHV0427235	STLC Arsenic	6010B	<0.20	mg/L	04/27/23 17:35	04/28/23 10:53		--	1

**QA/QC Report  
for  
Metals**

Reference #: NAM 27815B

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ 6010B

Laboratory Sample #: AZ13965-001

Date of Extraction: 04/25/23 17:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
TCLP Arsenic	04/26/23 12:44	04/26/23 12:47	0.00	0.400	0.382	0.371	95	93	3	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ 6010B

Laboratory Sample #: IR0425232

Date of Extraction: 04/25/23 17:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
TCLP Arsenic	04/26/23 12:34	04/26/23 12:36	--	0.400	0.375	0.386	94	97	3	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ STLC CCR

Laboratory Sample #: 27815-021

Date of Extraction: 04/27/23 17:35

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
STLC Arsenic	04/28/23 11:17	04/28/23 11:20	11.0	1.00	13.1	13.4	210	240	2	75-125	20	M3,

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ STLC CCR

Laboratory Sample #: HV0427235

Date of Extraction: 04/27/23 17:35

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
STLC Arsenic	04/28/23 10:56	04/28/23 10:58	--	1.00	0.956	0.963	96	96	1	80-120	20	--

# Data Qualifier Definitions

## Qualifier

M3 = The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

27815-021

STLC CCR

STLC Arsenic

MS/MSD

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

## Analysis Request &amp; Chain of Custody Record

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Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA
Send Report To:	Dennis Fee	Project Number:	211936010
Email:	dfee@ninyoandmoore.com	PO #:	
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA
Phone:	(949) 753-7070	EDD Required:	Scribe EDD
Fax:		Sampled By:	AC/EAC

Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type
1 B45-0.5	5	4/3/23	0800	SS	9oz jar/Voag
2 B45-2.5	↓		0805		↓
3 B45-5	↓		0815		↓
4 B45-10	↓		0830		↓
5 B45-15	↓		0835		↓
6 B20-W-0.5	1		0939		9oz jar
7 B20-W-2.5	↓		0941		↓
8 B20-E-0.5	↓		0957		↓
9 B20-E-2.5	↓		1003		↓
10 B21-W-0.5	↓		1019		↓
11 B21-W-2.5	↓		1025		↓
12 B4-E2-0.5	↓		1055		↓
13 B4-E2-2.5	↓		1057		↓
14 B4-E2-5	↓		1059		↓

ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g,d,o by EPA 8015B	Standard:	X
										72 Hour:	
										48 Hour:	
										24 Hour:	
REMARKS / INSTRUCTIONS											

No. of Samples: 14		Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other	
Relinquished By:	Date: 4/3/23	Received By:	Date:	Sample Matrix:	DW - Drinking Water
Ed Chavez	Time: 1647		Time:	GW - Groundwater	AQ - Aqueous
Company: Ninyo & Moore		Company:		WW - Wastewater	SS - Soil / Solid
Relinquished By:	Date:	Received By:	Date:	SW - Stormwater	OT - Other
	Time:		Time:		
Company:		Company:			
Relinquished By:	Date:	Received For OCA By:	Date: 4/3/23	Sample Integrity:	3 + 0 = 3°C
	Time:	Heath (all)	Time: 1647	Intact:	Yes No @ °C
Company:		Company: OCA			

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## Analysis Request &amp; Chain of Custody Record

Lab Job No.:

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Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA				Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SJM	VOCs by EPA 8260B	TPH-g,d,o by EPA 8015B	Standard:	X
Send Report To:	Dennis Fee	Project Number:	211936010														72 Hour:	
Email:	dfee@ninyoandmoore.com	PO #:															48 Hour:	
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA														24 Hour:	
Phone:	(949) 753-7070 Fax:	Sampled By:	EAC/AC															
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type											REMARKS / INSTRUCTIONS	
15	B4-E-0.5	1	4/3/23	1102	SS	9oz jar	X											
16	B4-E-2.5			1105														HOLD
17	B4-E-5			1110														HOLD
18	B4-W-0.5			1112			X											
19	B4-W-2.5			1114														HOLD
20	B4-W-5			1116														HOLD
21	B4-W2-0.5			1126														HOLD
22	B4-W2-2.5			1128														HOLD
23	B4-W2-5			1130														HOLD
24	B4-N-0.5			1132			X											
25	B4-N-2.5			1134														HOLD
26	B4-N-5			1136														HOLD
27	B4-N2-0.5			1205														HOLD
28	B4-N2-2.5			1207														HOLD
No. of Samples: 14		Method of Shipment:		Preservative:		1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other												
Relinquished By: Ed Chang		Date: 4/3/23 Time: 1647		Received By:		Date:		Sample Matrix: DW - Drinking Water										
Company: Ninyo & Moore				Company:		Time:		GW - Groundwater AQ - Aqueous										
Relinquished By:		Date:		Received By:		Date:		WW - Wastewater SS - Soil / Solid										
		Time:		Company:		Time:		SW - Stormwater OT - Other										
Relinquished By:		Date:		Received For OCA By:		Date: 4/3/23		Sample Integrity: 3 HO = 3 C										
		Time:		Company: OCA		Time: 1647		Intact: On Ice: Yes / No @ °C										

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



## Analysis Request &amp; Chain of Custody Record



ORANGE COAST ANALYTICAL, INC.

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Lab Job No.:

27815

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of

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3002 Dow Avenue, Suite 532

Tustin, CA 92780

Phone: (714) 832-0064 Fax: (714) 832-0067

4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME		
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA					Lead by EPA 60108	Arsenic by EPA 60108	OCPs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 60108/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.mo by EPA 8015B	Standard:	X
Send Report To:	Dennis Fee	Project Number:	211936010															72 Hour:	
Email:	dfee@ninyoandmoore.com	PO #:																48 Hour:	
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA															24 Hour:	
Phone:	(949) 753-7070	Fax:																	
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type												REMARKS / INSTRUCTIONS	
29 B4-N2-5	1	4/3/23	1209	SS	9oz jar													HOLD	
30 B4A-0.5			1218				X	(EAC)										HOLD	
31 B4A-2.5			1220															HOLD	
32 B4A-5			1222															HOLD	
33 B4-5			1235															HOLD	
34 B4-7.5			1239															HOLD	
35 B2-N-0.5			1307				X												
36 B2-N-2.5			1310															HOLD	
37 B2-N-5			1313															HOLD	
38 B42A-0.5			1344				X												
39 B42A-2.5			1346															HOLD	
40 B42A-5			1348															HOLD	
41 B44-0.5	5		1416		+4 Vials						X					X			
42 B44-2.5			1418								X					X			
No. of Samples: 14		Method of Shipment:		Preservative:		1 = Ice		2 = HCl		3 = HNO <sub>3</sub>		4 = H <sub>2</sub> SO <sub>4</sub>		5 = NaOH		6 = Other			
Relinquished By: Ed Chavez		Date: 4/3/23		Received By:		Date:		Sample Matrix:		DW - Drinking Water									
Time: 1647				Company:		Time:		GW - Groundwater		AQ - Aqueous									
Company: Ninyo & Moore				Received By:		Date:		WW - Wastewater		SS - Soil / Solid									
Time:				Company:		Time:		SW - Stormwater		OT - Other									
Relinquished By:		Date:		Received For OCA By:		Date: 4/3/23		Sample Integrity:		3 HD = 3°C IR3									
Time:				Company: OCA		Time: 1647		Intact: _____		On Ice: Yes / No @ _____ °C									

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



## Analysis Request &amp; Chain of Custody Record



ORANGE COAST ANALYTICAL, INC.

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Lab Job No.:

27815

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CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA				Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g,d,mo by EPA 8015B	Standard:	X
Send Report To:	Dennis Fee	Project Number:	211936010														72 Hour:	
Email:	dfee@ninyoandmoore.com	PO #:															48 Hour:	
Address:	475 Goddard Irvine, CA 92618	Address (City / State):	Los Angeles, CA														24 Hour:	
Phone:	(949) 753-7070 Fax:	Sampled By:	EAC/AC															
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type											REMARKS / INSTRUCTIONS		
B44-5	5	4/3/23	1420	SS	9oz jar / 1900AS												HOLD	
B14-E-0.5	1		1440		9oz jar		X											
B14-E-2.5			1441															
B14-S-0.5			1445				X											
B14-S-2.5			1447															
EAC 4/3/23																		
No. of Samples: 5 Method of Shipment: Hand delivered Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other																		
Relinquished By:	Date:	Received By:	Date:	Sample Matrix:		DW - Drinking Water												
Ed Chavez	4/3/23			GW - Groundwater		AQ - Aqueous												
Company: Ninyo & Moore	Time: 1647	Company:	Time:	WW - Wastewater		SS - Soil / Solid												
Relinquished By:	Date:	Received By:	Date:	SW - Stormwater		OT - Other												
	Time:	Company:	Time:															
Relinquished By:	Date:	Received For OCA By:	Date:	Sample Integrity:		3rd = 3°C 4/23												
	Time:	Heath Cole	4/3/23	Intact:		On Ice: (Yes) No @ °C												
Company:		Company: OCA	Time: 1647															

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## Sample Receipt Report

Laboratory Reference NAM 27815

Logged in by HC

Received: 04/03/23 16:47

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

47 Soil

Chain of Custody

Complete ☒

Incomplete ☐

None ☐

Samples On Ice

Yes, Wet ☒

Yes, Blue ☐

No ☐

Observed Temp. (°C): 3

Thermometer ID: #3

Adjusted Temp.: 3

Shipping Intact

Yes ☒

N/A ☐

No ☐

Shipping Custody Seals Intact

Yes ☐

N/A ☒

No ☐

Samples Intact

Yes ☒

No ☐

Sample Custody Seals Intact

Yes ☐

N/A ☒

No ☐

Custody Seals Signed & Dated

Yes ☐

N/A ☒

No ☐

Proper Test Containers

Yes ☒

No ☐

Proper Test Preservations

Yes ☒

No ☐

Samples Within Hold Times

Yes ☒

No ☐

VOAs Have Zero Headspace

Yes ☐

N/A ☒

No ☐

Sample Labels

Complete ☒

Incomplete ☐

None ☐

Sample Information Matches COC

Yes ☒

N/A ☐

No ☐

### Notes

Client Notified

By

On



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27827

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 4/5/2023

Date Reported: 4/17/2023

Chain of Custody Received: ☒

Analytical Method: 8015B, 8081A, 8082, 8260B, 8270C, 6010B,  
7471A,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at °C, on ice.  
2 coolers at 3 and 1 °C IR#3 correction =+0 °C

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B34-2.5	27827-001	4/5/2023	4/5/2023	Soil
B34-5	27827-002	4/5/2023	4/5/2023	Soil
B34-10	27827-003	4/5/2023	4/5/2023	Soil
B35-2.5	27827-004	4/5/2023	4/5/2023	Soil
B35-5	27827-005	4/5/2023	4/5/2023	Soil
B35-10	27827-006	4/5/2023	4/5/2023	Soil
B46-0.5	27827-007	4/5/2023	4/5/2023	Soil
B46-2.5	27827-008	4/5/2023	4/5/2023	Soil
B46-5	27827-009	4/5/2023	4/5/2023	Soil
B46-10	27827-010	4/5/2023	4/5/2023	Soil
B46-15	27827-011	4/5/2023	4/5/2023	Soil
B39-0.5	27827-012	4/5/2023	4/5/2023	Soil
B39-2.5	27827-013	4/5/2023	4/5/2023	Soil
B39-5	27827-014	4/5/2023	4/5/2023	Soil
B39-10	27827-015	4/5/2023	4/5/2023	Soil
B39-15	27827-016	4/5/2023	4/5/2023	Soil
B38-0.5	27827-017	4/5/2023	4/5/2023	Soil
B38-2.5	27827-018	4/5/2023	4/5/2023	Soil
B38-5	27827-019	4/5/2023	4/5/2023	Soil
B38-10	27827-020	4/5/2023	4/5/2023	Soil
B38-15	27827-021	4/5/2023	4/5/2023	Soil
B37-0.5	27827-022	4/5/2023	4/5/2023	Soil
B37-2.5	27827-023	4/5/2023	4/5/2023	Soil
B37-5	27827-024	4/5/2023	4/5/2023	Soil
B37-10	27827-025	4/5/2023	4/5/2023	Soil
B37-15	27827-026	4/5/2023	4/5/2023	Soil
B36-0.5	27827-027	4/5/2023	4/5/2023	Soil
B36-2.5	27827-028	4/5/2023	4/5/2023	Soil
B36-5	27827-029	4/5/2023	4/5/2023	Soil
B36-10	27827-030	4/5/2023	4/5/2023	Soil
B43-0.5	27827-031	4/5/2023	4/5/2023	Soil
B43-2.5	27827-032	4/5/2023	4/5/2023	Soil
B43-5	27827-033	4/5/2023	4/5/2023	Soil
B43-10	27827-034	4/5/2023	4/5/2023	Soil
B43-15	27827-035	4/5/2023	4/5/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B34-2.5	27827-001	4/5/2023 17:51	4/5/2023 8:00	4/11/2023 14:35	4/13/2023 12:26	Soil

<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
DROs	<10	Octacosane	132
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

B34-2.5	27827-001	4/5/2023 17:51	4/5/2023 8:00	4/11/2023 14:35	4/13/2023 12:26	Soil
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<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
MROs	<50	Octacosane	132
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

B34-10	27827-003	4/5/2023 17:51	4/5/2023 8:30	4/11/2023 14:35	4/13/2023 13:08	Soil
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<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
DROs	<10	Octacosane	146
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

B34-10	27827-003	4/5/2023 17:51	4/5/2023 8:30	4/11/2023 14:35	4/13/2023 13:08	Soil
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<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
MROs	<50	Octacosane	146
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

B35-2.5	27827-004	4/5/2023 17:51	4/5/2023 9:10	4/11/2023 14:35	4/13/2023 13:51	Soil
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<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
DROs	<10	Octacosane	146
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B35-2.5	27827-004	4/5/2023 17:51	4/5/2023 9:10	4/11/2023 14:35	4/13/2023 13:51	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	146	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B35-10	27827-006	4/5/2023 17:51	4/5/2023 9:25	4/11/2023 14:35	4/13/2023 14:33	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	142	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B35-10	27827-006	4/5/2023 17:51	4/5/2023 9:25	4/11/2023 14:35	4/13/2023 14:33	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	142	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B46-0.5	27827-007	4/5/2023 17:51	4/5/2023 9:58	4/11/2023 14:35	4/13/2023 15:16	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	140	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B46-0.5	27827-007	4/5/2023 17:51	4/5/2023 9:58	4/11/2023 14:35	4/13/2023 15:16	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	140	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B46-2.5	27827-008	4/5/2023 17:51	4/5/2023 10:00	4/11/2023 14:35	4/13/2023 15:59	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	131	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B46-2.5	27827-008	4/5/2023 17:51	4/5/2023 10:00	4/11/2023 14:35	4/13/2023 15:59	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	131	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B46-5	27827-009	4/5/2023 17:51	4/5/2023 10:13	4/11/2023 14:35	4/13/2023 16:42	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	132	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B46-5	27827-009	4/5/2023 17:51	4/5/2023 10:13	4/11/2023 14:35	4/13/2023 16:42	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	132	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B46-10	27827-010	4/5/2023 17:51	4/5/2023 10:15	4/11/2023 14:35	4/13/2023 17:25	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	150	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B46-10	27827-010	4/5/2023 17:51	4/5/2023 10:15	4/11/2023 14:35	4/13/2023 17:25	Soil

ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      150

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B39-0.5	27827-012	4/5/2023 17:51	4/5/2023 10:49	4/11/2023 14:35	4/14/2023 18:21	Soil
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ANALYTE                      mg/kg

DROs                              <10

Surrogate:                      % RC\*

Octacosane                      121

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B39-0.5	27827-012	4/5/2023 17:51	4/5/2023 10:49	4/11/2023 14:35	4/14/2023 18:21	Soil
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ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      121

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B39-2.5	27827-013	4/5/2023 17:51	4/5/2023 10:52	4/11/2023 14:35	4/14/2023 19:04	Soil
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ANALYTE                      mg/kg

DROs                              <10

Surrogate:                      % RC\*

Octacosane                      128

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B39-2.5	27827-013	4/5/2023 17:51	4/5/2023 10:52	4/11/2023 14:35	4/14/2023 19:04	Soil
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ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      128

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B39-5	27827-014	4/5/2023 17:51	4/5/2023 11:00	4/11/2023 14:35	4/14/2023 19:47	Soil

<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
DROs	12	Octacosane	130
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

B39-5	27827-014	4/5/2023 17:51	4/5/2023 11:00	4/11/2023 14:35	4/14/2023 19:47	Soil
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<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
MROs	<50	Octacosane	130
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

B39-10	27827-015	4/5/2023 17:51	4/5/2023 11:02	4/11/2023 14:35	4/14/2023 20:29	Soil
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<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
DROs	<10	Octacosane	147
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

B39-10	27827-015	4/5/2023 17:51	4/5/2023 11:02	4/11/2023 14:35	4/14/2023 20:29	Soil
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<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
MROs	<50	Octacosane	147
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

B39-15	27827-016	4/5/2023 17:51	4/5/2023 11:05	4/11/2023 14:35	4/14/2023 21:11	Soil
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<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
DROs	<10	Octacosane	128
<u>Dilution Factor:</u> 1		* Acc Recovery: 40-160 %	
<u>Data Qualifiers:</u> None			

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B39-15	27827-016	4/5/2023 17:51	4/5/2023 11:05	4/11/2023 14:35	4/14/2023 21:11	Soil

ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      128

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B38-0.5	27827-017	4/5/2023 17:51	4/5/2023 12:37	4/11/2023 14:35	4/14/2023 21:53	Soil
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ANALYTE                      mg/kg

DROs                              <10

Surrogate:                      % RC\*

Octacosane                      130

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B38-0.5	27827-017	4/5/2023 17:51	4/5/2023 12:37	4/11/2023 14:35	4/14/2023 21:53	Soil
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ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      130

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B38-2.5	27827-018	4/5/2023 17:51	4/5/2023 12:39	4/11/2023 14:35	4/14/2023 22:35	Soil
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ANALYTE                      mg/kg

DROs                              <10

Surrogate:                      % RC\*

Octacosane                      171

Dilution Factor: 1

Data Qualifiers: S1,

\* Acc Recovery: 40-160 %

B38-2.5	27827-018	4/5/2023 17:51	4/5/2023 12:39	4/11/2023 14:35	4/14/2023 22:35	Soil
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ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      171

Dilution Factor: 1

Data Qualifiers: S1,

\* Acc Recovery: 40-160 %

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**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B38-5	27827-019	4/5/2023 17:51	4/5/2023 12:53	4/11/2023 14:35	4/14/2023 23:17	Soil

ANALYTE                      mg/kg

DROs                              <10

Surrogate:                      % RC\*

Octacosane                      187

Dilution Factor: 1

Data Qualifiers: S1,

\* Acc Recovery: 40-160 %

B38-5	27827-019	4/5/2023 17:51	4/5/2023 12:53	4/11/2023 14:35	4/14/2023 23:17	Soil
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ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      187

Dilution Factor: 1

Data Qualifiers: S1,

\* Acc Recovery: 40-160 %

B38-10	27827-020	4/5/2023 17:51	4/5/2023 12:55	4/11/2023 14:35	4/14/2023 23:59	Soil
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ANALYTE                      mg/kg

DROs                              <10

Surrogate:                      % RC\*

Octacosane                      159

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B38-10	27827-020	4/5/2023 17:51	4/5/2023 12:55	4/11/2023 14:35	4/14/2023 23:59	Soil
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ANALYTE                      mg/kg

MROs                              <50

Surrogate:                      % RC\*

Octacosane                      159

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B38-15	27827-021	4/5/2023 17:51	4/5/2023 12:58	4/11/2023 14:35	4/15/2023 0:41	Soil
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ANALYTE                      mg/kg

DROs                              <10

Surrogate:                      % RC\*

Octacosane                      170

Dilution Factor: 1

Data Qualifiers: S1,

\* Acc Recovery: 40-160 %

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**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B38-15	27827-021	4/5/2023 17:51	4/5/2023 12:58	4/11/2023 14:35	4/15/2023 0:41	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	170	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B37-0.5	27827-022	4/5/2023 17:51	4/5/2023 13:26	4/11/2023 14:35	4/15/2023 1:24	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	182	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B37-0.5	27827-022	4/5/2023 17:51	4/5/2023 13:26	4/11/2023 14:35	4/15/2023 1:24	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	182	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B37-2.5	27827-023	4/5/2023 17:51	4/5/2023 13:32	4/11/2023 14:35	4/15/2023 2:06	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	191	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B37-2.5	27827-023	4/5/2023 17:51	4/5/2023 13:32	4/11/2023 14:35	4/15/2023 2:06	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	191	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					

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**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B37-5	27827-024	4/5/2023 17:51	4/5/2023 13:42	4/11/2023 16:37	4/15/2023 6:24	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	126	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B37-5	27827-024	4/5/2023 17:51	4/5/2023 13:42	4/11/2023 16:37	4/15/2023 6:24	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	126	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B37-10	27827-025	4/5/2023 17:51	4/5/2023 13:44	4/11/2023 16:37	4/15/2023 7:08	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	158	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B37-10	27827-025	4/5/2023 17:51	4/5/2023 13:44	4/11/2023 16:37	4/15/2023 7:08	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	158	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B37-15	27827-026	4/5/2023 17:51	4/5/2023 13:46	4/11/2023 16:37	4/15/2023 7:51	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	164	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					

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**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B37-15	27827-026	4/5/2023 17:51	4/5/2023 13:46	4/11/2023 16:37	4/15/2023 7:51	Soil

ANALYTE                      mg/kg

MROs                                      <50

Surrogate:                      % RC\*

Octacosane                      164

Dilution Factor: 1

Data Qualifiers: S1,

\* Acc Recovery: 40-160 %

B36-0.5	27827-027	4/5/2023 17:51	4/5/2023 14:20	4/11/2023 16:37	4/15/2023 8:34	Soil
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ANALYTE                      mg/kg

DROs                                      18

Surrogate:                      % RC\*

Octacosane                      112

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B36-0.5	27827-027	4/5/2023 17:51	4/5/2023 14:20	4/11/2023 16:37	4/15/2023 8:34	Soil
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ANALYTE                      mg/kg

MROs                                      78

Surrogate:                      % RC\*

Octacosane                      112

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B36-2.5	27827-028	4/5/2023 17:51	4/5/2023 14:23	4/11/2023 16:37	4/15/2023 9:17	Soil
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ANALYTE                      mg/kg

DROs                                      <10

Surrogate:                      % RC\*

Octacosane                      118

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

B36-2.5	27827-028	4/5/2023 17:51	4/5/2023 14:23	4/11/2023 16:37	4/15/2023 9:17	Soil
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ANALYTE                      mg/kg

MROs                                      <50

Surrogate:                      % RC\*

Octacosane                      118

Dilution Factor: 1

Data Qualifiers: None

\* Acc Recovery: 40-160 %

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**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B43-0.5	27827-031	4/5/2023 17:51	4/5/2023 15:15	4/11/2023 16:37	4/15/2023 9:58	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	122	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B43-0.5	27827-031	4/5/2023 17:51	4/5/2023 15:15	4/11/2023 16:37	4/15/2023 9:58	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	122	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B43-2.5	27827-032	4/5/2023 17:51	4/5/2023 15:20	4/11/2023 16:37	4/15/2023 10:50	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	161	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B43-2.5	27827-032	4/5/2023 17:51	4/5/2023 15:20	4/11/2023 16:37	4/15/2023 10:50	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	161	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B43-5	27827-033	4/5/2023 17:51	4/5/2023 15:28	4/11/2023 16:37	4/15/2023 11:33	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	180	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					



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**Extractable Fuel Hydrocarbons (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B43-5	27827-033	4/5/2023 17:51	4/5/2023 15:28	4/11/2023 16:37	4/15/2023 11:33	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	180	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	S1,					
B43-10	27827-034	4/5/2023 17:51	4/5/2023 15:30	4/11/2023 16:37	4/15/2023 14:22	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	154	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B43-10	27827-034	4/5/2023 17:51	4/5/2023 15:30	4/11/2023 16:37	4/15/2023 14:22	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	154	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B43-15	27827-035	4/5/2023 17:51	4/5/2023 15:35	4/11/2023 16:37	4/15/2023 15:05	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	156	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
B43-15	27827-035	4/5/2023 17:51	4/5/2023 15:35	4/11/2023 16:37	4/15/2023 15:05	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	156	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					

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***Extractable Fuel Hydrocarbons (EPA 8015B)***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBVV0411231			4/11/2023 14:35	4/13/2023 10:18	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	115	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
Method Blank	MBVV0411231			4/11/2023 14:35	4/13/2023 10:18	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	115	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
Method Blank	MBVV0411232			4/11/2023 16:37	4/15/2023 4:15	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	119	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
Method Blank	MBVV0411232			4/11/2023 16:37	4/15/2023 4:15	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	119	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					

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**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B34-2.5	27827-001	4/5/2023 17:51	4/5/2023 8:00	4/5/2023 8:00	4/6/2023 17:12	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	91		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B34-10	27827-003	4/5/2023 17:51	4/5/2023 8:30	4/5/2023 8:30	4/6/2023 17:33	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	86		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B35-2.5	27827-004	4/5/2023 17:51	4/5/2023 9:10	4/5/2023 9:10	4/6/2023 17:54	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	92		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B35-10	27827-006	4/5/2023 17:51	4/5/2023 9:25	4/5/2023 9:25	4/6/2023 18:15	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	93		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B46-0.5	27827-007	4/5/2023 17:51	4/5/2023 9:58	4/5/2023 9:58	4/10/2023 13:07	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	98		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B46-2.5	27827-008	4/5/2023 17:51	4/5/2023 10:00	4/5/2023 10:00	4/10/2023 13:28	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	91		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B46-5	27827-009	4/5/2023 17:51	4/5/2023 10:13	4/5/2023 10:13	4/10/2023 13:49	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	92		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B46-10	27827-010	4/5/2023 17:51	4/5/2023 10:15	4/5/2023 10:15	4/10/2023 14:10	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	93		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B39-0.5	27827-012	4/5/2023 17:51	4/5/2023 10:49	4/5/2023 10:49	4/10/2023 14:30	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	78		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B39-2.5	27827-013	4/5/2023 17:51	4/5/2023 10:52	4/5/2023 10:52	4/10/2023 14:51	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	80		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

Mr. Dennis Fee  
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Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B39-5	27827-014	4/5/2023 17:51	4/5/2023 11:00	4/5/2023 11:00	4/10/2023 15:12	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	101		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B39-10	27827-015	4/5/2023 17:51	4/5/2023 11:02	4/5/2023 11:02	4/10/2023 15:33	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	87		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B39-15	27827-016	4/5/2023 17:51	4/5/2023 11:05	4/5/2023 11:05	4/10/2023 15:54	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	94		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B38-0.5	27827-017	4/5/2023 17:51	4/5/2023 12:37	4/5/2023 12:37	4/10/2023 16:14	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	84		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B38-2.5	27827-018	4/5/2023 17:51	4/5/2023 12:39	4/5/2023 12:39	4/10/2023 17:01	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	105		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

Mr. Dennis Fee  
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Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B38-5	27827-019	4/5/2023 17:51	4/5/2023 12:53	4/5/2023 12:53	4/10/2023 17:22	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	99		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B38-10	27827-020	4/5/2023 17:51	4/5/2023 12:55	4/5/2023 12:55	4/10/2023 17:42	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	69		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B38-15	27827-021	4/5/2023 17:51	4/5/2023 12:58	4/5/2023 12:58	4/10/2023 18:03	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	102		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B37-0.5	27827-022	4/5/2023 17:51	4/5/2023 13:26	4/5/2023 13:26	4/10/2023 18:23	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	96		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B37-2.5	27827-023	4/5/2023 17:51	4/5/2023 13:32	4/5/2023 13:32	4/10/2023 18:44	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	86		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

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Project #: 211936010

**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B37-5	27827-024	4/5/2023 17:51	4/5/2023 13:42	4/5/2023 13:42	4/10/2023 19:05	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	66		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B37-10	27827-025	4/5/2023 17:51	4/5/2023 13:44	4/5/2023 13:44	4/10/2023 19:25	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	86		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B37-15	27827-026	4/5/2023 17:51	4/5/2023 13:46	4/5/2023 13:46	4/10/2023 19:46	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	89		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B36-0.5	27827-027	4/5/2023 17:51	4/5/2023 14:20	4/5/2023 14:20	4/10/2023 20:07	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	87		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B36-2.5	27827-028	4/5/2023 17:51	4/5/2023 14:23	4/5/2023 14:23	4/11/2023 13:49	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	89		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B43-0.5	27827-031	4/5/2023 17:51	4/5/2023 15:15	4/5/2023 15:15	4/11/2023 14:10	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	92		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B43-2.5	27827-032	4/5/2023 17:51	4/5/2023 15:20	4/5/2023 15:20	4/11/2023 14:31	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	85		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B43-5	27827-033	4/5/2023 17:51	4/5/2023 15:28	4/5/2023 15:28	4/11/2023 14:52	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	62		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B43-10	27827-034	4/5/2023 17:51	4/5/2023 15:30	4/5/2023 15:30	4/11/2023 15:13	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	88		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						
B43-15	27827-035	4/5/2023 17:51	4/5/2023 15:35	4/5/2023 15:35	4/11/2023 15:34	Soil
<u>ANALYTE</u>	<u>mg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>		
GROs <sup>1</sup>	<0.20		$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	75		
<u>Dilution Factor:</u> 1			* Acceptable Recovery: 32-153 %			
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.



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Project #: 211936010

**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBLY0406231			4/6/2023 13:00	4/6/2023 13:28	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
GROs <sup>1</sup>	<0.20			$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	90	
<u>Dilution Factor:</u> 1				* Acceptable Recovery: 32-153 %		
<u>Data Qualifiers:</u> None						
Method Blank	MBLY0410231			4/10/2023 9:30	4/10/2023 10:37	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
GROs <sup>1</sup>	<0.20			$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	89	
<u>Dilution Factor:</u> 1				* Acceptable Recovery: 32-153 %		
<u>Data Qualifiers:</u> None						
Method Blank	MBLY0411231			4/11/2023 9:30	4/11/2023 10:44	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
GROs <sup>1</sup>	<0.20			$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	93	
<u>Dilution Factor:</u> 1				* Acceptable Recovery: 32-153 %		
<u>Data Qualifiers:</u> None						

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

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Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B34-2.5	27827-001	4/5/2023 17:51	4/5/2023 8:00	4/6/2023 11:15	4/7/2023 14:02	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
Aldrin	309-00-2	<8.0
alpha-BHC	319-84-6	<20
beta-BHC	319-85-7	<20
gamma-BHC (Lindane)	58-89-9	<20
delta-BHC	319-86-8	<40
Chlordane	57-74-9	<120
4,4'-DDD	72-54-8	<40
4,4'-DDE	72-55-9	<20
4,4'-DDT	50-29-3	<40
Dieldrin	60-57-1	<8.0
Endosulfan I	959-98-8	<40
Endosulfan II	33213-65-9	<20
Endosulfan sulfate	1031-07-8	<40
Endrin	72-20-8	<40
Endrin aldehyde	7421-93-4	<40
Endrin ketone	53494-70-5	<20
Heptachlor	76-44-8	<8.0
Heptachlor epoxide	1024-57-3	<20
Methoxychlor	72-43-5	<40
Toxaphene	8001-35-2	<160

Surrogate:      % RC\*

Decachlorobiphenyl      86

\* Acceptable Recovery: 35-130 %

Dilution Factor: 4

Data Qualifiers: D1,

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Project Name: LAUSD 49th Street PEA  
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**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B34-10	27827-003	4/5/2023 17:51	4/5/2023 8:30	4/6/2023 11:15	4/7/2023 13:47	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:      % RC\*

Decachlorobiphenyl      91

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B35-2.5	27827-004	4/5/2023 17:51	4/5/2023 9:10	4/6/2023 11:15	4/7/2023 14:16	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:      % RC\*

Decachlorobiphenyl      90

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B35-10	27827-006	4/5/2023 17:51	4/5/2023 9:25	4/6/2023 11:15	4/7/2023 14:31	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:                      % RC\*

Decachlorobiphenyl      84

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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Project #: 211936010

**Organochlorine Pesticides (EPA 8081A)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBBL0406231			4/6/2023 11:15	4/7/2023 11:07	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
Aldrin	309-00-2	<2.0		Decachlorobiphenyl	83	
alpha-BHC	319-84-6	<5.0				
beta-BHC	319-85-7	<5.0				
gamma-BHC (Lindane)	58-89-9	<5.0				
delta-BHC	319-86-8	<10				
Chlordane	57-74-9	<30				
4,4'-DDD	72-54-8	<10				
4,4'-DDE	72-55-9	<5.0				
4,4'-DDT	50-29-3	<10				
Dieldrin	60-57-1	<2.0				
Endosulfan I	959-98-8	<10				
Endosulfan II	33213-65-9	<5.0				
Endosulfan sulfate	1031-07-8	<10				
Endrin	72-20-8	<10				
Endrin aldehyde	7421-93-4	<10				
Endrin ketone	53494-70-5	<5.0				
Heptachlor	76-44-8	<2.0				
Heptachlor epoxide	1024-57-3	<5.0				
Methoxychlor	72-43-5	<10				
Toxaphene	8001-35-2	<40				

\* Acceptable Recovery: 35-130 %

Dilution Factor: 1

Data Qualifiers: None

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B39-0.5	27827-012	4/5/2023 17:51	4/5/2023 10:49	4/6/2023 15:25	4/7/2023 18:24	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
PCB-1016	12674-11-2	<25	Decachlorobiphenyl	79
PCB-1221	11104-28-2	<25		
PCB-1232	11141-16-5	<25	* Acceptable Recovery: 35-130 %	
PCB-1242	53469-21-9	<25	<u>Dilution Factor:</u> 1	
PCB-1248	12672-29-6	<25	<u>Data Qualifiers:</u> None	
PCB-1254	11097-69-1	<25		
PCB-1260	11096-82-5	<25		

B39-2.5	27827-013	4/5/2023 17:51	4/5/2023 10:52	4/6/2023 15:25	4/7/2023 18:39	Soil
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<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
PCB-1016	12674-11-2	<25	Decachlorobiphenyl	84
PCB-1221	11104-28-2	<25		
PCB-1232	11141-16-5	<25	* Acceptable Recovery: 35-130 %	
PCB-1242	53469-21-9	<25	<u>Dilution Factor:</u> 1	
PCB-1248	12672-29-6	<25	<u>Data Qualifiers:</u> None	
PCB-1254	11097-69-1	<25		
PCB-1260	11096-82-5	<25		

B39-5	27827-014	4/5/2023 17:51	4/5/2023 11:00	4/6/2023 15:25	4/7/2023 18:10	Soil
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<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
PCB-1016	12674-11-2	<25	Decachlorobiphenyl	80
PCB-1221	11104-28-2	<25		
PCB-1232	11141-16-5	<25	* Acceptable Recovery: 35-130 %	
PCB-1242	53469-21-9	<25	<u>Dilution Factor:</u> 1	
PCB-1248	12672-29-6	<25	<u>Data Qualifiers:</u> None	
PCB-1254	11097-69-1	<25		
PCB-1260	11096-82-5	<25		

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**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B39-10	27827-015	4/5/2023 17:51	4/5/2023 11:02	4/6/2023 15:25	4/7/2023 18:53	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	83	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B39-15	27827-016	4/5/2023 17:51	4/5/2023 11:05	4/6/2023 15:25	4/7/2023 19:08	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	86	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B38-0.5	27827-017	4/5/2023 17:51	4/5/2023 12:37	4/6/2023 15:25	4/7/2023 19:23	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	85	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				



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**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B38-2.5	27827-018	4/5/2023 17:51	4/5/2023 12:39	4/6/2023 15:25	4/7/2023 19:37	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	84	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B38-5	27827-019	4/5/2023 17:51	4/5/2023 12:53	4/6/2023 15:25	4/7/2023 19:52	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	83	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B38-10	27827-020	4/5/2023 17:51	4/5/2023 12:55	4/6/2023 15:25	4/7/2023 20:06	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	126	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				

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**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B38-15	27827-021	4/5/2023 17:51	4/5/2023 12:58	4/6/2023 15:25	4/7/2023 20:21	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	50	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B37-0.5	27827-022	4/5/2023 17:51	4/5/2023 13:26	4/6/2023 15:25	4/7/2023 20:36	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	90	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B37-2.5	27827-023	4/5/2023 17:51	4/5/2023 13:32	4/6/2023 15:25	4/7/2023 20:50	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	83	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				

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**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B37-5	27827-024	4/5/2023 17:51	4/5/2023 13:42	4/6/2023 15:25	4/7/2023 21:05	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	85	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B37-10	27827-025	4/5/2023 17:51	4/5/2023 13:44	4/6/2023 15:25	4/7/2023 21:20	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	90	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B37-15	27827-026	4/5/2023 17:51	4/5/2023 13:46	4/6/2023 15:25	4/7/2023 21:34	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	89	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				

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**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B43-0.5	27827-031	4/5/2023 17:51	4/5/2023 15:15	4/6/2023 15:25	4/7/2023 22:18	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	75	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B43-2.5	27827-032	4/5/2023 17:51	4/5/2023 15:20	4/6/2023 15:25	4/7/2023 22:32	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	90	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				
B43-5	27827-033	4/5/2023 17:51	4/5/2023 15:28	4/6/2023 15:25	4/7/2023 22:47	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>		<u>Surrogate:</u>	<u>% RC*</u>	
PCB-1016	12674-11-2	<25		Decachlorobiphenyl	77	
PCB-1221	11104-28-2	<25				
PCB-1232	11141-16-5	<25		* Acceptable Recovery: 35-130 %		
PCB-1242	53469-21-9	<25		<u>Dilution Factor:</u> 1		
PCB-1248	12672-29-6	<25		<u>Data Qualifiers:</u> None		
PCB-1254	11097-69-1	<25				
PCB-1260	11096-82-5	<25				

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**Polychlorinated Biphenyl's (EPA 8082)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B43-10	27827-034	4/5/2023 17:51	4/5/2023 15:30	4/6/2023 15:25	4/7/2023 23:01	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
PCB-1016	12674-11-2	<25	Decachlorobiphenyl	92
PCB-1221	11104-28-2	<25		
PCB-1232	11141-16-5	<25	* Acceptable Recovery: 35-130 %	
PCB-1242	53469-21-9	<25	<u>Dilution Factor:</u> 1	
PCB-1248	12672-29-6	<25	<u>Data Qualifiers:</u> None	
PCB-1254	11097-69-1	<25		
PCB-1260	11096-82-5	<25		

B43-15	27827-035	4/5/2023 17:51	4/5/2023 15:35	4/6/2023 15:25	4/7/2023 23:16	Soil
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<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
PCB-1016	12674-11-2	<25	Decachlorobiphenyl	81
PCB-1221	11104-28-2	<25		
PCB-1232	11141-16-5	<25	* Acceptable Recovery: 35-130 %	
PCB-1242	53469-21-9	<25	<u>Dilution Factor:</u> 1	
PCB-1248	12672-29-6	<25	<u>Data Qualifiers:</u> None	
PCB-1254	11097-69-1	<25		
PCB-1260	11096-82-5	<25		

Method Blank	MBVV0406231			4/6/2023 15:25	4/7/2023 16:57	Soil
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<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
PCB-1016	12674-11-2	<25	Decachlorobiphenyl	87
PCB-1221	11104-28-2	<25		
PCB-1232	11141-16-5	<25	* Acceptable Recovery: 35-130 %	
PCB-1242	53469-21-9	<25	<u>Dilution Factor:</u> 1	
PCB-1248	12672-29-6	<25	<u>Data Qualifiers:</u> None	
PCB-1254	11097-69-1	<25		
PCB-1260	11096-82-5	<25		

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**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B34-2.5	27827-001	4/5/2023 17:51	4/5/2023 8:00	4/5/2023 8:00	4/10/2023 20:23	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	90	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	85	58-130 %				
4-Bromofluorobenzene:	82	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B34-10	27827-003	4/5/2023 17:51	4/5/2023 8:30	4/5/2023 8:30	4/10/2023 20:43	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
Surrogate:	% RC	Acceptable % RC	Dilution Factor:	1		
Dibromofluoromethane:	93	65-130 %	Data Qualifiers:	None		
Toluene-d8:	90	58-130 %				
4-Bromofluorobenzene:	91	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B35-2.5	27827-004	4/5/2023 17:51	4/5/2023 9:10	4/5/2023 9:10	4/10/2023 21:04	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	93	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	85	58-130 %	
4-Bromofluorobenzene:	82	40-135 %	



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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B35-10	27827-006	4/5/2023 17:51	4/5/2023 9:25	4/5/2023 9:25	4/10/2023 21:25	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	90	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	85	58-130 %				
4-Bromofluorobenzene:	85	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B46-2.5	27827-008	4/5/2023 17:51	4/5/2023 10:00	4/5/2023 10:00	4/10/2023 21:45	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	92	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	86	58-130 %				
4-Bromofluorobenzene:	85	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B46-5	27827-009	4/5/2023 17:51	4/5/2023 10:13	4/5/2023 10:13	4/10/2023 22:05	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	92	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	82	58-130 %				
4-Bromofluorobenzene:	76	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B46-10	27827-010	4/5/2023 17:51	4/5/2023 10:15	4/5/2023 10:15	4/11/2023 17:41	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	95	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	84	58-130 %	
4-Bromofluorobenzene:	78	40-135 %	

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B39-2.5	27827-013	4/5/2023 17:51	4/5/2023 10:52	4/5/2023 10:52	4/11/2023 18:01	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	95	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	87	58-130 %	
4-Bromofluorobenzene:	84	40-135 %	

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B39-5	27827-014	4/5/2023 17:51	4/5/2023 11:00	4/5/2023 11:00	4/11/2023 18:21	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	94	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	85	58-130 %				
4-Bromofluorobenzene:	81	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B39-10	27827-015	4/5/2023 17:51	4/5/2023 11:02	4/5/2023 11:02	4/11/2023 18:41	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	92	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	85	58-130 %				
4-Bromofluorobenzene:	82	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B39-15	27827-016	4/5/2023 17:51	4/5/2023 11:05	4/5/2023 11:05	4/11/2023 19:01	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	96	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	88	58-130 %				
4-Bromofluorobenzene:	81	40-135 %				



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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B38-2.5	27827-018	4/5/2023 17:51	4/5/2023 12:39	4/5/2023 12:39	4/11/2023 19:21	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	96	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	85	58-130 %	
4-Bromofluorobenzene:	80	40-135 %	

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B38-5	27827-019	4/5/2023 17:51	4/5/2023 12:53	4/5/2023 12:53	4/11/2023 19:42	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	98	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	91	58-130 %	
4-Bromofluorobenzene:	87	40-135 %	

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B38-10	27827-020	4/5/2023 17:51	4/5/2023 12:55	4/5/2023 12:55	4/11/2023 20:03	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	93	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	84	58-130 %				
4-Bromofluorobenzene:	79	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B38-15	27827-021	4/5/2023 17:51	4/5/2023 12:58	4/5/2023 12:58	4/11/2023 20:23	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	96	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	88	58-130 %				
4-Bromofluorobenzene:	86	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B37-2.5	27827-023	4/5/2023 17:51	4/5/2023 13:32	4/5/2023 13:32	4/11/2023 20:42	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	99	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	88	58-130 %				
4-Bromofluorobenzene:	84	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B37-5	27827-024	4/5/2023 17:51	4/5/2023 13:42	4/5/2023 13:42	4/11/2023 21:02	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	93	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	82	58-130 %	
4-Bromofluorobenzene:	74	40-135 %	

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B37-10	27827-025	4/5/2023 17:51	4/5/2023 13:44	4/5/2023 13:44	4/11/2023 21:21	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	<u>1</u>	<u>Data Qualifiers:</u>	<u>None</u>
Dibromofluoromethane:	92	65-130 %				
Toluene-d8:	82	58-130 %				
4-Bromofluorobenzene:	77	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B37-15	27827-026	4/5/2023 17:51	4/5/2023 13:46	4/5/2023 13:46	4/11/2023 21:41	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	93	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	83	58-130 %	
4-Bromofluorobenzene:	76	40-135 %	



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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B36-0.5	27827-027	4/5/2023 17:51	4/5/2023 14:20	4/5/2023 14:20	4/11/2023 22:01	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
Surrogate:	% RC	Acceptable % RC	Dilution Factor:	1		
Dibromofluoromethane:	95	65-130 %	Data Qualifiers:	None		
Toluene-d8:	86	58-130 %				
4-Bromofluorobenzene:	83	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B36-2.5	27827-028	4/5/2023 17:51	4/5/2023 14:23	4/5/2023 14:23	4/11/2023 22:21	Soil

ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	94	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	83	58-130 %	
4-Bromofluorobenzene:	73	40-135 %	

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Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B43-2.5	27827-032	4/5/2023 17:51	4/5/2023 15:20	4/5/2023 15:20	4/11/2023 22:41	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	96	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	84	58-130 %				
4-Bromofluorobenzene:	79	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B43-5	27827-033	4/5/2023 17:51	4/5/2023 15:28	4/5/2023 15:28	4/11/2023 23:02	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	94	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	84	58-130 %	
4-Bromofluorobenzene:	75	40-135 %	

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B43-10	27827-034	4/5/2023 17:51	4/5/2023 15:30	4/5/2023 15:30	4/11/2023 23:23	Soil
ANALYTE	CAS #	µg/kg	ANALYTE	CAS #	µg/kg	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
Surrogate:	% RC	Acceptable % RC	Dilution Factor:	1		
Dibromofluoromethane:	95	65-130 %	Data Qualifiers:	None		
Toluene-d8:	85	58-130 %				
4-Bromofluorobenzene:	81	40-135 %				

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B43-15	27827-035	4/5/2023 17:51	4/5/2023 15:35	4/5/2023 15:35	4/11/2023 11:43	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	94	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	84	58-130 %	
4-Bromofluorobenzene:	75	40-135 %	

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT0407231			4/7/2023 10:30	4/10/2023 20:04	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u>	1		
Dibromofluoromethane:	91	65-130 %	<u>Data Qualifiers:</u>	None		
Toluene-d8:	88	58-130 %				
4-Bromofluorobenzene:	87	40-135 %				

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Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT0410231			4/10/2023 10:00	4/11/2023 15:56	Soil
<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5	
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10	
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10	
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5	
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0	
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5	
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5	
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0	
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10	
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5	
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5	
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5	
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5	
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5	
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5	
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5	
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5	
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5	
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5	
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5	
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5	
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0	
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5	
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5	
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5	
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5	
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0	
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5	
1,1-Dichloroethene	75-35-4	<2.5				
cis-1,2-Dichloroethene	156-59-2	<2.5				
trans-1,2-Dichloroethene	156-60-5	<2.5				
1,2-Dichloropropane	78-87-5	<2.5				
1,3-Dichloropropane	142-28-9	<2.5				
2,2-Dichloropropane	594-20-7	<2.5				
1,1-Dichloropropene	563-58-6	<2.5				
cis-1,3-Dichloropropene	10061-01-5	<2.5				
<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1			
Dibromofluoromethane:	96	65-130 %	<u>Data Qualifiers:</u> None			
Toluene-d8:	89	58-130 %				
4-Bromofluorobenzene:	86	40-135 %				



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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Polynuclear Aromatic Hydrocarbons by SIM (EPA 8270C)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B36-0.5	27827-027	4/5/2023 17:51	4/5/2023 14:20	4/6/2023 11:15	4/13/2023 10:28	Soil

ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	82
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

B36-2.5	27827-028	4/5/2023 17:51	4/5/2023 14:23	4/6/2023 11:15	4/13/2023 11:00	Soil
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ANALYTE	CAS #	µg/kg	Surrogate:	% RC*
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	77
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	Dilution Factor:	1
Benzo(b)fluoranthene:	205-99-2	<50	Data Qualifiers:	None
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

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Project #: 211936010

**Polynuclear Aromatic Hydrocarbons by SIM (EPA 8270C)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBGS0405231			4/5/2023 12:35	4/5/2023 16:37	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
Acenaphthene:	83-32-9	<50	Nitrobenzene-d5	61
Acenaphthylene:	208-96-8	<50		
Anthracene:	120-12-7	<50	* Acceptable Recovery: 13-182 %	
Benz(a)anthracene:	56-55-3	<50		
Benzo(a)pyrene:	50-32-8	<50	<u>Dilution Factor:</u> 1	
Benzo(b)fluoranthene:	205-99-2	<50	<u>Data Qualifiers:</u> None	
Benzo(k)fluoranthene:	207-08-9	<50		
Benzo(g,h,i)perylene:	191-24-2	<50		
Chrysene:	218-01-9	<50		
Dibenz(a,h)anthracene:	53-70-3	<60		
Fluoranthene:	206-44-0	<65		
Pyrene:	129-00-0	<65		
Fluorene:	86-73-7	<50		
Phenanthrene:	85-01-8	<50		
Indeno(1,2,3-cd)pyrene:	193-39-5	<50		
Naphthalene:	91-20-3	<50		

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B34-2.5		27827-001	4/5/2023	17:51	4/5/2023	8:00	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Arsenic	6010B	2.4	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Barium	6010B	190	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Chromium	6010B	12	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Cobalt	6010B	7.3	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Copper	6010B	17	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Lead	6010B	230	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Mercury	7471A	0.11	mg/kg	04/06/23 16:00	04/11/23 10:20	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Nickel	6010B	8.0	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Vanadium	6010B	27	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		
Zinc	6010B	210	mg/kg	04/06/23 12:00	04/10/23 12:49	--	1		

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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B34-10	27827-003	4/5/2023 17:51	4/5/2023 8:30	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Barium	6010B	71	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Chromium	6010B	10	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Cobalt	6010B	7.7	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Copper	6010B	11	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Lead	6010B	3.3	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Mercury	7471A	<0.10	mg/kg	04/06/23 16:00	04/11/23 10:25	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Nickel	6010B	6.9	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Vanadium	6010B	28	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1
Zinc	6010B	35	mg/kg	04/06/23 12:00	04/10/23 13:04	--	1

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix			
B35-2.5		27827-004	4/5/2023	17:51	4/5/2023	9:10	Soil			
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF			
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Barium	6010B	85	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Chromium	6010B	13	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Cobalt	6010B	8.3	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Copper	6010B	12	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Lead	6010B	3.4	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Mercury	7471A	0.11	mg/kg	04/06/23 16:00	04/11/23 10:27	--	1			
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Nickel	6010B	8.5	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Vanadium	6010B	32	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			
Zinc	6010B	45	mg/kg	04/06/23 12:00	04/10/23 13:07	--	1			

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B35-10	27827-006	4/5/2023 17:51	4/5/2023 9:25	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Barium	6010B	71	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Chromium	6010B	10	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Cobalt	6010B	7.0	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Copper	6010B	11	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Lead	6010B	2.4	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Mercury	7471A	0.18	mg/kg	04/06/23 16:00	04/11/23 10:29	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Nickel	6010B	6.4	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Vanadium	6010B	26	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1
Zinc	6010B	35	mg/kg	04/06/23 12:00	04/10/23 13:16	--	1

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Lab Reference # NAM 27827  
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Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B46-0.5	27827-007	4/5/2023 17:51	4/5/2023 9:58	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Barium	6010B	100	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Chromium	6010B	15	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Cobalt	6010B	8.9	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Copper	6010B	14	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Lead	6010B	16	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Mercury	7471A	0.45	mg/kg	04/06/23 16:00	04/11/23 10:30	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Nickel	6010B	9.3	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Vanadium	6010B	36	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1
Zinc	6010B	71	mg/kg	04/06/23 12:00	04/10/23 13:19	--	1

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B46-2.5	27827-008	4/5/2023 17:51	4/5/2023 10:00	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Barium	6010B	95	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Chromium	6010B	15	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Cobalt	6010B	9.5	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Copper	6010B	13	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Lead	6010B	8.6	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Mercury	7471A	0.14	mg/kg	04/06/23 16:00	04/11/23 10:32	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Nickel	6010B	9.4	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Vanadium	6010B	38	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1
Zinc	6010B	52	mg/kg	04/06/23 12:00	04/10/23 13:22	--	1



Mr. Dennis Fee  
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475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix			
B46-5		27827-009	4/5/2023	17:51	4/5/2023	10:13	Soil			
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF			
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Barium	6010B	88	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Chromium	6010B	14	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Cobalt	6010B	8.8	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Copper	6010B	13	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Lead	6010B	3.9	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Mercury	7471A	0.12	mg/kg	04/06/23 16:00	04/11/23 10:34	--	1			
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Nickel	6010B	8.6	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Vanadium	6010B	34	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			
Zinc	6010B	44	mg/kg	04/06/23 12:00	04/10/23 13:25	--	1			

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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B46-10		27827-010	4/5/2023	17:51	4/5/2023	10:15	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Barium	6010B	84	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Chromium	6010B	12	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Cobalt	6010B	8.6	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Copper	6010B	12	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Lead	6010B	3.1	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Mercury	7471A	<0.10	mg/kg	04/06/23 16:00	04/11/23 10:36	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Nickel	6010B	8.3	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Vanadium	6010B	32	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		
Zinc	6010B	43	mg/kg	04/06/23 12:00	04/10/23 13:28	--	1		

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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B39-0.5		27827-012	4/5/2023	17:51	4/5/2023	10:49	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Barium	6010B	100	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Chromium	6010B	15	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Cobalt	6010B	9.6	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Copper	6010B	15	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Lead	6010B	16	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Mercury	7471A	0.11	mg/kg	04/06/23 16:00	04/11/23 10:37	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Nickel	6010B	9.9	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Vanadium	6010B	39	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		
Zinc	6010B	58	mg/kg	04/06/23 12:00	04/10/23 13:31	--	1		

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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B39-2.5	27827-013	4/5/2023 17:51	4/5/2023 10:52	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Barium	6010B	93	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Chromium	6010B	14	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Cobalt	6010B	7.8	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Copper	6010B	11	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Lead	6010B	6.9	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Mercury	7471A	0.19	mg/kg	04/06/23 16:00	04/11/23 10:39	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Nickel	6010B	7.9	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Vanadium	6010B	32	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1
Zinc	6010B	46	mg/kg	04/06/23 12:00	04/10/23 13:34	--	1

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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix			
B39-5		27827-014	4/5/2023	17:51	4/5/2023	11:00	Soil			
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF			
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Barium	6010B	150	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Chromium	6010B	16	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Cobalt	6010B	9.6	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Copper	6010B	14	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Lead	6010B	13	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Mercury	7471A	0.17	mg/kg	04/06/23 16:00	04/11/23 10:41	--	1			
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Nickel	6010B	10	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Vanadium	6010B	38	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			
Zinc	6010B	62	mg/kg	04/06/23 12:00	04/10/23 13:38	--	1			

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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B39-10		27827-015	4/5/2023	17:51	4/5/2023	11:02	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Barium	6010B	82	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Chromium	6010B	9.7	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Cobalt	6010B	7.3	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Copper	6010B	9.3	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Lead	6010B	2.1	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Mercury	7471A	0.18	mg/kg	04/06/23 16:00	04/11/23 10:46	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Nickel	6010B	6.4	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Vanadium	6010B	26	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		
Zinc	6010B	40	mg/kg	04/06/23 12:00	04/10/23 13:41	--	1		

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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B39-15		27827-016	4/5/2023	17:51	4/5/2023	11:05	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Barium	6010B	49	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Chromium	6010B	5.6	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Cobalt	6010B	4.9	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Copper	6010B	<5.0	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Lead	6010B	1.4	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Mercury	7471A	<0.10	mg/kg	04/06/23 16:00	04/11/23 10:49	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Nickel	6010B	4.1	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Vanadium	6010B	18	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		
Zinc	6010B	260	mg/kg	04/06/23 12:00	04/10/23 13:44	--	1		

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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B38-0.5		27827-017	4/5/2023	17:51	4/5/2023	12:37	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Barium	6010B	110	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Chromium	6010B	15	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Cobalt	6010B	10	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Copper	6010B	15	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Lead	6010B	8.4	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Mercury	7471A	0.15	mg/kg	04/06/23 16:00	04/11/23 10:51	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Nickel	6010B	10	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Vanadium	6010B	39	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		
Zinc	6010B	53	mg/kg	04/06/23 12:00	04/10/23 13:53	--	1		



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**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B38-2.5	27827-018	4/5/2023 17:51	4/5/2023 12:39	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Barium	6010B	100	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Chromium	6010B	15	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Cobalt	6010B	10	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Copper	6010B	14	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Lead	6010B	6.9	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Mercury	7471A	0.18	mg/kg	04/06/23 16:00	04/11/23 10:53	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Nickel	6010B	9.7	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Vanadium	6010B	40	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1
Zinc	6010B	51	mg/kg	04/06/23 12:00	04/10/23 13:56	--	1

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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B38-5		27827-019	4/5/2023	17:51	4/5/2023	12:53	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Arsenic	6010B	2.5	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Barium	6010B	150	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Beryllium	6010B	0.71	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Chromium	6010B	23	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Cobalt	6010B	14	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Copper	6010B	25	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Lead	6010B	6.8	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Mercury	7471A	0.49	mg/kg	04/06/23 16:00	04/11/23 10:54	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Nickel	6010B	16	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Vanadium	6010B	54	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		
Zinc	6010B	67	mg/kg	04/06/23 12:00	04/10/23 13:58	--	1		

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Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B38-10	27827-020	4/5/2023 17:51	4/5/2023 12:55	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Arsenic	6010B	2.2	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Barium	6010B	85	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Chromium	6010B	12	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Cobalt	6010B	8.1	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Copper	6010B	11	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Lead	6010B	2.6	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Mercury	7471A	0.13	mg/kg	04/06/23 16:30	04/11/23 11:02	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Nickel	6010B	7.5	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Vanadium	6010B	30	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1
Zinc	6010B	40	mg/kg	04/06/23 12:00	04/10/23 14:01	--	1

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Lab Reference # NAM 27827  
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Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B38-15		27827-021	4/5/2023	17:51	4/5/2023	12:58	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Barium	6010B	82	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Chromium	6010B	14	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Cobalt	6010B	7.6	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Copper	6010B	13	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Lead	6010B	5.7	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Mercury	7471A	0.19	mg/kg	04/06/23 16:30	04/11/23 11:10	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Nickel	6010B	11	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Vanadium	6010B	33	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		
Zinc	6010B	42	mg/kg	04/06/23 12:00	04/10/23 14:04	--	1		

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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
B37-0.5	27827-022	4/5/2023	17:51	4/5/2023	13:26	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Arsenic	6010B	2.3	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Barium	6010B	100	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Chromium	6010B	14	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Cobalt	6010B	9.4	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Copper	6010B	13	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Lead	6010B	13	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Mercury	7471A	0.14	mg/kg	04/06/23 16:30	04/11/23 11:12	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Nickel	6010B	9.2	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Vanadium	6010B	36	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1
Zinc	6010B	62	mg/kg	04/06/23 12:00	04/10/23 14:07	--	1

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**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B37-2.5		27827-023	4/5/2023	17:51	4/5/2023	13:32	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Barium	6010B	120	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Chromium	6010B	18	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Cobalt	6010B	12	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Copper	6010B	16	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Lead	6010B	4.1	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Mercury	7471A	0.13	mg/kg	04/06/23 16:30	04/11/23 11:14	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Nickel	6010B	12	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Vanadium	6010B	46	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		
Zinc	6010B	56	mg/kg	04/06/23 12:00	04/10/23 14:11	--	1		

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B37-5	27827-024	4/5/2023 17:51	4/5/2023 13:42	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Barium	6010B	94	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Chromium	6010B	14	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Cobalt	6010B	9.8	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Copper	6010B	13	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Lead	6010B	3.9	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Mercury	7471A	0.11	mg/kg	04/06/23 16:30	04/11/23 11:16	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Nickel	6010B	9.6	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Vanadium	6010B	37	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1
Zinc	6010B	46	mg/kg	04/06/23 12:00	04/10/23 14:28	--	1

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B37-10	27827-025	4/5/2023 17:51	4/5/2023 13:44	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Arsenic	6010B	3.9	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Barium	6010B	150	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Beryllium	6010B	0.76	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Chromium	6010B	21	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Cobalt	6010B	14	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Copper	6010B	24	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Lead	6010B	6.3	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Mercury	7471A	0.14	mg/kg	04/06/23 16:30	04/11/23 11:17	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Nickel	6010B	15	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Vanadium	6010B	53	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1
Zinc	6010B	67	mg/kg	04/06/23 12:00	04/10/23 14:44	--	1



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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B37-15	27827-026	4/5/2023 17:51	4/5/2023 13:46	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Barium	6010B	80	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Chromium	6010B	13	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Cobalt	6010B	8.5	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Copper	6010B	11	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Lead	6010B	2.6	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Mercury	7471A	<0.10	mg/kg	04/06/23 16:30	04/11/23 11:19	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Nickel	6010B	8.4	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Vanadium	6010B	34	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1
Zinc	6010B	41	mg/kg	04/06/23 12:00	04/10/23 14:47	--	1

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Lab Reference # NAM 27827  
 Project Name: LAUSD 49th Street PEA  
 Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B36-0.5	27827-027	4/5/2023 17:51	4/5/2023 14:20	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Arsenic	6010B	2.1	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Barium	6010B	88	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Chromium	6010B	13	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Cobalt	6010B	7.6	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Copper	6010B	19	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Lead	6010B	15	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Mercury	7471A	0.18	mg/kg	04/06/23 16:30	04/11/23 11:21	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Nickel	6010B	7.9	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Vanadium	6010B	31	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1
Zinc	6010B	46	mg/kg	04/06/23 12:00	04/10/23 14:50	--	1

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Lab Reference # NAM 27827  
 Project Name: LAUSD 49th Street PEA  
 Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B36-2.5		27827-028	4/5/2023	17:51	4/5/2023	14:23	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Arsenic	6010B	2.2	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Barium	6010B	110	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Chromium	6010B	15	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Cobalt	6010B	10	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Copper	6010B	15	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Lead	6010B	5.6	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Mercury	7471A	0.20	mg/kg	04/06/23 16:30	04/11/23 11:22	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Nickel	6010B	11	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Vanadium	6010B	39	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		
Zinc	6010B	51	mg/kg	04/06/23 12:00	04/10/23 14:53	--	1		

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B43-0.5		27827-031	4/5/2023	17:51	4/5/2023	15:15	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Barium	6010B	430	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Chromium	6010B	12	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Cobalt	6010B	7.7	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Copper	6010B	11	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Lead	6010B	7.1	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Mercury	7471A	0.15	mg/kg	04/06/23 16:30	04/11/23 11:28	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Nickel	6010B	7.6	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Vanadium	6010B	32	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		
Zinc	6010B	50	mg/kg	04/06/23 12:00	04/12/23 09:52	--	1		

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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B43-2.5	27827-032	4/5/2023 17:51	4/5/2023 15:20	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Barium	6010B	110	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Chromium	6010B	13	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Cobalt	6010B	9.0	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Copper	6010B	13	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Lead	6010B	4.7	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Mercury	7471A	0.10	mg/kg	04/06/23 16:30	04/11/23 11:29	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Nickel	6010B	8.7	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Vanadium	6010B	35	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1
Zinc	6010B	49	mg/kg	04/06/23 12:00	04/12/23 09:54	--	1

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B43-5		27827-033	4/5/2023	17:51	4/5/2023	15:28	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Arsenic	6010B	2.5	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Barium	6010B	130	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Beryllium	6010B	0.59	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Chromium	6010B	20	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Cobalt	6010B	13	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Copper	6010B	20	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Lead	6010B	4.2	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Mercury	7471A	0.19	mg/kg	04/06/23 16:30	04/11/23 11:31	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Nickel	6010B	13	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Vanadium	6010B	52	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		
Zinc	6010B	62	mg/kg	04/06/23 12:00	04/12/23 09:58	--	1		

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Lab Reference # NAM 27827  
 Project Name: LAUSD 49th Street PEA  
 Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received		Date Sampled		Matrix
B43-10	27827-034	4/5/2023	17:51	4/5/2023	15:30	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Barium	6010B	95	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Chromium	6010B	12	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Cobalt	6010B	8.9	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Copper	6010B	13	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Lead	6010B	3.0	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Mercury	7471A	0.16	mg/kg	04/06/23 16:30	04/11/23 11:33	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Nickel	6010B	8.1	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Vanadium	6010B	31	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1
Zinc	6010B	44	mg/kg	04/06/23 12:00	04/12/23 10:01	--	1

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B43-15		27827-035	4/5/2023	17:51	4/5/2023	15:35	Soil		
ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF		
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Arsenic	6010B	2.0	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Barium	6010B	110	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Beryllium	6010B	0.54	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Chromium	6010B	17	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Cobalt	6010B	12	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Copper	6010B	19	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Lead	6010B	4.2	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Mercury	7471A	0.11	mg/kg	04/06/23 16:30	04/11/23 11:35	--	1		
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Nickel	6010B	12	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Vanadium	6010B	45	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		
Zinc	6010B	56	mg/kg	04/06/23 12:00	04/12/23 10:04	--	1		



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Lab Reference # NAM 27827  
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**Metals**

Client Sample ID			Lab Sample Number	Date Received	Date Sampled			Matrix		
Method Blank								Soil		
MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted		Date Analyzed		Qual	DF
MBIR0406233	Antimony	6010B	<2.0	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Arsenic	6010B	<2.0	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Barium	6010B	<1.0	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Beryllium	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Cadmium	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Chromium	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Cobalt	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Copper	6010B	<5.0	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Lead	6010B	<0.80	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406235	Mercury	7471A	<0.10	mg/kg	04/06/23	16:00	04/11/23	10:02	--	1
MBIR0406233	Molybdenum	6010B	<1.0	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Nickel	6010B	<1.0	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Selenium	6010B	<4.8	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Silver	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Thallium	6010B	<2.0	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Vanadium	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1
MBIR0406233	Zinc	6010B	<5.0	mg/kg	04/06/23	12:00	04/10/23	12:40	--	1

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Lab Reference # NAM 27827  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID			Lab Sample Number	Date Received	Date Sampled			Matrix		
Method Blank								Soil		
MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted		Date Analyzed		Qual	DF
MBIR0406234	Antimony	6010B	<2.0	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Arsenic	6010B	<2.0	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Barium	6010B	<1.0	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Beryllium	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Cadmium	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Chromium	6010B	<0.50	mg/kg	04/06/23	12:00	04/12/23	14:06	--	1
MBIR0406234	Cobalt	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Copper	6010B	<5.0	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Lead	6010B	<0.80	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406236	Mercury	7471A	<0.10	mg/kg	04/06/23	16:30	04/11/23	10:56	--	1
MBIR0406234	Molybdenum	6010B	<1.0	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Nickel	6010B	<1.0	mg/kg	04/06/23	12:00	04/12/23	14:06	--	1
MBIR0406234	Selenium	6010B	<4.8	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Silver	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Thallium	6010B	<2.0	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Vanadium	6010B	<0.50	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1
MBIR0406234	Zinc	6010B	<5.0	mg/kg	04/06/23	12:00	04/10/23	14:14	--	1

**QA/QC Report**  
for  
**Extractable Fuel Hydrocarbons (EPA 8015B/8015M)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/11/2023 14:35

Date of Analysis: 4/13/2023 11:44

Dup Date of Analysis: 4/13/2023 12:04

Laboratory Sample #: 27827-003

MS/MSD Qualifiers: None

Reference #: NAM 27827

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
EFH as Diesel	0.00	1000	1450	1420	145	142	2	8-193	20	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Octacosane	145	153	<input type="checkbox"/>	113	111	<input type="checkbox"/>	40-160

**Laboratory Control Sample**

Date of Extraction: 4/11/2023 14:35

Date of Analysis: 4/13/2023 11:00

Dup Date of Analysis: 4/13/2023 11:22

Laboratory Sample #: VV0411231

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
EFH as Diesel	1000	935	1010	94	101	8	17-180	42	<input type="checkbox"/>

**QA/QC Report**  
for  
**Extactable Fuel Hydrocarbons (EPA 8015B/8015M)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/11/2023 16:37

Date of Analysis: 4/15/2023 5:41

Dup Date of Analysis: 4/15/2023 6:03

Laboratory Sample #: 27827-024

MS/MSD Qualifiers: S1,

Reference #: NAM 27827

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
EFH as Diesel	0.00	1000	1290	1230	129	123	5	8-193	20	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Octacosane	181	195	<input checked="" type="checkbox"/>	114	116	<input type="checkbox"/>	40-160

**Laboratory Control Sample**

Date of Extraction: 4/11/2023 16:37

Date of Analysis: 4/15/2023 4:58

Dup Date of Analysis: 4/15/2023 5:20

Laboratory Sample #: VV0411232

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
EFH as Diesel	1000	684	747	68	75	9	17-180	42	<input type="checkbox"/>

**QA/QC Report**  
for  
**Volatile Fuel Hydrocarbons (EPA 8015B)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/6/2023 13:00  
Date of Analysis: 4/6/2023 14:30  
Dup Date of Analysis: 4/6/2023 14:51  
Laboratory Sample #: 27825-001  
MS/MSD Qualifiers: None  
Reference #: NAM 27827

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
VFH as Gasoline	0.00	0.250	0.152	0.139	61	56	9	20-144	50	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	76	68	<input type="checkbox"/>	95	90	<input type="checkbox"/>	32-153

**Laboratory Control Sample**

Date of Extraction: 4/6/2023 13:00  
Date of Analysis: 4/6/2023 13:49  
Dup Date of Analysis: 4/6/2023 14:10  
Laboratory Sample #: LY0406231  
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
VFH as Gasoline	0.250	0.181	0.193	72	77	6	38-130	27	<input type="checkbox"/>

**QA/QC Report**  
for  
**Volatile Fuel Hydrocarbons (EPA 8015B)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/10/2023 9:30

Date of Analysis: 4/10/2023 12:27

Dup Date of Analysis: 4/10/2023 12:47

Laboratory Sample #: 27827-007

MS/MSD Qualifiers: R5,

Reference #: NAM 27827

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
VFH as Gasoline	0.00	0.250	0.194	0.114	78	46	52	20-144	50	<input checked="" type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	105	63	<input type="checkbox"/>	87	96	<input type="checkbox"/>	32-153

**Laboratory Control Sample**

Date of Extraction: 4/10/2023 9:30

Date of Analysis: 4/10/2023 10:58

Dup Date of Analysis: 4/10/2023 11:19

Laboratory Sample #: LY0410231

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
VFH as Gasoline	0.250	0.210	0.194	84	78	8	38-130	27	<input type="checkbox"/>

**QA/QC Report**  
for  
**Volatile Fuel Hydrocarbons (EPA 8015B)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/11/2023 9:30

Date of Analysis: 4/11/2023 11:45

Dup Date of Analysis: 4/11/2023 12:06

Laboratory Sample #: 27828-001

MS/MSD Qualifiers: None

Reference #: NAM 27827

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
VFH as Gasoline	0.00	0.250	0.123	0.165	49	66	29	20-144	50	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	82	84	<input type="checkbox"/>	111	86	<input type="checkbox"/>	32-153

**Laboratory Control Sample**

Date of Extraction: 4/11/2023 9:30

Date of Analysis: 4/11/2023 11:04

Dup Date of Analysis: 4/11/2023 11:25

Laboratory Sample #: LY0411231

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
VFH as Gasoline	0.250	0.168	0.196	67	78	15	38-130	27	<input type="checkbox"/>

**QA/QC Report**  
for  
**Organochlorine Pesticides (EPA 8081A)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/6/2023 11:15  
Date of Analysis: 4/7/2023 13:18  
Dup Date of Analysis: 4/7/2023 13:32  
Laboratory Sample #: 27827-003  
MS/MSD Qualifiers: None  
Reference #: NAM 27827

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Aldrin	0.00	20.0	13.4	14.4	67	72	7	14-130	28	--
alpha-BHC	0.00	20.0	13.0	14.0	65	70	7	13-130	29	--
beta-BHC	0.00	20.0	14.3	15.5	72	77	8	13-140	26	--
gamma-BHC (Lindane)	0.00	20.0	13.1	14.2	66	71	8	15-130	26	--
4,4'-DDD	0.00	20.0	15.7	16.5	78	82	5	18-169	20	--
4,4'-DDE	0.00	20.0	16.3	17.8	81	89	9	30-165	20	--
4,4'-DDT	0.00	20.0	18.3	20.3	91	101	10	34-170	20	--
delta-BHC	0.00	20.0	15.7	16.9	78	84	7	18-143	27	--
Dieldrin	0.00	20.0	15.0	16.2	75	81	8	24-147	20	--
Endosulfan I	0.00	20.0	15.5	16.7	77	84	7	13-158	23	--
Endosulfan II	0.00	20.0	15.4	16.4	77	82	6	19-143	29	--
Endosulfan sulfate	0.00	20.0	15.9	16.8	79	84	6	D-158	59	--
Endrin	0.00	20.0	15.0	15.8	75	79	5	26-156	25	--
Endrin Aldehyde	0.00	20.0	11.5	12.9	57	64	11	D-148	59	--
Endrin ketone	0.00	20.0	14.2	15.3	71	76	7	D-147	36	--
Heptachlor	0.00	20.0	13.1	14.1	66	71	7	10-130	30	--
Heptachlor epoxide	0.00	20.0	13.7	14.8	69	74	8	19-134	24	--
Methoxychlor	0.00	20.0	18.4	19.3	92	96	5	12-165	32	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Decachlorobiphenyl	86	96	<input type="checkbox"/>	89	91	<input type="checkbox"/>	35-130

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 4/6/2023 11:15  
Date of Analysis: 4/7/2023 11:21  
Dup Date of Analysis: 4/7/2023 11:36  
Laboratory Sample #: BL0406231  
LCS/LCSD Qualifiers: None

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Aldrin	20.0	13.8	14.5	69	73	5	7-130	31	--
alpha-BHC	20.0	13.4	14.4	67	72	7	10-130	25	--
beta-BHC	20.0	13.5	15.7	68	78	15	12-137	23	--
gamma-BHC (Lindane)	20.0	12.9	14.3	64	72	10	14-130	22	--
4,4'-DDD	20.0	15.0	16.7	75	84	11	25-161	20	--
4,4'-DDE	20.0	16.7	17.5	84	88	5	20-154	20	--



**QA/QC Report**  
**for**  
**Organochlorine Pesticides (EPA 8081A)**  
Reporting Units: ppb

<b>Analyte</b>	<b>Spike Conc.</b>	<b>LCS</b>	<b>LCSD</b>	<b>%LCS</b>	<b>%LCSD</b>	<b>RPD</b>	<b>ACP %LCS</b>	<b>ACP RPD</b>	<b>Qual</b>
4,4'-DDT	20.0	17.7	18.7	89	94	5	26-164	20	--
delta-BHC	20.0	15.0	16.6	75	83	10	17-137	24	--
Dieldrin	20.0	14.5	16.0	73	80	10	18-138	21	--
Endosulfan I	20.0	15.8	16.5	79	82	4	14-142	23	--
Endosulfan II	20.0	14.9	15.8	75	79	6	18-148	20	--
Endosulfan sulfate	20.0	15.5	16.4	77	82	6	11-159	32	--
Endrin	20.0	14.7	16.2	74	81	10	22-141	21	--
Endrin Aldehyde	20.0	10.5	12.1	52	61	14	2-140	40	--
Endrin ketone	20.0	13.6	15.2	68	76	11	12-145	22	--
Heptachlor	20.0	12.9	14.2	64	71	10	5-130	29	--
Heptachlor epoxide	20.0	13.9	14.6	69	73	5	14-130	22	--
Methoxychlor	20.0	17.8	17.6	89	88	1	29-157	20	--

**QA/QC Report**  
for  
**Polychlorinated Biphenyl's (EPA 8082)**  
Reporting units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/6/2023 15:25  
Date of Analysis: 4/7/2023 17:40  
Dup Date of Analysis: 4/7/2023 17:55  
Laboratory Sample #: 27827-014  
MS/MSD Qualifiers: None  
Reference #: NAM 27827

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
PCB-1016	0.00	150	99.4	87.0	66	58	13	28-130	28	<input type="checkbox"/>
PCB-1260	0.00	150	95.6	104	64	69	8	36-132	20	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Decachlorobiphenyl	70	77	<input type="checkbox"/>	86	87	<input type="checkbox"/>	35-130

**Laboratory Control Sample**

Date of Extraction: 4/6/2023 15:25  
Date of Analysis: 4/7/2023 17:11  
Dup Date of Analysis: 4/7/2023 17:26  
Laboratory Sample #: VV0406231  
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
PCB-1016	150	82.9	80.6	55	54	3	14-130	31	<input type="checkbox"/>
PCB-1260	150	104	101	69	67	3	42-130	20	<input type="checkbox"/>

**QA/QC Report**  
for  
**Volatile Organic Compounds (8260B)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/10/2023 10:35

Date of Analysis: 4/10/2023 14:45

Dup Date of Analysis: 4/10/2023 15:05

Laboratory Sample #: 27830-011

MS/MSD Qualifiers: None

Reference #: NAM 27827

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Benzene	0.00	10.0	10.5	10.8	105	108	3	70-138	20	--
Chlorobenzene	0.00	10.0	10.9	11.2	109	112	3	70-132	20	--
1,1-Dichloroethene	0.00	10.0	7.98	8.19	80	82	3	46-130	20	--
Toluene	0.00	10.0	10.5	10.9	105	109	4	70-130	20	--
Trichloroethene	0.00	10.0	9.87	10.1	99	101	2	70-135	20	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Dibromofluoromethane	86	87	<input type="checkbox"/>	87	87	<input type="checkbox"/>	65-130
Toluene-d8	83	88	<input type="checkbox"/>	84	85	<input type="checkbox"/>	58-130
4-Bromofluorobenzene	78	91	<input type="checkbox"/>	85	87	<input type="checkbox"/>	40-135

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 4/10/2023 10:35

Date of Analysis: 4/10/2023 14:05

Dup Date of Analysis: 4/10/2023 14:25

Laboratory Sample #: HT0410231

LCS/LCSD Qualifiers: None

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Benzene	10.0	12.2	10.3	122	103	17	70-134	20	--
Chlorobenzene	10.0	12.5	10.8	125	108	15	70-130	20	--
1,1-Dichloroethene	10.0	8.75	7.47	88	75	16	48-130	20	--
Toluene	10.0	11.9	10.3	119	103	14	70-130	20	--
Trichloroethene	10.0	11.3	9.64	113	96	16	70-132	20	--

**QA/QC Report**  
for  
**Volatile Organic Compounds (8260B)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/11/2023 12:09

Date of Analysis: 4/11/2023 17:02

Dup Date of Analysis: 4/11/2023 17:22

Laboratory Sample #: 27827-010

MS/MSD Qualifiers: None

Reference #: NAM 27827

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Benzene	0.00	10.0	11.3	10.8	113	108	5	70-138	20	--
Chlorobenzene	0.00	10.0	11.3	11.0	113	110	3	70-132	20	--
1,1-Dichloroethene	0.00	10.0	8.98	8.59	90	86	4	46-130	20	--
Toluene	0.00	10.0	10.9	10.4	109	104	5	70-130	20	--
Trichloroethene	0.00	10.0	10.8	10.3	108	103	5	70-135	20	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Dibromofluoromethane	94	95	<input type="checkbox"/>	93	97	<input type="checkbox"/>	65-130
Toluene-d8	84	87	<input type="checkbox"/>	85	89	<input type="checkbox"/>	58-130
4-Bromofluorobenzene	78	84	<input type="checkbox"/>	77	87	<input type="checkbox"/>	40-135

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 4/11/2023 12:09

Date of Analysis: 4/11/2023 16:15

Dup Date of Analysis: 4/11/2023 16:35

Laboratory Sample #: HT0411231

LCS/LCSD Qualifiers: None

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Benzene	10.0	10.2	9.76	102	98	4	70-134	20	--
Chlorobenzene	10.0	10.2	10.1	102	101	1	70-130	20	--
1,1-Dichloroethene	10.0	7.51	7.72	75	77	3	48-130	20	--
Toluene	10.0	9.78	9.42	98	94	4	70-130	20	--
Trichloroethene	10.0	9.30	8.92	93	89	4	70-132	20	--

**QA/QC Report**  
for  
**Semi-Volatile Organic Compounds (8270C)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/5/2023 12:35  
Date of Analysis: 4/5/2023 18:13  
Dup Date of Analysis: 4/5/2023 18:46  
Laboratory Sample #: 27811-007  
MS/MSD Qualifiers: None  
Reference #: NAM 27827

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Acenaphthene	0.00	20.0	17.9	17.3	89	86	3	11-138	20	--
Acenaphthylene	0.00	20.0	15.1	14.7	75	74	3	54-130	32	--
Anthracene	0.00	20.0	18.6	18.5	93	93	1	43-130	30	--
Benz(a)anthracene	0.00	20.0	23.1	23.0	115	115	0	42-133	30	--
Benzo(a)pyrene	0.00	20.0	16.8	17.2	84	86	2	32-148	30	--
Benzo(b)fluoranthene	0.00	20.0	17.3	17.5	86	88	1	42-140	30	--
Benzo(g,h,i)perylene	0.00	20.0	12.7	13.2	63	66	4	D-195	30	--
Benzo(k)fluoranthene	0.00	20.0	14.4	14.7	72	74	2	25-146	30	--
Chrysene	0.00	20.0	17.2	17.6	86	88	2	44-140	35	--
Dibenz(a,h)anthracene	0.00	20.0	15.2	15.5	76	77	2	D-200	35	--
Fluoranthene	0.00	20.0	20.5	20.7	102	104	1	43-130	30	--
Fluorene	0.00	20.0	20.2	19.7	101	99	3	70-130	30	--
Indeno(1,2,3-cd)pyrene	0.00	20.0	15.2	15.5	76	77	2	D-151	30	--
Naphthalene	0.00	20.0	16.5	16.2	82	81	2	36-130	30	--
Phenanthrene	0.00	20.0	19.5	19.7	98	99	1	70-130	30	--
Pyrene	0.00	20.0	17.0	17.0	85	85	0	25-145	20	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Nitrobenzene-d5	69	58	<input type="checkbox"/>	82	65	<input type="checkbox"/>	8-134

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 4/5/2023 12:35  
Date of Analysis: 4/5/2023 17:09  
Dup Date of Analysis: 4/5/2023 17:41  
Laboratory Sample #: GS0405231  
LCS/LCSD Qualifiers: None

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Acenaphthene	20.0	18.4	18.3	92	91	1	24-137	20	--
Acenaphthylene	20.0	16.5	15.8	82	79	4	54-126	32	--
Anthracene	20.0	18.1	18.2	91	91	1	43-118	27	--
Benz(a)anthracene	20.0	24.5	25.6	123	128	4	42-133	21	--

**QA/QC Report**  
**for**  
**Semi-Volatile Organic Compounds (8270C)**  
Reporting Units: ppb

<b>Analyte</b>	<b>Spike Conc.</b>	<b>LCS</b>	<b>LCSD</b>	<b>%LCS</b>	<b>%LCSD</b>	<b>RPD</b>	<b>ACP %LCS</b>	<b>ACP RPD</b>	<b>Qual</b>
Benzo(a)pyrene	20.0	14.7	16.8	74	84	13	32-148	26	--
Benzo(b)fluoranthene	20.0	15.3	17.1	76	86	11	42-140	28	--
Benzo(g,h,i)perylene	20.0	11.8	13.0	59	65	10	D-195	30	--
Benzo(k)fluoranthene	20.0	15.2	15.7	76	78	3	25-146	22	--
Chrysene	20.0	16.4	17.3	82	86	5	44-140	35	--
Dibenz(a,h)anthracene	20.0	14.0	15.3	70	76	9	D-200	35	--
Fluoranthene	20.0	19.6	19.3	98	96	2	43-121	27	--
Fluorene	20.0	21.0	20.6	105	103	2	72-108	20	--
Indeno(1,2,3-cd)pyrene	20.0	14.0	15.3	70	76	9	D-151	30	--
Naphthalene	20.0	20.3	15.8	101	79	25	36-120	25	--
Phenanthrene	20.0	19.0	19.1	95	96	1	70-130	20	--
Pyrene	20.0	16.9	17.0	84	85	1	27-154	20	--

**QA/QC Report  
for  
Metals**

Reference #: NAM 27827

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B/7471A**

Laboratory Sample #: 27827-001

Date of Extraction: 04/06/23 12:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Antimony	04/10/23 12:52	04/10/23 12:55	0.00	20.0	3.67	4.51	18	23	21	75-125	20	M3,
Arsenic	04/10/23 12:52	04/10/23 12:55	2.40	20.0	16.4	18.0	70	78	9	75-125	20	M2,
Barium	04/10/23 12:52	04/10/23 12:55	190	20.0	149	195	0	25	27	75-125	20	M3,
Beryllium	04/10/23 12:52	04/10/23 12:55	0.00	20.0	14.3	15.7	72	78	9	75-125	20	M2,
Cadmium	04/10/23 12:52	04/10/23 12:55	0.00	20.0	15.0	16.0	75	80	6	75-125	20	--
Chromium	04/10/23 12:52	04/10/23 12:55	12.0	20.0	24.1	27.1	61	76	12	75-125	20	M2,
Cobalt	04/10/23 12:52	04/10/23 12:55	7.30	20.0	19.8	21.9	62	73	10	75-125	20	M2,
Copper	04/10/23 12:52	04/10/23 12:55	17.0	20.0	29.0	33.5	60	83	14	75-125	20	M2,
Lead	04/10/23 12:52	04/10/23 12:55	230	20.0	115	440	0	1050	117	75-125	20	M3,
Molybdenum	04/10/23 12:52	04/10/23 12:55	0.00	20.0	13.6	14.5	68	73	6	75-125	20	M2,
Nickel	04/10/23 12:52	04/10/23 12:55	8.00	20.0	20.8	23.1	64	76	10	75-125	20	M2,
Selenium	04/10/23 12:52	04/10/23 12:55	0.00	20.0	13.7	11.3	68	57	19	75-125	20	M2,
Silver	04/10/23 12:52	04/10/23 12:55	0.00	20.0	15.8	16.4	79	82	4	75-125	20	--
Thallium	04/10/23 12:52	04/10/23 12:55	0.00	20.0	12.6	11.4	63	57	10	75-125	20	M2,
Vanadium	04/10/23 12:52	04/10/23 12:55	27.0	20.0	37.9	42.6	55	78	12	75-125	20	M2,
Zinc	04/10/23 12:52	04/10/23 12:55	210	20.0	195	242	0	160	22	75-125	20	M3,

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: IR0406233

Date of Extraction: 04/06/23 12:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Antimony	04/10/23 12:44	04/10/23 12:46	--	20.0	19.3	19.4	96	97	1	80-120	20	--
Arsenic	04/10/23 12:44	04/10/23 12:46	--	20.0	19.1	19.2	96	96	1	80-120	20	--
Barium	04/10/23 12:44	04/10/23 12:46	--	20.0	19.9	20.1	99	101	1	80-120	20	--
Beryllium	04/10/23 12:44	04/10/23 12:46	--	20.0	19.2	19.5	96	98	2	80-120	20	--
Cadmium	04/10/23 12:44	04/10/23 12:46	--	20.0	18.8	18.7	94	94	1	80-120	20	--
Chromium	04/10/23 12:44	04/10/23 12:46	--	20.0	20.4	20.7	102	104	1	80-120	20	--
Cobalt	04/10/23 12:44	04/10/23 12:46	--	20.0	20.3	20.5	101	102	1	80-120	20	--
Copper	04/10/23 12:44	04/10/23 12:46	--	20.0	20.8	21.2	104	106	2	80-120	20	--
Lead	04/10/23 12:44	04/10/23 12:46	--	20.0	20.1	20.2	101	101	0	80-120	20	--
Molybdenum	04/10/23 12:44	04/10/23 12:46	--	20.0	19.2	19.3	96	96	1	80-120	20	--
Nickel	04/10/23 12:44	04/10/23 12:46	--	20.0	20.7	21.0	104	105	1	80-120	20	--
Selenium	04/10/23 12:44	04/10/23 12:46	--	20.0	20.7	17.0	104	85	20	80-120	20	--
Silver	04/10/23 12:44	04/10/23 12:46	--	20.0	19.1	19.2	96	96	1	80-120	20	--
Thallium	04/10/23 12:44	04/10/23 12:46	--	20.0	20.4	20.3	102	101	0	80-120	20	--
Vanadium	04/10/23 12:44	04/10/23 12:46	--	20.0	19.3	19.5	96	98	1	80-120	20	--
Zinc	04/10/23 12:44	04/10/23 12:46	--	20.0	20.5	20.2	102	101	1	80-120	20	--

**QA/QC Report  
for  
Metals**

Reference #: NAM 27827

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B/7471A**

Laboratory Sample #: 27827-024

Date of Extraction: 04/06/23 12:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Antimony	04/10/23 14:31	04/10/23 14:34	0.00	20.0	6.00	4.33	30	22	32	75-125	20	M2, R2,
Arsenic	04/10/23 14:31	04/10/23 14:34	0.00	20.0	21.8	22.0	109	110	1	75-125	20	--
Barium	04/10/23 14:31	04/10/23 14:34	94.0	20.0	122	120	140	130	2	75-125	20	M3,
Beryllium	04/10/23 14:31	04/10/23 14:34	0.00	20.0	20.0	20.0	100	100	0	75-125	20	--
Cadmium	04/10/23 14:31	04/10/23 14:34	0.00	20.0	17.9	18.0	89	90	1	75-125	20	--
Chromium	04/10/23 14:31	04/10/23 14:34	14.0	20.0	35.2	33.6	106	98	5	75-125	20	--
Cobalt	04/10/23 14:31	04/10/23 14:34	9.80	20.0	30.1	28.3	102	92	6	75-125	20	--
Copper	04/10/23 14:31	04/10/23 14:34	13.0	20.0	33.2	33.1	101	100	0	75-125	20	--
Lead	04/10/23 14:31	04/10/23 14:34	3.90	20.0	21.8	22.0	89	90	1	75-125	20	--
Molybdenum	04/10/23 14:31	04/10/23 14:34	0.00	20.0	17.7	17.8	89	89	1	75-125	20	--
Nickel	04/10/23 14:31	04/10/23 14:34	9.60	20.0	31.3	28.8	108	96	8	75-125	20	--
Selenium	04/10/23 14:31	04/10/23 14:34	0.00	20.0	17.0	17.4	85	87	2	75-125	20	--
Silver	04/10/23 14:31	04/10/23 14:34	0.00	20.0	17.6	17.5	88	88	1	75-125	20	--
Thallium	04/10/23 14:31	04/10/23 14:34	0.00	20.0	13.3	13.0	67	65	2	75-125	20	M2,
Vanadium	04/10/23 14:31	04/10/23 14:34	37.0	20.0	57.1	55.4	100	92	3	75-125	20	--
Zinc	04/10/23 14:31	04/10/23 14:34	46.0	20.0	67.6	66.7	108	103	1	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: IR0406234

Date of Extraction: 04/06/23 12:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Antimony	04/10/23 14:17	04/10/23 14:20	--	20.0	20.0	19.5	100	98	3	80-120	20	--
Arsenic	04/10/23 14:17	04/10/23 14:20	--	20.0	20.3	20.0	101	100	1	80-120	20	--
Barium	04/10/23 14:17	04/10/23 14:20	--	20.0	20.6	20.3	103	101	1	80-120	20	--
Beryllium	04/10/23 14:17	04/10/23 14:20	--	20.0	19.5	19.1	98	96	2	80-120	20	--
Cadmium	04/10/23 14:17	04/10/23 14:20	--	20.0	18.8	18.3	94	91	3	80-120	20	--
Chromium	04/10/23 14:17	04/10/23 14:20	--	20.0	21.2	20.5	106	102	3	80-120	20	--
Cobalt	04/10/23 14:17	04/10/23 14:20	--	20.0	21.1	20.6	106	103	2	80-120	20	--
Copper	04/10/23 14:17	04/10/23 14:20	--	20.0	20.4	19.7	102	99	3	80-120	20	--
Lead	04/10/23 14:17	04/10/23 14:20	--	20.0	20.7	19.8	104	99	4	80-120	20	--
Molybdenum	04/10/23 14:17	04/10/23 14:20	--	20.0	19.8	19.3	99	96	3	80-120	20	--
Nickel	04/10/23 14:17	04/10/23 14:20	--	20.0	22.0	21.6	110	108	2	80-120	20	--
Selenium	04/10/23 14:17	04/10/23 14:20	--	20.0	18.8	18.7	94	94	1	80-120	20	--
Silver	04/10/23 14:17	04/10/23 14:20	--	20.0	19.0	18.4	95	92	3	80-120	20	--
Thallium	04/10/23 14:17	04/10/23 14:20	--	20.0	20.3	20.4	101	102	0	80-120	20	--
Vanadium	04/10/23 14:17	04/10/23 14:20	--	20.0	19.8	19.1	99	96	4	80-120	20	--
Zinc	04/10/23 14:17	04/10/23 14:20	--	20.0	21.5	21.0	108	105	2	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B/7471A**

Laboratory Sample #: 27825-001

Date of Extraction: 04/06/23 16:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Mercury	04/11/23 10:11	04/11/23 10:13	0.00	1.00	0.907	0.907	91	91	0	80-120	20	--



**QA/QC Report  
for  
Metals**

Reference #: NAM 27827

Reporting units: ppm

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: IR0406235

Date of Extraction: 04/06/23 16:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Mercury	04/11/23 11:42	04/11/23 10:08	--	1.00	0.963	1.04	96	104	8	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B/7471A**

Laboratory Sample #: 27827-020

Date of Extraction: 04/06/23 16:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Mercury	04/11/23 13:24	04/11/23 13:26	0.13	1.00	0.959	0.973	83	84	1	80-120	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: IR0406236

Date of Extraction: 04/06/23 16:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Mercury	04/11/23 10:58	04/11/23 11:00	--	1.00	0.984	0.990	98	99	1	80-120	20	--

# Data Qualifier Definitions

## Qualifier

D1 = Sample required dilution due to matrix.

M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

27827-001	6010B	Arsenic	MS
27827-001	6010B	Beryllium	MS
27827-001	6010B	Chromium	MS
27827-001	6010B	Cobalt	MS/MSD
27827-001	6010B	Copper	MS
27827-001	6010B	Molybdenum	MS/MSD
27827-001	6010B	Nickel	MS
27827-001	6010B	Selenium	MS/MSD
27827-001	6010B	Thallium	MS/MSD
27827-001	6010B	Vanadium	MS
27827-024	6010B	Antimony	MS/MSD
27827-024	6010B	Thallium	MS/MSD

M3 = The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

27827-001	6010B	Antimony	MS/MSD
27827-001	6010B	Barium	MS/MSD
27827-001	6010B	Lead	MS/MSD
27827-001	6010B	Zinc	MS/MSD
27827-024	6010B	Barium	MS/MSD

R2 = RPD/RSD exceeded the laboratory acceptance limit.

27827-024	6010B	Antimony	MS/MSD
-----------	-------	----------	--------

R5 = MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

27827-007	8015B	VFH	MS/MSD
-----------	-------	-----	--------

S1 = Surrogate recovery was above laboratory acceptance limits.

27827-024	8015B	Octacosane	MS/MSD
-----------	-------	------------	--------

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

# Analysis Request & Chain of Custody Record



**ORANGE COAST ANALYTICAL, INC.**

3002 Dow Avenue, Suite 532

Tustin, CA 92780

Phone: (714) 832-0064 Fax: (714) 832-0067

www.ocalab.com

4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.:

27827

Page:

1

of

3

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME																					
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					<table border="1"> <tr> <td>Lead by EPA 60108</td> <td>Arsenic by EPA 60108</td> <td>OCs by EPA 8081A</td> <td>PCBs by EPA 8082</td> <td>Title 22 Metals by EPA 60108/7471A</td> <td>Hexavalent Chromium by EPA 7199</td> <td>Asbestos by PLM</td> <td>PAHs by EPA 8270-SIM</td> <td>VOCs by EPA 8260B</td> <td>TPH-g.d.mo by EPA 8015B</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										Lead by EPA 60108	Arsenic by EPA 60108	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 60108/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.mo by EPA 8015B											Standard: <u>X</u>	
Lead by EPA 60108	Arsenic by EPA 60108	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 60108/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM											PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g.d.mo by EPA 8015B																			
Send Report To: Dennis Fee		Project Number: 211936010															72 Hour: _____																					
Email: <u>dfee@ninyoandmoore.com</u>		PO #:															48 Hour: _____																					
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA															24 Hour: _____																					
Phone: (949) 753-7070 Fax:		Sampled By: <u>Aileen Chea / Skylar Lee</u>															REMARKS / INSTRUCTIONS																					
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type																																	
1 B34-2.5	5	4/5/23	0800	SS	902 jar / 4 VOAS																																	
2 B34-5	1		0820															HOLD																				
3 B34-10	1		0830															<del>AC 4/5/23</del>																				
4 B35-2.5	1		0910																																			
5 B35-5	1		0923		6" sleeve / 4 VOAS													HOLD																				
6 B35-10	1		0925															<del>AC 4/5/23</del>																				
7 B46-0.5	1		0958		902 jar																																	
8 B46-2.5	5		1000		902 jar / 4 VOAS																																	
9 B46-5	1		1013		6" sleeve / 4 VOAS													<del>AC 4/5/23</del>																				
10 B46-10	1		1015															<del>AC 4/5/23</del>																				
11 B46-15	1		1025															HOLD																				
12 B39-0.5	1		1049		902 jar																																	
13 B39-2.5	5		1052		902 jar / 4 VOAS																																	
14 B39-5	1		1100		6" sleeve / 4 VOAS																																	
No. of Samples: <u>14</u>		Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other																																		
Relinquished By:		Date:		Received By:		Date:		Sample Matrix:																														
Time:				Time:				DW - Drinking Water																														
Company:				Company:				GW - Groundwater																														
								AQ - Aqueous																														
Relinquished By:		Date:		Received By:		Date:		WW - Wastewater																														
Time:				Time:				SS - Soil / Solid																														
Company:				Company:				SW - Stormwater																														
								OT - Other																														
Relinquished By:		Date: <u>4/5/23</u>		Received For OCA By:		Date: <u>4/5/23</u>		Sample Integrity: <u>2 coolers</u>																														
Time: <u>1751</u>				Time: <u>1751</u>				Intact: <u>✓</u> On Ice: <u>(Yes)</u> No @ <u>31.1°C</u>																														
Company: <u>Ninyo &amp; Moore</u>				Company: <u>OCA</u>				@ <u>11#3</u>																														

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



### n of Custody Record



4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.: 77821

Page: 3 of 3

[illegible]

REQUESTED TURN-AROUND-TIME	NUMBER OF SUBMITTERS	NUMBER OF SOLUTIONS	NUMBER OF PROBLEMS
1	1	1	1
2	1	1	1
3	1	1	1
4	1	1	1
5	1	1	1
6	1	1	1
7	1	1	1
8	1	1	1
9	1	1	1
10	1	1	1
11	1	1	1
12	1	1	1
13	1	1	1
14	1	1	1
15	1	1	1
16	1	1	1
17	1	1	1
18	1	1	1
19	1	1	1
20	1	1	1
21	1	1	1
22	1	1	1
23	1	1	1
24	1	1	1
25	1	1	1
26	1	1	1
27	1	1	1
28	1	1	1
29	1	1	1
30	1	1	1
31	1	1	1
32	1	1	1
33	1	1	1
34	1	1	1
35	1	1	1
36	1	1	1
37	1	1	1
38	1	1	1
39	1	1	1
40	1	1	1
41	1	1	1
42	1	1	1
43	1	1	1
44	1	1	1
45	1	1	1
46	1	1	1
47	1	1	1
48	1	1	1
49	1	1	1
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54	1	1	1
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57	1	1	1
58	1	1	1
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67	1	1	1
68	1	1	1
69	1	1	1
70	1	1	1
71	1	1	1
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86	1	1	1
87	1	1	1
88	1	1	1
89	1	1	1
90	1	1	1
91	1	1	1
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94	1	1	1
95	1	1	1
96	1	1	1
97	1	1	1
98	1	1	1
99	1	1	1
100	1	1	1

Standard: X

72 Hour:

48 Hour:

24 Hour: \_\_\_\_\_

REMARKS / INSTRUCTIONS

fold

HOLD

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\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

5 = NaOH      6 = Other

DW = Drinking Water

A9. Aqueous

12. *Mydas*

S - Soil / Solid

DT - Other

---

 $\frac{1}{2} \text{Al}_2\text{O}_3 \cdot \text{H}_2\text{O}$ 

---

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

# Sample Receipt Report

Laboratory Reference NAM 27827

Logged in by MM

Received: 04/05/23 17:51

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 2

Project #: 211936010

Sample Quantity

35 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): _____	Thermometer ID: _____	Adjusted Temp.: _____	
Shipping Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

## Notes

2 coolers at 3 and 1 °C IR#3 correction =+0 °C

Client Notified \_\_\_\_\_

By \_\_\_\_\_

On \_\_\_\_\_



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mark Noorani  
Orange Coast Analytical Inc  
3002 Dow Ave,  
Suite 532  
Tustin, California 92780

Generated 4/17/2023 4:29:15 PM

## JOB DESCRIPTION

211936010

## JOB NUMBER

570-134446-1



# Eurofins Calscience

## Job Notes

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

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



---

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

Generated  
4/17/2023 4:29:15 PM

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## Definitions/Glossary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-134446-1

### 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: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-134446-1

**Job ID: 570-134446-1**

**Laboratory: Eurofins Calscience**

## Narrative

**Job Narrative**  
**570-134446-1**

## Comments

No additional comments.

## Receipt

The sample was received on 4/11/2023 11:15 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2° C.

## HPLC/IC

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

# Detection Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-134446-1

**Client Sample ID: B36-0.5**

**Lab Sample ID: 570-134446-1**

 No Detections.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

# Client Sample Results

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-134446-1

## Method: SW846 7199 - Chromium, Hexavalent (IC)

Client Sample ID: B36-0.5  
Date Collected: 04/05/23 14:20  
Date Received: 04/11/23 11:15

Lab Sample ID: 570-134446-1  
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		04/15/23 02:00	04/15/23 09:46	10

# QC Sample Results

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-134446-1

## Method: 7199 - Chromium, Hexavalent (IC)

Lab Sample ID: MB 570-319506/1-A

Matrix: Solid

Analysis Batch: 320685

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319506

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400	190	ug/Kg		04/15/23 02:00	04/15/23 09:34	10

Lab Sample ID: LCS 570-319506/2-A

Matrix: Solid

Analysis Batch: 320685

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319506

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	20100	19510		ug/Kg		97	80 - 120

Lab Sample ID: LCSD 570-319506/3-A

Matrix: Solid

Analysis Batch: 320685

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 319506

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	19800	19980		ug/Kg		101	80 - 120	2	20

Lab Sample ID: 570-134446-1 MS

Matrix: Solid

Analysis Batch: 320685

Client Sample ID: B36-0.5

Prep Type: Total/NA

Prep Batch: 319506

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium, hexavalent	ND		19900	19300		ug/Kg		97	75 - 125

Lab Sample ID: 570-134446-1 MSD

Matrix: Solid

Analysis Batch: 320685

Client Sample ID: B36-0.5

Prep Type: Total/NA

Prep Batch: 319506

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium, hexavalent	ND		20100	18920		ug/Kg		94	75 - 125	2	25

# QC Association Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-134446-1

## HPLC/IC

### Prep Batch: 319506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-134446-1	B36-0.5	Total/NA	Solid	3060A	
MB 570-319506/1-A	Method Blank	Total/NA	Solid	3060A	
LCS 570-319506/2-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSD 570-319506/3-A	Lab Control Sample Dup	Total/NA	Solid	3060A	
570-134446-1 MS	B36-0.5	Total/NA	Solid	3060A	
570-134446-1 MSD	B36-0.5	Total/NA	Solid	3060A	

### Analysis Batch: 320685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-134446-1	B36-0.5	Total/NA	Solid	7199	319506
MB 570-319506/1-A	Method Blank	Total/NA	Solid	7199	319506
LCS 570-319506/2-A	Lab Control Sample	Total/NA	Solid	7199	319506
LCSD 570-319506/3-A	Lab Control Sample Dup	Total/NA	Solid	7199	319506
570-134446-1 MS	B36-0.5	Total/NA	Solid	7199	319506
570-134446-1 MSD	B36-0.5	Total/NA	Solid	7199	319506



# Lab Chronicle

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-134446-1

**Client Sample ID: B36-0.5**  
**Date Collected: 04/05/23 14:20**  
**Date Received: 04/11/23 11:15**

**Lab Sample ID: 570-134446-1**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.51 g	100 mL	319506	04/15/23 02:00	YO8L	EET CAL 4
Total/NA	Analysis	7199		10	4 mL	4 mL	320685	04/15/23 09:46	YO8L	EET CAL 4
Instrument ID: IC33										

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

# Accreditation/Certification Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-134446-1

## Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-134446-1

Method	Method Description	Protocol	Laboratory
7199	Chromium, Hexavalent (IC)	SW846	EET CAL 4
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	EET CAL 4

### Protocol References:

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: Orange Coast Analytical Inc  
Project/Site: 211936010

Job ID: 570-134446-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-134446-1	B36-0.5	Solid	04/05/23 14:20	04/11/23 11:15

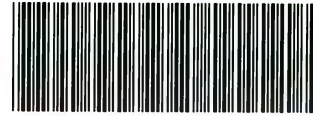
- 1
- 2
- 3
- 4
- 5
- 6
- 7
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- 9
- 10
- 11
- 12
- 13
- 14



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

For courier service / sample drop off information, contact us26\_sales@eurofinsus.com or call us.



570-134446 Chain of Custody

134446  
CHAIN OF CUSTODY RECORD

DATE:

PAGE:

1

OF

1

LABORATORY CLIENT:

Orange Coast Analytical, Inc.

ADDRESS:

3002 Dow Ave, Ste 532

CITY:

Tustin

STATE:

CA

ZIP:

92780

TEL:

7148320064

E-MAIL:

markn@ocalab.com

CLIENT PROJECT NAME / NUMBER:

211936010

P.O. NO.:

27827

PROJECT CONTACT:

Mark Noorani

SAMPLER(S): (PRINT)

### REQUESTED ANALYSES

Please check box or fill in blank as needed.

<input type="checkbox"/> SAME DAY	<input type="checkbox"/> 24 HR	<input type="checkbox"/> 48 HR	<input type="checkbox"/> 72 HR	<input type="checkbox"/> 5 DAYS	<input checked="" type="checkbox"/> STANDARD																					
<input type="checkbox"/> COELT EDF	GLOBAL ID:		LOG CODE:																							
SPECIAL INSTRUCTIONS:						Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	Cr(VI) <input type="checkbox"/> 7199 <input checked="" type="checkbox"/> 218.6	TOC	OPPs by 8141		
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.																					
		DATE	TIME																							
	B36-0.5	4/5/23	14:20	S	1																		x			

Relinquished by: (Signature)

Received by: (Signature/Affiliation)

Date:

Time:

Relinquished by: (Signature)

Received by: (Signature/Affiliation)

Date:

Time:

Relinquished by: (Signature)

Received by: (Signature/Affiliation)

Date:

Time:

## Login Sample Receipt Checklist

Client: Orange Coast Analytical Inc

Job Number: 570-134446-1

Login Number: 134446

List Number: 1

Creator: Vitente, Precy

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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?	False	Received project as a subcontract.
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27827A

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 4/18/2023

Date Reported: 4/24/2023

Chain of Custody Received: ☒

Analytical Method: 6010B, 1311/6010B,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27827A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at °C, on ice.  
2 coolers at 3 and 1 °C IR#3 correction =+0 °C

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27827A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B34-2.5	27827-001	4/5/2023	4/5/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27827A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID			Lab Sample Number	Date Received		Date Sampled		Matrix	
B34-2.5			27827-001	4/5/2023	17:51	4/5/2023	8:00	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	TCLP Lead	6010B	0.19	mg/l	04/19/23 10:35	04/20/23 10:49		--	1
Method Blank								Soil	
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
MBIR0419232	TCLP Lead	6010B	<0.080	mg/l	04/19/23 10:35	04/20/23 10:35		--	1
B34-2.5			27827-001	4/5/2023	17:51	4/5/2023	8:00	Soil	
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
	STLC Lead	6010B	11	mg/L	04/20/23 17:00	04/24/23 14:19		--	1
Method Blank								Soil	
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>
MBIR0420234	STLC Lead	6010B	<0.20	mg/L	04/20/23 17:00	04/24/23 14:06		--	1

**QA/QC Report  
for  
Metals**

Reference #: NAM 27827A

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ 6010B

Laboratory Sample #: 27827-001

Date of Extraction: 04/19/23 10:35

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
TCLP Lead	04/20/23 10:43	04/20/23 10:46	0.19	0.400	0.587	0.569	99	95	3	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ 6010B

Laboratory Sample #: IR0419232

Date of Extraction: 04/19/23 10:35

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
TCLP Lead	04/20/23 10:37	04/20/23 10:40	--	0.400	0.387	0.379	97	95	2	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

1311/ STLC CCR

Laboratory Sample #: 27827-001

Date of Extraction: 04/20/23 17:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
STLC Lead	04/24/23 14:14	04/24/23 14:17	11.0	1.00	11.3	11.7	30	70	3	75-125	20	M3,

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

1311/ STLC CCR

Laboratory Sample #: IR0420234

Date of Extraction: 04/20/23 17:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
STLC Lead	04/24/23 14:09	04/24/23 14:11	--	1.00	0.889	0.898	89	90	1	80-120	20	--

# Data Qualifier Definitions

## Qualifier

M3 = The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

27827-001	STLC CCR	STLC Lead	MS/MSD
-----------	----------	-----------	--------

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

# Analysis Request & Chain of Custody Record



**ORANGE COAST ANALYTICAL, INC.**

3002 Dow Avenue, Suite 532

Tustin, CA 92780

Phone: (714) 832-0064 Fax: (714) 832-0067

www.ocalab.com

4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.:

27827

Page:

1

of

3

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					<div>Lead by EPA 60108</div> <div>Arsenic by EPA 60108</div> <div>OCs by EPA 8081A</div> <div>PCBs by EPA 8082</div> <div>Title 22 Metals by EPA 60108/7471A</div> <div>Hexavalent Chromium by EPA 7199</div> <div>Asbestos by PLM</div> <div>PAHs by EPA 8270-SIM</div> <div>VOCs by EPA 8260B</div> <div>TPH-g.d.mo by EPA 8015B</div>										Standard: X	
Send Report To: Dennis Fee		Project Number: 211936010															72 Hour:	
Email: dfee@ninyoandmoore.com		PO #:					48 Hour:											
Address: 475 Goddard		Address (City / State): Los Angeles, CA					24 Hour:											
Irvine, CA 92618		EDD Required:					REMARKS / INSTRUCTIONS											
Phone: (949) 753-7070 Fax:		Sampled By: Aileen Chea / Skylar Lee																
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type													
1 B34-2.5	5	4/5/23	0800	SS	902 jar / 4 VOAS													
2 B34-5	1		0820												HOLD			
3 B34-10	1		0830												AC 4/5/23			
4 B35-2.5	1		0910															
5 B35-5	1		0923		6" sleeve / 4 VOAS										HOLD			
6 B35-10	1		0925												AC 4/5/23			
7 B46-0.5	1		0958		902 jar													
8 B46-2.5	5		1000		902 jar / 4 VOAS													
9 B46-5	1		1013		6" sleeve / 4 VOAS										AC 4/5/23			
10 B46-10	1		1015												AC 4/5/23			
11 B46-15	1		1025												HOLD			
12 B39-0.5	1		1049		902 jar													
13 B39-2.5	5		1052		902 jar / 4 VOAS													
14 B39-5	1		1100		6" sleeve / 4 VOAS													
No. of Samples: 14		Method of Shipment:					Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other											
Relinquished By:		Date:		Received By:		Date:		Sample Matrix:										
Time:				Time:				DW - Drinking Water										
Company:				Company:				GW - Groundwater										
Relinquished By:		Date:		Received By:		Date:		AQ - Aqueous										
Time:				Time:				WW - Wastewater										
Company:				Company:				SS - Soil / Solid										
Relinquished By:		Date:		Received By:		Date:		SW - Stormwater										
Time:				Time:				OT - Other										
Company:				Company:				2 coolers										
Relinquished By:		Date: 4/5/23		Received For OCA By:		Date: 4/5/23		Sample Integrity:										
Time: 1751				Time: 1751				@31.1°C										
Company: Ninyo & Moore				Company: OCA				Intact: <input checked="" type="checkbox"/> On Ice: <input checked="" type="checkbox"/> Yes No @ 18°C										

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

## Analysis Request & Chain of Custody Record



4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.: 27827

Page: 2 of 3

Sample	Container	Sample Date	Sample Time	Matrix	Container Type
15 B39-10	5	4/5/23	1102	SS	6" sleeve / 4 VOA's
16 B39-15	↓		1105		↓
17 B38-0.5	1		1237		9oz jar
18 B38-2.5	5		1239		9oz jar / 4 VOA's
19 B38-5	↓		<del>1253</del> 1253		6" sleeve / 4 VOA's
20 B38-10	↓		1255		↓
21 B38-15	↓		1258		↓
22 B37-0.5	1		1326		9oz jar
23 B37-2.5	5		1332		9oz jar / 4 VOA's
24 B37-5	↓		1342		6" sleeve / 4 VOA's
25 B37-10	↓		1344		↓
26 B37-15	↓		1346		9oz jar / 4 VOA's
27 B36-0.5	6		1420		9oz & 4oz jar / 4 VOA's
28 B36-2.5	↓	↓	1423	✓	↓

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

### n of Custody Record



4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.: 77821

Page: 3 of 3

ANALYSIS REQUEST / PRESERVATION							
Lead by EPA 6010B							
Arsenic by EPA 6010B							
OCs by EPA 8081A							
PCBs by EPA 8082	X	X	X	X	X	X	X
Title 22 Metals by EPA 6010B/7471A	X	X	X	X	X	X	X
Hexavalent Chromium by EPA 7199							
Asbestos by PLM							
PAHs by EPA 8270-SIM							
VOCs by EPA 8260B	X	X	X	X	X	X	X
TPH-gal,mo by EPA 8015B	X	X	X	X	X	X	X

REQUESTED  
TURN-AROUND-TIME

Standard: X

72 Hour:

48 Hour:

24 Hour: \_\_\_\_\_

REMARKS / INSTRUCTIONS

401 D

400

\_\_\_\_\_

\_\_\_\_\_

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11

100%

DW - Drinking Water

AQ = Aqueous

S - Soil / Solid

NT Other

---

/ No @ °C

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



# Sample Receipt Report

Laboratory Reference NAM 27827

Logged in by MM

Received: 04/05/23 17:51

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 2

Project #: 211936010

Sample Quantity

35 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): _____	Thermometer ID: _____	Adjusted Temp.: _____	
Shipping Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

## Notes

2 coolers at 3 and 1 °C IR#3 correction =+0 °C

Client Notified \_\_\_\_\_

By \_\_\_\_\_

On \_\_\_\_\_



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27827B

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 4/25/2023

Date Reported: 4/26/2023

Chain of Custody Received: ☒

Analytical Method: 6010B,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27827B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at °C, on ice.  
2 coolers at 3 and 1 °C IR#3 correction =+0 °C

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27827B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B34-5	27827-002	4/5/2023	4/5/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27827B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B34-5		27827-002	4/5/2023	17:51	4/5/2023	8:20	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Lead	6010B	3.2	mg/kg	04/25/23 12:45	04/26/23 12:49	--	1		
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBHV0424232	Lead	6010B	<0.80	mg/kg	04/24/23 13:30	04/25/23 11:50	--	1	

**QA/QC Report  
for  
Metals**

Reference #: NAM 27827B

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B**

Laboratory Sample #: 27859-001

Date of Extraction: 04/24/23 13:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Lead	04/25/23 12:00	04/25/23 12:10	62.0	20.0	30.5	30.0	0	0	2	75-125	20	M3,

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B**

Laboratory Sample #: HV0424232

Date of Extraction: 04/24/23 13:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Lead	04/25/23 11:54	04/25/23 11:57	--	20.0	18.6	17.3	93	86	7	80-120	20	--

# Data Qualifier Definitions

## Qualifier

M3 = The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

27859-001

6010B

Lead

MS/MSD

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected



## Miriam Molina

---

**From:** Dennis Fee <dfee@ninyoandmoore.com>  
**Sent:** Tuesday, April 25, 2023 11:49 AM  
**To:** Miriam Molina  
**Cc:** ocalab@sbcglobal.net  
**Subject:** RE: Report and Invoice-NAM 27827 LAUSD 49th Street PEA Rev1.0 (CRVI INCLUDED)

Hi Miriam,

I have one more round of analyses for 49<sup>th</sup> Street PEA. Please analyze the following samples on 2-day rush TAT so we have results by end of day Thursday:

- B4-W2-0.5: Arsenic STLC & TCLP - 27815-021
- B34-5: Lead by EPA 6010B - 27827-002

Thanks,



**Dennis Fee, EIT**  
Senior Project Engineer  
**Ninyo & Moore** | Geotechnical & Environmental Sciences Consultants  
475 Goddard, Suite 200 | Irvine, CA 92618  
949.753.7070 (x12210) | 714.926.4048 (Cell)  
35+ Years of Quality Service | [ninyoandmoore.com](http://ninyoandmoore.com)



**From:** Miriam Molina <miriamm@ocalab.com>  
**Sent:** Tuesday, April 18, 2023 11:00 AM  
**To:** Dennis Fee <dfee@ninyoandmoore.com>  
**Cc:** ocalab@sbcglobal.net  
**Subject:** RE: Report and Invoice-NAM 27827 LAUSD 49th Street PEA Rev1.0 (CRVI INCLUDED)

Sorry counted wrong- we'll aim for Friday but due to the rotation and prep time it looks we'll have the results on Monday.



**ORANGE COAST  
ANALYTICAL, INC.**

**Miriam Molina** | Project Manager  
3002 Dow Ave. Ste. 532 Tustin, CA, 92780  
Office: 714-832-0064 Cell: 714-721-5914 (Call/Text)  
[miriamm@ocalab.com](mailto:miriamm@ocalab.com)

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**From:** Dennis Fee [<mailto:dfee@ninyoandmoore.com>]  
**Sent:** Tuesday, April 18, 2023 10:54 AM  
**To:** Miriam Molina <[miriamm@ocalab.com](mailto:miriamm@ocalab.com)>  
**Cc:** [ocalab@sbcglobal.net](mailto:ocalab@sbcglobal.net)  
**Subject:** RE: Report and Invoice-NAM 27827 LAUSD 49th Street PEA Rev1.0 (CRVI INCLUDED)



## Analysis Request &amp; Chain of Custody Record

Lab Job No.:

27827

Page:

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of

3



ORANGE COAST ANALYTICAL, INC.

3002 Dow Avenue, Suite 532

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4620 East Elwood Street, Suite 4

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Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION				ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA				Lead by EPA 6010B	Arsenic by EPA 6010B	OCBs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g,mo by EPA 8015B	Standard: X	
Send Report To: Dennis Fee		Project Number: 211936010														72 Hour: _____	
Email: dfee@ninyoandmoore.com		PO #:														48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA														24 Hour: _____	
Phone: (949) 753-7070 Fax:		Sampled By: Aileen Chea / Skylar Lee															
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type											REMARKS / INSTRUCTIONS
1	B34-2.5	5	4/5/23	0800	SS	9oz jar / 4 VOAS											
2	B34-5	↓	↓	0820	↓	↓										HOLD	
3	B34-10	↓	↓	0830	↓	↓										AC 4/5/23	
4	B35-2.5	↓	↓	0910	↓	↓											
5	B35-5	↓	↓	0923	↓	6" sleeve / 4 VOAS										HOLD	
6	B35-10	↓	↓	0925	↓	↓										AC 4/5/23	
7	B46-0.5	1	↓	0958	↓	9oz jar											
8	B46-2.5	5	↓	1000	↓	9oz jar / 4 VOAS											
9	B46-5	↓	↓	1013	↓	6" sleeve / 4 VOAS										AC 4/5/23	
10	B46-10	↓	↓	1015	↓	↓										AC 4/5/23	
11	B46-15	↓	↓	1025	↓	↓										HOLD	
12	B39-0.5	1	↓	1049	↓	9oz jar											
13	B39-2.5	5	↓	1052	↓	9oz jar / 4 VOAS											
14	B39-5	↓	↓	1100	↓	6" sleeve / 4 VOAS											

No. of Samples: 14		Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other	
Relinquished By:	Date:	Received By:	Date:	Sample Matrix:	DW - Drinking Water
	Time:		Time:	GW - Groundwater	AQ - Aqueous
Company:		Company:		WW - Wastewater	SS - Soil / Solid
Relinquished By:	Date:	Received By:	Date:	SW - Stormwater	OT - Other
	Time:		Time:		
Company:		Company:			
Relinquished By:	Date: 4/5/23	Received For OCA By:	Date: 4/5/23	Sample Integrity:	2 coolers @ 3.1°C
	Time: 1751		Time: 1751	Intact: <input checked="" type="checkbox"/>	On Ice: Yes No @ 18°C
Company: Ninyo & Moore		Company: OCA			

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



Lab Job No.: 27824 Page: 2 of 3



No. of Samples: 14		Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other	
Relinquished By:	Date:	Received By:	Date:	Sample Matrix:	DW - Drinking Water
	Time:		Time:	GW - Groundwater	AQ - Aqueous
Company:		Company:		WW - Wastewater	SS - Soil / Solid
Relinquished By:	Date:	Received By:	Date:	SW - Stormwater	OT - Other
	Time:		Time:		
Company:		Company:			
Relinquished By:	Date: 4/5/23	Received For OCA By:	Date: 4/5/23	Sample Integrity:	
	Time: 1751		Time: 1751	Intact: _____ On Ice: Yes / No @ _____ °C	
Company: Nnyo & Moore		Company: OCA			

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.



## Analysis Request &amp; Chain of Custody Record

Lab Job No.: 27827 Page: 3 of 3

ORANGE COAST ANALYTICAL, INC.

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Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION												REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					Lead by EPA 6010B	Arsenic by EPA 6010B	OCs by EPA 8081A	PCBs by EPA 8082	Title 22 Metals by EPA 6010B/7471A	Hexavalent Chromium by EPA 7199	Asbestos by PLM	PAHs by EPA 8270-SIM	VOCs by EPA 8260B	TPH-g,d,mo by EPA 8015B	Standard: <u>X</u>			
Send Report To: Dennis Fee		Project Number: 211936010															72 Hour: _____			
Email: <a href="mailto:dfee@ninyoandmoore.com">dfee@ninyoandmoore.com</a>		PO #:															48 Hour: _____			
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA															24 Hour: _____			
Phone: (949) 753-7070 Fax:		EDD Required:																		
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type												REMARKS / INSTRUCTIONS			
29 B36-5	6	4/5/23	1440	SS	9oz jar / 4 vials												HOLD			
30 B36-10	↓	↓	1442	↓	↓												HOLD			
31 B43-0.5	1	↓	1515	↓	9oz jar															
32 B43-2.5	5	↓	1520	↓	9oz jar / 4 vials															
33 B43-5	↓	↓	1528	↓	6" sleeve / 4 vials															
34 B43-10	↓	↓	1530	↓	↓															
35 B43-15	↓	↓	1535	↓	9oz jar / 4 vials															
AC # 4/5/23																				
No. of Samples: <u>7</u> Method of Shipment: _____ Preservative: 1 = Ice 2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other																				
Relinquished By:	Date:	Received By:	Date:	Sample Matrix:																
	Time:		Time:	DW - Drinking Water																
Company:		Company:		GW - Groundwater																
Relinquished By:	Date:	Received By:	Date:	WW - Wastewater																
	Time:		Time:	SS - Soil / Solid																
Company:		Company:		SW - Stormwater																
				OT - Other																
Relinquished By:	Date: 4/5/23	Received For OCA By:	Date: 4/5/23	Sample Integrity:																
	Time: 1751		Time: 1751	Intact: _____ On Ice: Yes / No @ _____ °C																
Company: Ninyo & Moore		Company: OCA																		

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

## Sample Receipt Report

Laboratory Reference NAM 27827

Logged in by MM

Received: 04/05/23 17:51

Company Name: Ninvo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 2

Project #: 211936010

Sample Quantity

35 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): _____	Thermometer ID: _____	Adjusted Temp.: _____	
Shipping Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

### Notes

2 coolers at 3 and 1 °C IR#3 correction =+0 °C

Client Notified \_\_\_\_\_

By \_\_\_\_\_

On \_\_\_\_\_



**Orange Coast Analytical, Inc.**

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**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2023

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27828

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 4/5/2023

Date Reported: 4/14/2023

Chain of Custody Received: ☒

Analytical Method: 8015B, 8260B, 6010B, 7471A,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27828  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at °C, on ice.  
2 coolers at 0 and 1 °C IR#3 correction =+0 °C

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27828  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
WC-040523	27828-001	4/5/2023	4/5/2023	Soil



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27828  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Extractable Fuel Hydrocarbons (EPA 8015B)***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
WC-040523	27828-001	4/5/2023 17:51	4/5/2023 15:55	4/6/2023 16:00	4/13/2023 18:07	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	150			Octacosane	121	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
WC-040523	27828-001	4/5/2023 17:51	4/5/2023 15:55	4/6/2023 16:00	4/13/2023 18:07	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	880			Octacosane	121	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
Method Blank	MBLY0406233			4/6/2023 16:00	4/11/2023 18:06	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
DROs	<10			Octacosane	104	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					
Method Blank	MBLY0406233			4/6/2023 16:00	4/11/2023 18:06	Soil
<u>ANALYTE</u>	<u>mg/kg</u>			<u>Surrogate:</u>	<u>% RC*</u>	
MROs	<50			Octacosane	104	
<u>Dilution Factor:</u>	1			* Acc Recovery:	40-160 %	
<u>Data Qualifiers:</u>	None					

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27828  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Gasoline Range Organics - GROs (EPA 8015B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
WC-040523	27828-001	4/5/2023 17:51	4/5/2023 15:55	4/11/2023 9:30	4/11/2023 12:26	Soil

<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
GROs <sup>1</sup>	<0.20	$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	95
<u>Dilution Factor:</u> 1		* Acceptable Recovery: 32-153 %	
<u>Data Qualifiers:</u> None			

Method Blank	MBLY0411231	4/11/2023 9:30	4/11/2023 10:44	Soil
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<u>ANALYTE</u>	<u>mg/kg</u>	<u>Surrogate:</u>	<u>% RC*</u>
GROs <sup>1</sup>	<0.20	$\alpha$ - $\alpha$ - $\alpha$ -Trifluorotoluene	93
<u>Dilution Factor:</u> 1		* Acceptable Recovery: 32-153 %	
<u>Data Qualifiers:</u> None			

Gasoline Range Organics (GROs) are quantitated against a gasoline standard.

Mr. Dennis Fee  
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Irvine, CA, 92618

Lab Reference #: NAM 27828  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
WC-040523	27828-001	4/5/2023 17:51	4/5/2023 15:55	4/6/2023 11:45	4/7/2023 16:32	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>ug/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	88	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	84	58-130 %	
4-Bromofluorobenzene:	89	40-135 %	

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Lab Reference #: NAM 27828  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Volatile Organics by GC/MS (EPA 8260B)**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBHT0406233			4/6/2023 11:45	4/7/2023 11:34	Soil

<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>	<u>ANALYTE</u>	<u>CAS #</u>	<u>µg/kg</u>
t-Amyl methyl ether (TAME)	994-05-8	<10	trans-1,3-Dichloropropene	10061-02-6	<2.5
Benzene	71-43-2	<2.0	Diisopropyl ether (DIPE)	108-20-3	<10
Bromobenzene	108-86-1	<2.5	Ethyl t-butyl ether (ETBE)	637-92-3	<10
Bromochloromethane	74-97-5	<2.5	Ethylbenzene	100-41-4	<2.5
Bromodichloromethane	75-27-4	<2.5	Hexachlorobutadiene	87-68-3	<5.0
Bromoform	75-25-2	<2.5	Isopropylbenzene	98-82-8	<2.5
Bromomethane	74-83-9	<10	4-Isopropyltoluene	99-87-6	<2.5
tert-Butyl alcohol (TBA)	75-65-0	<50	Methyl t-butyl ether (MTBE)	1634-04-4	<5.0
n-Butylbenzene	104-51-8	<2.5	Methylene chloride	75-09-2	<10
sec-Butylbenzene	135-98-8	<2.5	Naphthalene	91-20-3	<2.5
tert-Butylbenzene	98-06-6	<2.5	n-Propylbenzene	103-65-1	<2.5
Carbon tetrachloride	56-23-5	<2.5	Styrene	100-42-5	<2.5
Chlorobenzene	108-90-7	<2.5	1,1,1,2-Tetrachloroethane	630-20-6	<2.5
Chloroethane	75-00-3	<5.0	1,1,2,2-Tetrachloroethane	79-34-5	<2.5
Chloroform	67-66-3	<2.5	Tetrachloroethene	127-18-4	<2.5
Chloromethane	74-87-3	<5.0	Toluene	108-88-3	<2.5
2-Chlorotoluene	95-49-8	<2.5	1,2,3-Trichlorobenzene	87-61-6	<2.5
4-Chlorotoluene	106-43-4	<2.5	1,2,4-Trichlorobenzene	120-82-1	<2.5
Dibromochloromethane	124-48-1	<2.5	1,1,1-Trichloroethane	71-55-6	<2.5
1,2-Dibromo-3-chloropropane	96-12-8	<5.0	1,1,2-Trichloroethane	79-00-5	<2.5
1,2-Dibromoethane	106-93-4	<2.5	Trichloroethene	79-01-6	<2.5
Dibromomethane	74-95-3	<2.5	Trichlorofluoromethane	75-69-4	<5.0
1,2-Dichlorobenzene	95-50-1	<2.5	1,2,3-Trichloropropane	96-18-4	<2.5
1,3-Dichlorobenzene	541-73-1	<2.5	1,2,4-Trimethylbenzene	95-63-6	<2.5
1,4-Dichlorobenzene	106-46-7	<2.5	1,3,5-Trimethylbenzene	108-67-8	<2.5
Dichlorodifluoromethane	75-71-8	<2.5	Vinyl Chloride	75-01-4	<2.5
1,1-Dichloroethane	75-34-3	<2.5	m- & p-Xylenes	179601-23-1	<5.0
1,2-Dichloroethane	107-06-2	<2.5	o-Xylene	95-47-6	<2.5
1,1-Dichloroethene	75-35-4	<2.5			
cis-1,2-Dichloroethene	156-59-2	<2.5			
trans-1,2-Dichloroethene	156-60-5	<2.5			
1,2-Dichloropropane	78-87-5	<2.5			
1,3-Dichloropropane	142-28-9	<2.5			
2,2-Dichloropropane	594-20-7	<2.5			
1,1-Dichloropropene	563-58-6	<2.5			
cis-1,3-Dichloropropene	10061-01-5	<2.5			

<u>Surrogate:</u>	<u>% RC</u>	<u>Acceptable % RC</u>	<u>Dilution Factor:</u> 1
Dibromofluoromethane:	87	65-130 %	<u>Data Qualifiers:</u> None
Toluene-d8:	86	58-130 %	
4-Bromofluorobenzene:	87	40-135 %	

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Lab Reference #: NAM 27828  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
WC-040523	27828-001	4/5/2023 17:51	4/5/2023 15:55	Soil

<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>
Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Barium	6010B	120	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Chromium	6010B	12	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Cobalt	6010B	9.5	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Copper	6010B	16	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Lead	6010B	15	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Mercury	7471A	0.34	mg/kg	04/06/23 16:30	04/11/23 11:36	--	1
Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Nickel	6010B	11	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Vanadium	6010B	37	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1
Zinc	6010B	64	mg/kg	04/06/23 12:00	04/12/23 10:07	--	1

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Lab Reference #: NAM 27828  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received	Date Sampled		Matrix			
Method Blank						Soil			
MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF	
MBIR0406234	Antimony	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Arsenic	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Barium	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Beryllium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Cadmium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Chromium	6010B	<0.50	mg/kg	04/06/23 12:00	04/12/23 14:06	--	1	
MBIR0406234	Cobalt	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Copper	6010B	<5.0	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Lead	6010B	<0.80	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406236	Mercury	7471A	<0.10	mg/kg	04/06/23 16:30	04/11/23 10:56	--	1	
MBIR0406234	Molybdenum	6010B	<1.0	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Nickel	6010B	<1.0	mg/kg	04/06/23 12:00	04/12/23 14:06	--	1	
MBIR0406234	Selenium	6010B	<4.8	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Silver	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Thallium	6010B	<2.0	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Vanadium	6010B	<0.50	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	
MBIR0406234	Zinc	6010B	<5.0	mg/kg	04/06/23 12:00	04/10/23 14:14	--	1	

**QA/QC Report**  
for  
**Extractable Fuel Hydrocarbons (EPA 8015B/8015M)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/6/2023 16:00

Date of Analysis: 4/11/2023 19:32

Dup Date of Analysis: 4/11/2023 19:53

Laboratory Sample #: 27829-001

MS/MSD Qualifiers: R4,

Reference #: NAM 27828

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
EFH as Diesel	0.00	1000	1040	1300	104	130	22	8-193	20	<input checked="" type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Octacosane	100	128	<input type="checkbox"/>	99	98	<input type="checkbox"/>	40-160

**Laboratory Control Sample**

Date of Extraction: 4/6/2023 16:00

Date of Analysis: 4/11/2023 18:49

Dup Date of Analysis: 4/11/2023 19:10

Laboratory Sample #: LY0406233

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
EFH as Diesel	1000	1030	1010	103	101	2	17-180	42	<input type="checkbox"/>

**QA/QC Report**  
for  
**Volatile Fuel Hydrocarbons (EPA 8015B)**  
Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/11/2023 9:30

Date of Analysis: 4/11/2023 11:45

Dup Date of Analysis: 4/11/2023 12:06

Laboratory Sample #: 27828-001

MS/MSD Qualifiers: None

Reference #: NAM 27828

Analyte	R	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
VFH as Gasoline	0.00	0.250	0.123	0.165	49	66	29	20-144	50	<input type="checkbox"/>

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
$\alpha$ - $\alpha$ -Trifluorotoluene	82	84	<input type="checkbox"/>	111	86	<input type="checkbox"/>	32-153

**Laboratory Control Sample**

Date of Extraction: 4/11/2023 9:30

Date of Analysis: 4/11/2023 11:04

Dup Date of Analysis: 4/11/2023 11:25

Laboratory Sample #: LY0411231

LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
VFH as Gasoline	0.250	0.168	0.196	67	78	15	38-130	27	<input type="checkbox"/>



**QA/QC Report**  
for  
**Volatile Organic Compounds (8260B)**  
Reporting Units: ppb

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Date of Extraction: 4/7/2023 9:26  
Date of Analysis: 4/7/2023 12:54  
Dup Date of Analysis: 4/7/2023 13:14  
Laboratory Sample #: 27829-010  
MS/MSD Qualifiers: None  
Reference #: NAM 27828

Analyte	R	Spike Conc.	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Benzene	0.00	10.0	9.55	9.34	96	93	2	70-138	20	--
Chlorobenzene	0.00	10.0	9.67	9.48	97	95	2	70-132	20	--
1,1-Dichloroethene	0.00	10.0	7.13	7.04	71	70	1	46-130	20	--
Toluene	0.00	10.0	9.05	8.78	91	88	3	70-130	20	--
Trichloroethene	0.00	10.0	8.93	8.69	89	87	3	70-135	20	--

**Surrogate Recoveries for Spike Samples**

Surrogate (%RC)	MS	MSD	Qual	LCS	LCSD	Qual	ACP % RC
Dibromofluoromethane	88	84	<input type="checkbox"/>	88	90	<input type="checkbox"/>	65-130
Toluene-d8	86	80	<input type="checkbox"/>	86	87	<input type="checkbox"/>	58-130
4-Bromofluorobenzene	89	79	<input type="checkbox"/>	89	91	<input type="checkbox"/>	40-135

**Laboratory Control Sample (LCS) / Laboratory Control Sample Duplicate (LCSD)**

Date of Extraction: 4/7/2023 9:26  
Date of Analysis: 4/7/2023 12:14  
Dup Date of Analysis: 4/7/2023 12:34  
Laboratory Sample #: HT0407231  
LCS/LCSD Qualifiers: None

Analyte	Spike Conc.	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Benzene	10.0	9.99	9.59	100	96	4	70-134	20	--
Chlorobenzene	10.0	10.3	9.85	103	99	4	70-130	20	--
1,1-Dichloroethene	10.0	7.82	7.41	78	74	5	48-130	20	--
Toluene	10.0	9.85	9.49	99	95	4	70-130	20	--
Trichloroethene	10.0	9.71	9.00	97	90	8	70-132	20	--

**QA/QC Report  
for  
Metals**

Reference #: NAM 27828

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

6010B/7471A

Laboratory Sample #: 27827-024

Date of Extraction: 04/06/23 12:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Antimony	04/10/23 14:31	04/10/23 14:34	0.00	20.0	6.00	4.33	30	22	32	75-125	20	M2, R2,
Arsenic	04/10/23 14:31	04/10/23 14:34	0.00	20.0	21.8	22.0	109	110	1	75-125	20	--
Barium	04/10/23 14:31	04/10/23 14:34	94.0	20.0	122	120	140	130	2	75-125	20	M3,
Beryllium	04/10/23 14:31	04/10/23 14:34	0.00	20.0	20.0	20.0	100	100	0	75-125	20	--
Cadmium	04/10/23 14:31	04/10/23 14:34	0.00	20.0	17.9	18.0	89	90	1	75-125	20	--
Chromium	04/10/23 14:31	04/10/23 14:34	14.0	20.0	35.2	33.6	106	98	5	75-125	20	--
Cobalt	04/10/23 14:31	04/10/23 14:34	9.80	20.0	30.1	28.3	102	92	6	75-125	20	--
Copper	04/10/23 14:31	04/10/23 14:34	13.0	20.0	33.2	33.1	101	100	0	75-125	20	--
Lead	04/10/23 14:31	04/10/23 14:34	3.90	20.0	21.8	22.0	89	90	1	75-125	20	--
Molybdenum	04/10/23 14:31	04/10/23 14:34	0.00	20.0	17.7	17.8	89	89	1	75-125	20	--
Nickel	04/10/23 14:31	04/10/23 14:34	9.60	20.0	31.3	28.8	108	96	8	75-125	20	--
Selenium	04/10/23 14:31	04/10/23 14:34	0.00	20.0	17.0	17.4	85	87	2	75-125	20	--
Silver	04/10/23 14:31	04/10/23 14:34	0.00	20.0	17.6	17.5	88	88	1	75-125	20	--
Thallium	04/10/23 14:31	04/10/23 14:34	0.00	20.0	13.3	13.0	67	65	2	75-125	20	M2,
Vanadium	04/10/23 14:31	04/10/23 14:34	37.0	20.0	57.1	55.4	100	92	3	75-125	20	--
Zinc	04/10/23 14:31	04/10/23 14:34	46.0	20.0	67.6	66.7	108	103	1	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

6010B/7471A

Laboratory Sample #: IR0406234

Date of Extraction: 04/06/23 12:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Antimony	04/10/23 14:17	04/10/23 14:20	--	20.0	20.0	19.5	100	98	3	80-120	20	--
Arsenic	04/10/23 14:17	04/10/23 14:20	--	20.0	20.3	20.0	101	100	1	80-120	20	--
Barium	04/10/23 14:17	04/10/23 14:20	--	20.0	20.6	20.3	103	101	1	80-120	20	--
Beryllium	04/10/23 14:17	04/10/23 14:20	--	20.0	19.5	19.1	98	96	2	80-120	20	--
Cadmium	04/10/23 14:17	04/10/23 14:20	--	20.0	18.8	18.3	94	91	3	80-120	20	--
Chromium	04/10/23 14:17	04/10/23 14:20	--	20.0	21.2	20.5	106	102	3	80-120	20	--
Cobalt	04/10/23 14:17	04/10/23 14:20	--	20.0	21.1	20.6	106	103	2	80-120	20	--
Copper	04/10/23 14:17	04/10/23 14:20	--	20.0	20.4	19.7	102	99	3	80-120	20	--
Lead	04/10/23 14:17	04/10/23 14:20	--	20.0	20.7	19.8	104	99	4	80-120	20	--
Molybdenum	04/10/23 14:17	04/10/23 14:20	--	20.0	19.8	19.3	99	96	3	80-120	20	--
Nickel	04/10/23 14:17	04/10/23 14:20	--	20.0	22.0	21.6	110	108	2	80-120	20	--
Selenium	04/10/23 14:17	04/10/23 14:20	--	20.0	18.8	18.7	94	94	1	80-120	20	--
Silver	04/10/23 14:17	04/10/23 14:20	--	20.0	19.0	18.4	95	92	3	80-120	20	--
Thallium	04/10/23 14:17	04/10/23 14:20	--	20.0	20.3	20.4	101	102	0	80-120	20	--
Vanadium	04/10/23 14:17	04/10/23 14:20	--	20.0	19.8	19.1	99	96	4	80-120	20	--
Zinc	04/10/23 14:17	04/10/23 14:20	--	20.0	21.5	21.0	108	105	2	80-120	20	--

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

6010B/7471A

Laboratory Sample #: 27827-020

Date of Extraction: 04/06/23 16:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Mercury	04/11/23 13:24	04/11/23 13:26	0.13	1.00	0.959	0.973	83	84	1	80-120	20	--

**QA/QC Report  
for  
Metals**

Reference #: NAM 27828

Reporting units: ppm

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B/7471A**

Laboratory Sample #: IR0406235

Date of Extraction: 04/06/23 16:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Mercury	04/11/23 10:58	04/11/23 11:00	--	1.00	0.984	0.990	98	99	1	80-120	20	--

# Data Qualifier Definitions

## Qualifier

M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

27827-024	6010B	Antimony	MS/MSD
-----------	-------	----------	--------

27827-024	6010B	Thallium	MS/MSD
-----------	-------	----------	--------

M3 = The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

27827-024	6010B	Barium	MS/MSD
-----------	-------	--------	--------

R2 = RPD/RSD exceeded the laboratory acceptance limit.

27827-024	6010B	Antimony	MS/MSD
-----------	-------	----------	--------

R4 = MS/MSD RPD exceeded the method acceptance limit. Recovery met acceptance criteria.

27829-001	8015B	EFH	MS/MSD
-----------	-------	-----	--------

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

### of Custody Record



4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.:

27820

Page:

O

## ANALYSIS REQUEST / PRESERVATION

REQUESTED  
TURN-AROUND-TIME

Standard:	X
-----------	---

72 Hour:

48 Hour:

24 Hour:

## REMARKS / INSTRUCTIONS

[illegible]

No. of Samples:	Method of Shipment:	Preservative:	1 = Ice	2 = HCl	3 = HNO <sub>3</sub>	4 = H <sub>2</sub> SO <sub>4</sub>	5 = NaOH	6 = Other
-----------------	---------------------	---------------	---------	---------	----------------------	------------------------------------	----------	-----------

Relinquished By:	Date:	Received By:	Date:	Sample Matrix:
------------------	-------	--------------	-------	----------------

Date:	Date:	Sample Matrix:	DW - Drinking Water
-------	-------	----------------	---------------------

Time:	Time:	GW - Groundwater	

Company:	Company:	AQ - Aqueous

Relinquished By:	Date:	Received By:	Date:	WW - Wastewater	SS - Soil / Solid
------------------	-------	--------------	-------	-----------------	-------------------

Time: \_\_\_\_\_ Time: \_\_\_\_\_

Company:	Company:	SW - Stormwater	OT - Other
----------	----------	-----------------	------------

Relinquished By:	11/6/22	Received For: OCA By:	11/6/22
------------------	---------	-----------------------	---------

Reimbursement By:  Date: 4/5/23

Reimbursement By:  Date: 4/5/23

Sample Integrity: 

Time: 1:15

Company: Ninjo & Moore      Company: OCACA      Intact: \_\_\_\_\_ On Ice: yes / No @ \_\_\_\_\_ C

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by \_\_\_\_\_.

Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

## Sample Receipt Report

Laboratory Reference NAM 27828

Logged in by MM

Received: 04/05/23 17:51

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 2

Project #: 211936010

Sample Quantity

1 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): _____	Thermometer ID: _____	Adjusted Temp.: _____	
Shipping Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

### Notes

2 coolers at 0 and 1 °C IR#3 correction =+0 °C

Client Notified \_\_\_\_\_

By \_\_\_\_\_

On \_\_\_\_\_



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2025

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27893

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 5/6/2023

Date Reported: 5/10/2023

Chain of Custody Received: ☒

Analytical Method: 6010B,

Mark Noorani, Laboratory Director



Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27893  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 4°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27893  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B4-W4-0.5	27893-001	5/6/2023	5/6/2023	Soil
B4-W4-2.5	27893-002	5/6/2023	5/6/2023	Soil
B4-W3-0.5	27893-003	5/6/2023	5/6/2023	Soil
B4-W3-2.5	27893-004	5/6/2023	5/6/2023	Soil
B41A-0.5	27893-005	5/6/2023	5/6/2023	Soil
B40A-0.5	27893-006	5/6/2023	5/6/2023	Soil
B34-NE2-0.5	27893-007	5/6/2023	5/6/2023	Soil
B34-NE2-2.5	27893-008	5/6/2023	5/6/2023	Soil
B34-NE-0.5	27893-009	5/6/2023	5/6/2023	Soil
B34-NE-2.5	27893-010	5/6/2023	5/6/2023	Soil
B34-NW-0.5	27893-011	5/6/2023	5/6/2023	Soil
B34-NW2-0.5	27893-012	5/6/2023	5/6/2023	Soil
B34-NW2-2.5	27893-013	5/6/2023	5/6/2023	Soil
B34-SW-0.5	27893-014	5/6/2023	5/6/2023	Soil
B34-SW-2.5	27893-015	5/6/2023	5/6/2023	Soil
B34-SW2-0.5	27893-016	5/6/2023	5/6/2023	Soil
B34-SW2-2.5	27893-017	5/6/2023	5/6/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27893  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B4-W3-0.5		27893-003	5/6/2023	11:50	5/6/2023	8:13	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Arsenic	6010B	53	mg/kg	05/08/23 16:00	05/09/23 13:50	--	1		
B41A-0.5		27893-005	5/6/2023	11:50	5/6/2023	8:37	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Arsenic	6010B	89	mg/kg	05/08/23 16:00	05/09/23 13:53	--	1		
B34-NE-0.5		27893-009	5/6/2023	11:50	5/6/2023	9:21	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Lead	6010B	30	mg/kg	05/08/23 16:00	05/09/23 13:56	--	1		
B34-NE-2.5		27893-010	5/6/2023	11:50	5/6/2023	9:26	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Lead	6010B	360	mg/kg	05/08/23 16:00	05/09/23 14:00	--	1		
B34-SW-0.5		27893-014	5/6/2023	11:50	5/6/2023	9:50	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Lead	6010B	17	mg/kg	05/08/23 16:00	05/09/23 14:03	--	1		
B34-SW-2.5		27893-015	5/6/2023	11:50	5/6/2023	9:54	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>		
Lead	6010B	5.8	mg/kg	05/08/23 16:00	05/09/23 14:06	--	1		

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27893  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received	Date Sampled		Matrix			
Method Blank						Soil			
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBIR0508233	Arsenic	6010B	<2.0	mg/kg	05/08/23 16:00	05/09/23 13:27	--	1	
MBIR0508233	Lead	6010B	<0.80	mg/kg	05/08/23 16:00	05/09/23 13:27	--	1	

**QA/QC Report  
for  
Metals**

Reference #: NAM 27893

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B**

Laboratory Sample #: 27892-001

Date of Extraction: 05/08/23 16:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Arsenic	05/09/23 13:36	05/09/23 13:38	0.00	20.0	21.9	22.3	109	111	2	75-125	20	--
Lead	05/09/23 13:36	05/09/23 13:38	3.70	20.0	23.6	24.3	100	103	3	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B**

Laboratory Sample #: IR0508233

Date of Extraction: 05/08/23 16:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Arsenic	05/09/23 13:30	05/09/23 13:33	--	20.0	21.8	22.5	109	113	3	80-120	20	--
Lead	05/09/23 13:30	05/09/23 13:33	--	20.0	22.4	22.8	112	114	2	80-120	20	--

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

## Analysis Request &amp; Chain of Custody Record

Lab Job No.:

27893

Page:

1

of

2



ORANGE COAST ANALYTICAL, INC.

3002 Dow Avenue, Suite 532

Tustin, CA 92780

Phone: (714) 832-0064 Fax: (714) 832-0067

www.ocalab.com

4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

## ANALYSIS REQUEST / PRESERVATION

REQUESTED  
TURN-AROUND-TIME

Standard: \_\_\_\_\_

72 Hour: X

48 Hour: \_\_\_\_\_

24 Hour: \_\_\_\_\_

## REMARKS / INSTRUCTIONS

CUSTOMER INFORMATION		PROJECT INFORMATION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Company:	Ninyo & Moore	Project Name:	LAUSD 49th Street PEA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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B4-W4-0.5	1	5/6/23	0803	SS	902 jar																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							</

No. of Samples: 14 Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO<sub>3</sub> 4 = H<sub>2</sub>SO<sub>4</sub> 5 = NaOH 6 = Other

Relinquished By: <i>Aileen Chea/Orlun</i>	Date: 5/6/23 Time: 1150	Received By:	Date:	Sample Matrix:	DW - Drinking Water
Company: Ninyo & Moore		Company:	Time:	GW - Groundwater	AQ - Aqueous
Relinquished By:	Date:	Received By:	Date:	WW - Wastewater	SS - Soil / Solid
Company:	Time:	Company:	Time:	SW - Stormwater	OT - Other
Relinquished By:	Date:	Received For OCA By:	Date: 5/6/23	Sample Integrity:	4.0 + 0.34.5 2 IR 3
Company:	Time:	Company: OCA, CA	Time: 1150	Intact: _____	On Ice: <input checked="" type="checkbox"/> Yes No @ _____ °C

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

### of Custody Record



4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.:

27892

Page:

4

0

2

## ANALYSIS REQUEST / PRESERVATION

REQUESTED TURN-AROUND-TIME	NO. OF SUBMITTERS	NO. OF SOLUTIONS	NO. OF PROBLEMS	NO. OF SOLVED PROBLEMS	NO. OF UNSATISFACTORY SOLUTIONS	NO. OF UNSATISFACTORY PROBLEMS
1	1	1	1	1	0	0
2	1	1	1	1	0	0
3	1	1	1	1	0	0
4	1	1	1	1	0	0
5	1	1	1	1	0	0
6	1	1	1	1	0	0
7	1	1	1	1	0	0
8	1	1	1	1	0	0
9	1	1	1	1	0	0
10	1	1	1	1	0	0
11	1	1	1	1	0	0
12	1	1	1	1	0	0
13	1	1	1	1	0	0
14	1	1	1	1	0	0
15	1	1	1	1	0	0
16	1	1	1	1	0	0
17	1	1	1	1	0	0
18	1	1	1	1	0	0
19	1	1	1	1	0	0
20	1	1	1	1	0	0
21	1	1	1	1	0	0
22	1	1	1	1	0	0
23	1	1	1	1	0	0
24	1	1	1	1	0	0
25	1	1	1	1	0	0
26	1	1	1	1	0	0
27	1	1	1	1	0	0
28	1	1	1	1	0	0
29	1	1	1	1	0	0
30	1	1	1	1	0	0
31	1	1	1	1	0	0
32	1	1	1	1	0	0
33	1	1	1	1	0	0
34	1	1	1	1	0	0
35	1	1	1	1	0	0
36	1	1	1	1	0	0
37	1	1	1	1	0	0
38	1	1	1	1	0	0
39	1	1	1	1	0	0
40	1	1	1	1	0	0
41	1	1	1	1	0	0
42	1	1	1	1	0	0
43	1	1	1	1	0	0
44	1	1	1	1	0	0
45	1	1	1	1	0	0
46	1	1	1	1	0	0
47	1	1	1	1	0	0
48	1	1	1	1	0	0
49	1	1	1	1	0	0
50	1	1	1	1	0	0
51	1	1	1	1	0	0
52	1	1	1	1	0	0
53	1	1	1	1	0	0
54	1	1	1	1	0	0
55	1	1	1	1	0	0
56	1	1	1	1	0	0
57	1	1	1	1	0	0
58	1	1	1	1	0	0
59	1	1	1	1	0	0
60	1	1	1	1	0	0
61	1	1	1	1	0	0
62	1	1	1	1	0	0
63	1	1	1	1	0	0
64	1	1	1	1	0	0
65	1	1	1	1	0	0
66	1	1	1	1	0	0
67	1	1	1	1	0	0
68	1	1	1	1	0	0
69	1	1	1	1	0	0
70	1	1	1			

Standard:

72 Hour: ~~X~~

48 Hour:

24 Hour: \_\_\_\_\_

## REMARKS / INSTRUCTIONS

CUSTOMER INFORMATION		PROJECT INFORMATION					
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					
Send Report To: Dennis Fee		Project Number: 211936010					
Email: dfree@ninyoandmoore.com		PO #:					
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA					
Phone: (949) 753-7070 Fax:		EDD Required: <u>Scribe EDD</u>					
		Sampled By: <u>Aileen Chea</u>					
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type		
B34-SW-2.5	1	5/6/23	0954	SS	902 jar		
B34-SW2-0.5	↓	↓	1010	↓	↓		
B34-SW2-2.5	↓	↓	1021	↓	↓		
AC 5/6/23							

No. of Samples: 3 Method of Shipment: \_\_\_\_\_ Preservative: 1 = Ice 2 = HCl 3 = HNO<sub>3</sub> 4 = H<sub>2</sub>SO<sub>4</sub> 5 = NaOH 6 = Other

Relinquished By: Aileen Chea/Aileen Date: 5/6/23  
Time: 1150

Date:

DW - Drinking Water

AQ - Aqueous

SS - Soil / Solid

OT - Other

Date:

Company:

Received For OCA By:

Date: 5-6-22

Time: 1150

$$4 + 4 = 4 \dots$$

Intact: On Ice: Yes / No @ <sup>25</sup>°C

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# Sample Receipt Report

Laboratory Reference NAM 27893

Logged in by MM

Received: 05/06/23 11:50

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

17 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>4</u>	Thermometer ID: <u>IR#3</u>	Adjusted Temp.: <u>4+(-0)=4</u>	
Shipping Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

Notes

Client Notified

By

On



714-449-9937  
562-646-1611

11007 FOREST PLACE  
SANTA FE SPRINGS, CA 90670  
WWW.JONESENV.COM

10 April 2023

Dennis Fee  
Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Re: 211936010

Enclosed are the results of analyses for samples received by the laboratory on 04/06/23. 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", is positioned above the printed name.

Colby Wakeman  
Lab Director

Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis FeeReported  
04/10/23 10:09

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV-1-15'	J230852-001	Soil Gas	04/06/2023 08:20	04/06/2023 05:52
SV-1-15' REP	J230852-002	Soil Gas	04/06/2023 08:23	04/06/2023 05:52
SV-1-5'	J230852-003	Soil Gas	04/06/2023 08:37	04/06/2023 05:52
SV-2-5'	J230852-004	Soil Gas	04/06/2023 09:06	04/06/2023 05:52
SV-2-15'	J230852-005	Soil Gas	04/06/2023 09:26	04/06/2023 05:52
SV-3-5'	J230852-006	Soil Gas	04/06/2023 09:35	04/06/2023 05:52
SV-3-15'	J230852-007	Soil Gas	04/06/2023 09:49	04/06/2023 05:52
SV-4-5'	J230852-008	Soil Gas	04/06/2023 10:09	04/06/2023 05:52
SV-4-15'	J230852-009	Soil Gas	04/06/2023 10:18	04/06/2023 05:52
SV-5-5'	J230852-010	Soil Gas	04/06/2023 10:45	04/06/2023 05:52
SV-5-15'	J230852-011	Soil Gas	04/06/2023 11:05	04/06/2023 05:52
SV-6-5'	J230852-012	Soil Gas	04/06/2023 11:17	04/06/2023 05:52
SV-6-15'	J230852-013	Soil Gas	04/06/2023 11:34	04/06/2023 05:52

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.

Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

## DETECTIONS SUMMARY

Sample ID: SV-1-15'

Laboratory ID: J230852-001

Analyte	Result	Reporting Limit	Units	Method	Notes
Freon 12	44	16	µg/m3	EPA 8260	
Ethylbenzene	31	8	µg/m3	EPA 8260	
Tetrachloroethene	20	8	µg/m3	EPA 8260	
Toluene	92	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	22	8	µg/m3	EPA 8260	
m,p-Xylene	140	16	µg/m3	EPA 8260	
o-Xylene	41	8	µg/m3	EPA 8260	

Sample ID: SV-1-15' REP

Laboratory ID: J230852-002

Analyte	Result	Reporting Limit	Units	Method	Notes
Freon 12	42	16	µg/m3	EPA 8260	
Ethylbenzene	32	8	µg/m3	EPA 8260	
Tetrachloroethene	26	8	µg/m3	EPA 8260	
Toluene	82	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	20	8	µg/m3	EPA 8260	
m,p-Xylene	135	16	µg/m3	EPA 8260	
o-Xylene	39	8	µg/m3	EPA 8260	

Sample ID: SV-1-5'

Laboratory ID: J230852-003

Analyte	Result	Reporting Limit	Units	Method	Notes
Freon 12	32	16	µg/m3	EPA 8260	
Ethylbenzene	13	8	µg/m3	EPA 8260	
Tetrachloroethene	27	8	µg/m3	EPA 8260	
Toluene	46	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	9	8	µg/m3	EPA 8260	
m,p-Xylene	52	16	µg/m3	EPA 8260	
o-Xylene	15	8	µg/m3	EPA 8260	

Jones Environmental, Inc.



Colby Wakeman  
Lab Director

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Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

### DETECTIONS SUMMARY

**Sample ID:** SV-2-5'

**Laboratory ID:** J230852-004

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	28	8	µg/m3	EPA 8260	
Toluene	39	8	µg/m3	EPA 8260	
m,p-Xylene	25	16	µg/m3	EPA 8260	
o-Xylene	8	8	µg/m3	EPA 8260	

**Sample ID:** SV-2-15'

**Laboratory ID:** J230852-005

Analyte	Result	Reporting Limit	Units	Method	Notes
Freon 12	18	16	µg/m3	EPA 8260	
Tetrachloroethene	26	8	µg/m3	EPA 8260	
Toluene	22	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	11	8	µg/m3	EPA 8260	
m,p-Xylene	26	16	µg/m3	EPA 8260	

**Sample ID:** SV-3-5'

**Laboratory ID:** J230852-006

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	10	8	µg/m3	EPA 8260	
Tetrachloroethene	16	8	µg/m3	EPA 8260	
Toluene	59	8	µg/m3	EPA 8260	
m,p-Xylene	37	16	µg/m3	EPA 8260	
o-Xylene	12	8	µg/m3	EPA 8260	

**Sample ID:** SV-3-15'

**Laboratory ID:** J230852-007

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	26	8	µg/m3	EPA 8260	
Toluene	29	8	µg/m3	EPA 8260	
m,p-Xylene	20	16	µg/m3	EPA 8260	

Jones Environmental, Inc.



Colby Wakeman  
Lab Director

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Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

### DETECTIONS SUMMARY

**Sample ID:** SV-4-5'

**Laboratory ID:** J230852-008

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	30	8	µg/m3	EPA 8260	
Toluene	22	8	µg/m3	EPA 8260	

**Sample ID:** SV-4-15'

**Laboratory ID:** J230852-009

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	14	8	µg/m3	EPA 8260	
Tetrachloroethene	23	8	µg/m3	EPA 8260	
Toluene	57	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	10	8	µg/m3	EPA 8260	
m,p-Xylene	50	16	µg/m3	EPA 8260	
o-Xylene	16	8	µg/m3	EPA 8260	

**Sample ID:** SV-5-5'

**Laboratory ID:** J230852-010

Analyte	Result	Reporting Limit	Units	Method	Notes
Freon 12	69	16	µg/m3	EPA 8260	
Ethylbenzene	15	8	µg/m3	EPA 8260	
Tetrachloroethene	38	8	µg/m3	EPA 8260	
Toluene	44	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	14	8	µg/m3	EPA 8260	
m,p-Xylene	73	16	µg/m3	EPA 8260	
o-Xylene	22	8	µg/m3	EPA 8260	

**Sample ID:** SV-5-15'

**Laboratory ID:** J230852-011

Analyte	Result	Reporting Limit	Units	Method	Notes
Freon 12	82	16	µg/m3	EPA 8260	
Ethylbenzene	19	8	µg/m3	EPA 8260	
Tetrachloroethene	91	8	µg/m3	EPA 8260	

Jones Environmental, Inc.



Colby Wakeman  
Lab Director

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Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

### DETECTIONS SUMMARY

**Sample ID:** SV-5-15'

**Laboratory ID:** J230852-011

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	60	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	16	8	µg/m3	EPA 8260	
m,p-Xylene	71	16	µg/m3	EPA 8260	
o-Xylene	21	8	µg/m3	EPA 8260	

**Sample ID:** SV-6-5'

**Laboratory ID:** J230852-012

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	12	8	µg/m3	EPA 8260	
Tetrachloroethene	87	8	µg/m3	EPA 8260	
Toluene	51	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	10	8	µg/m3	EPA 8260	
m,p-Xylene	49	16	µg/m3	EPA 8260	
o-Xylene	15	8	µg/m3	EPA 8260	

**Sample ID:** SV-6-15'

**Laboratory ID:** J230852-013

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	64	8	µg/m3	EPA 8260	
Toluene	33	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	10	8	µg/m3	EPA 8260	
m,p-Xylene	34	16	µg/m3	EPA 8260	
o-Xylene	11	8	µg/m3	EPA 8260	

Jones Environmental, Inc.



Colby Wakeman  
Lab Director

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Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

**SV-1-15'**  
**J230852-001(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	44	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	31	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	20	8	µg/m3	"	"		"	"	
Toluene	92	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	22	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

Jones Environmental, Inc.



Colby Wakeman  
Lab Director

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Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

**SV-1-15'**  
**J230852-001(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	140	16	µg/m3	"	"		"	"	
o-Xylene	41	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	

*Surrogate: Toluene-d8*      100.58 %      60 - 140  
*Surrogate: Dibromofluoromethane*      92.82 %      60 - 140  
*Surrogate: 4-Bromofluorobenzene*      100.85 %      60 - 140

Jones Environmental, Inc.



Colby Wakeman  
Lab Director

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Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

**SV-I-15' REP**  
**J230852-002(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	42	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	32	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	26	8	µg/m3	"	"		"	"	
Toluene	82	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	20	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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**SV-I-15' REP**  
**J230852-002(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	135	16	µg/m3	"	"		"	"	
o-Xylene	39	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
<i>Surrogate: Toluene-d8</i>	<i>103.58 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>	<i>93.21 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>99.56 %</i>	<i>60 - 140</i>							

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**SV-1-5'**  
**J230852-003(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	32	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	13	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	27	8	µg/m3	"	"		"	"	
Toluene	46	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	9	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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**SV-1-5'**  
**J230852-003(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	52	16	µg/m3	"	"		"	"	
o-Xylene	15	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
<i>Surrogate: Toluene-d8</i>	<i>101.89 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>	<i>93.63 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>97.38 %</i>	<i>60 - 140</i>							

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**SV-2-5'**  
**J230852-004(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	28	8	µg/m3	"	"		"	"	
Toluene	39	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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**SV-2-5'**  
**J230852-004(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	25	16	µg/m3	"	"		"	"	
o-Xylene	8	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	

*Surrogate: Toluene-d8*      102.75 %      60 - 140  
*Surrogate: Dibromofluoromethane*      94.43 %      60 - 140  
*Surrogate: 4-Bromofluorobenzene*      98.77 %      60 - 140

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**SV-2-15'**  
**J230852-005(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	18	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	26	8	µg/m3	"	"		"	"	
Toluene	22	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	11	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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**SV-2-15'**  
**J230852-005(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	26	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
<i>Surrogate: Toluene-d8</i>	<i>101.60 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>	<i>91.39 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>97.77 %</i>	<i>60 - 140</i>							

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**SV-3-5'**  
**J230852-006(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m <sup>3</sup>	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m <sup>3</sup>	"	"		"	"	
Bromoform	ND	8	µg/m <sup>3</sup>	"	"		"	"	
n-Butylbenzene	ND	12	µg/m <sup>3</sup>	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m <sup>3</sup>	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m <sup>3</sup>	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m <sup>3</sup>	"	"		"	"	
Chlorobenzene	ND	8	µg/m <sup>3</sup>	"	"		"	"	
Chloroform	ND	8	µg/m <sup>3</sup>	"	"		"	"	
Dibromochloromethane	ND	8	µg/m <sup>3</sup>	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m <sup>3</sup>	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m <sup>3</sup>	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m <sup>3</sup>	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m <sup>3</sup>	"	"		"	"	
Freon 12	ND	16	µg/m <sup>3</sup>	"	"		"	"	
Freon 11	ND	16	µg/m <sup>3</sup>	"	"		"	"	
Freon 113	ND	16	µg/m <sup>3</sup>	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m <sup>3</sup>	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m <sup>3</sup>	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m <sup>3</sup>	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m <sup>3</sup>	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m <sup>3</sup>	"	"		"	"	
Ethylbenzene	10	8	µg/m <sup>3</sup>	"	"		"	"	
Isopropylbenzene	ND	8	µg/m <sup>3</sup>	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m <sup>3</sup>	"	"		"	"	
Methylene chloride	ND	8	µg/m <sup>3</sup>	"	"		"	"	
Naphthalene	ND	40	µg/m <sup>3</sup>	"	"		"	"	
n-Propylbenzene	ND	8	µg/m <sup>3</sup>	"	"		"	"	
Styrene	ND	8	µg/m <sup>3</sup>	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m <sup>3</sup>	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m <sup>3</sup>	"	"		"	"	
Tetrachloroethene	16	8	µg/m <sup>3</sup>	"	"		"	"	
Toluene	59	8	µg/m <sup>3</sup>	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m <sup>3</sup>	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m <sup>3</sup>	"	"		"	"	
Trichloroethene	ND	8	µg/m <sup>3</sup>	"	"		"	"	
1,2,4-Trimethylbenzene	ND	8	µg/m <sup>3</sup>	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m <sup>3</sup>	"	"		"	"	

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**SV-3-5'**  
**J230852-006(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	37	16	µg/m3	"	"		"	"	
o-Xylene	12	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
<i>Surrogate: Toluene-d8</i>	<i>103.40 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>	<i>92.62 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>98.60 %</i>	<i>60 - 140</i>							

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**SV-3-15'**  
**J230852-007(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	26	8	µg/m3	"	"		"	"	
Toluene	29	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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**SV-3-15'**  
**J230852-007(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	20	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
<i>Surrogate: Toluene-d8</i>	<i>102.43 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>	<i>92.12 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>95.45 %</i>	<i>60 - 140</i>							

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**SV-4-5'**  
**J230852-008(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	30	8	µg/m3	"	"		"	"	
Toluene	22	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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**SV-4-5'**  
**J230852-008(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	ND	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	102.47 %	60 - 140							
Surrogate: Dibromofluoromethane	92.61 %	60 - 140							
Surrogate: 4-Bromofluorobenzene	97.04 %	60 - 140							

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**SV-4-15'**  
**J230852-009(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	14	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	23	8	µg/m3	"	"		"	"	
Toluene	57	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	10	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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**SV-4-15'**  
**J230852-009(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	50	16	µg/m3	"	"		"	"	
o-Xylene	16	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
<i>Surrogate: Toluene-d8</i>	<i>101.78 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>	<i>92.98 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>97.95 %</i>	<i>60 - 140</i>							

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**SV-5-5'**  
**J230852-010(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	69	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	15	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	38	8	µg/m3	"	"		"	"	
Toluene	44	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	14	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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Project Number: 211936010  
Project Manager: Dennis Fee

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**SV-5-5'**  
**J230852-010(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	73	16	µg/m3	"	"		"	"	
o-Xylene	22	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
<i>Surrogate: Toluene-d8</i>	<i>103.54 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>	<i>88.70 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>97.97 %</i>	<i>60 - 140</i>							

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**SV-5-15'**  
**J230852-011 (Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	82	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	19	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	91	8	µg/m3	"	"		"	"	
Toluene	60	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	16	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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**SV-5-15'**  
**J230852-011 (Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	71	16	µg/m3	"	"		"	"	
o-Xylene	21	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
<i>Surrogate: Toluene-d8</i>	<i>101.57 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>	<i>90.75 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>97.08 %</i>	<i>60 - 140</i>							

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**SV-6-5'**  
**J230852-012(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	12	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	87	8	µg/m3	"	"		"	"	
Toluene	51	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	10	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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**SV-6-5'**  
**J230852-012(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	49	16	µg/m3	"	"		"	"	
o-Xylene	15	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
<i>Surrogate: Toluene-d8</i>	<i>104.15 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>	<i>90.58 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>96.97 %</i>	<i>60 - 140</i>							

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**SV-6-15'**  
**J230852-013(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Benzene	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	64	8	µg/m3	"	"		"	"	
Toluene	33	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	10	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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**SV-6-15'**  
**J230852-013(Soil Gas)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organic Compounds by EPA 8260</b>									
Vinyl chloride	ND	8	µg/m3	1	QC2304089		04/06/23	EPA 8260	
m,p-Xylene	34	16	µg/m3	"	"		"	"	
o-Xylene	11	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	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	"	"		"	"	
n-Heptane (LCC)	ND	80	µg/m3	"	"		"	"	
<i>Surrogate: Toluene-d8</i>	<i>103.23 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>	<i>90.91 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>97.26 %</i>	<i>60 - 140</i>							

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**Volatile Organic Compounds 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 QC2304089 - EPA 8260**

**CCV 1**

Benzene	11	8	%	10		112	80 - 120		120	
Chlorobenzene	11	8	%	10		112	80 - 120		120	
1,1-Dichloroethene	11	8	%	10		112	80 - 120		120	
cis-1,2-Dichloroethene	11	8	%	10		113	80 - 120		120	
Ethylbenzene	11	8	%	10		109	80 - 120		120	
Tetrachloroethene	10	8	%	10		101	80 - 120		120	
Toluene	12	8	%	10		117	80 - 120		120	
1,1,1-Trichloroethane	8	8	%	10		84	80 - 120		120	
Trichloroethene	10	8	%	10		102	80 - 120		120	
1,2,4-Trimethylbenzene	11	8	%	10		107	80 - 120		120	
Vinyl chloride	12	8	%	10		120	80 - 120		120	

**LCS 1**

Benzene	3.13	8	%	2.5		125	70 - 130			
Chlorobenzene	3.04	8	%	2.5		122	70 - 130			
1,1-Dichloroethene	3.13	8	%	2.5		125	60 - 140			
cis-1,2-Dichloroethene	2.99	8	%	2.5		119	70 - 130			
Ethylbenzene	2.86	8	%	2.5		114	70 - 130			
Tetrachloroethene	2.71	8	%	2.5		108	70 - 130			
Toluene	3.22	8	%	2.5		129	70 - 130			
1,1,1-Trichloroethane	2.03	8	%	2.5		81	70 - 130			
Trichloroethene	2.80	8	%	2.5		112	70 - 130			
1,2,4-Trimethylbenzene	2.52	8	%	2.5		101	70 - 130			
Vinyl chloride	2.96	8	%	2.5		119	60 - 140			

Surrogate: Toluene-d8      104.61 %      60 - 140  
Surrogate: Dibromofluoromethane      101.10 %      60 - 140  
Surrogate: 4-Bromofluorobenzene      100.50 %      60 - 140

**LCSD 1**

Benzene	3.14	8	%	2.5		125	70 - 130	0.06	130	
Chlorobenzene	3.07	8	%	2.5		123	70 - 130	1.07	130	

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### Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
<b>Batch QC2304089 - EPA 8260</b>										
<b>LCSD 1</b>										
1,1-Dichloroethene	3.08	8	%	2.5		123	60 - 140	1.61	140	
cis-1,2-Dichloroethene	3.07	8	%	2.5		123	70 - 130	2.83	130	
Ethylbenzene	2.73	8	%	2.5		109	70 - 130	4.47	130	
Tetrachloroethene	2.61	8	%	2.5		104	70 - 130	3.55	130	
Toluene	3.15	8	%	2.5		126	70 - 130	2.15	130	
1,1,1-Trichloroethane	1.92	8	%	2.5		77	70 - 130	5.45	130	
Trichloroethene	2.97	8	%	2.5		119	70 - 130	6.01	130	
1,2,4-Trimethylbenzene	2.48	8	%	2.5		99	70 - 130	1.67	130	
Vinyl chloride	2.77	8	%	2.5		111	60 - 140	6.91	140	

Surrogate: Toluene-d8 103.55 % 60 - 140

Surrogate: Dibromofluoromethane 97.89 % 60 - 140

Surrogate: 4-Bromofluorobenzene 99.67 % 60 - 140

### Method Blank 1

Benzene	ND	8	µg/m3
Bromodichloromethane	ND	8	µg/m3
Bromoform	ND	8	µg/m3
n-Butylbenzene	ND	12	µg/m3
sec-Butylbenzene	ND	12	µg/m3
tert-Butylbenzene	ND	12	µg/m3
Carbon tetrachloride	ND	8	µg/m3
Chlorobenzene	ND	8	µg/m3
Chloroform	ND	8	µg/m3
Dibromochloromethane	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	8	µg/m3
1,2-Dichlorobenzene	ND	16	µg/m3
1,3-Dichlorobenzene	ND	16	µg/m3
1,4-Dichlorobenzene	ND	16	µg/m3
Freon 12	ND	16	µg/m3
Freon 11	ND	16	µg/m3
Freon 113	ND	16	µg/m3
1,1-Dichloroethane	ND	8	µg/m3
1,2-Dichloroethane	ND	8	µg/m3
1,1-Dichloroethene	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	8	µg/m3

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.

Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

### Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-------------	-------

#### Batch QC2304089 - EPA 8260

##### Method Blank 1

Ethylbenzene	ND	8	µg/m3
Isopropylbenzene	ND	8	µg/m3
4-Isopropyltoluene	ND	8	µg/m3
Methylene chloride	ND	8	µg/m3
Naphthalene	ND	40	µg/m3
n-Propylbenzene	ND	8	µg/m3
Styrene	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	16	µg/m3
Tetrachloroethene	ND	8	µg/m3
Toluene	ND	8	µg/m3
1,1,1-Trichloroethane	ND	8	µg/m3
1,1,2-Trichloroethane	ND	8	µg/m3
Trichloroethene	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	8	µg/m3
Vinyl chloride	ND	8	µg/m3
m,p-Xylene	ND	16	µg/m3
o-Xylene	ND	8	µg/m3
Methyl-tert-butylether	ND	40	µg/m3
Ethyl-tert-butylether	ND	40	µg/m3
Di-isopropylether	ND	40	µg/m3
tert-amylmethylether	ND	40	µg/m3
tert-Butylalcohol	ND	400	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
n-Heptane (LCC)	ND	80	µg/m3

Surrogate: Toluene-d8 100.98 % 60 - 140  
Surrogate: Dibromofluoromethane 97.30 % 60 - 140  
Surrogate: 4-Bromofluorobenzene 96.49 % 60 - 140

##### Sample Blank 1

Benzene	ND	8	µg/m3
Bromodichloromethane	ND	8	µg/m3
Bromoform	ND	8	µg/m3

Jones Environmental, Inc.



Colby Wakeman  
Lab Director

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475 Goddard, Suite 200  
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Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

### Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-------------	-------

#### Batch QC2304089 - EPA 8260

#### Sample Blank 1

n-Butylbenzene	ND	12	µg/m3
sec-Butylbenzene	ND	12	µg/m3
tert-Butylbenzene	ND	12	µg/m3
Carbon tetrachloride	ND	8	µg/m3
Chlorobenzene	ND	8	µg/m3
Chloroform	ND	8	µg/m3
Dibromochloromethane	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	8	µg/m3
1,2-Dichlorobenzene	ND	16	µg/m3
1,3-Dichlorobenzene	ND	16	µg/m3
1,4-Dichlorobenzene	ND	16	µg/m3
Freon 12	ND	16	µg/m3
Freon 11	ND	16	µg/m3
Freon 113	ND	16	µg/m3
1,1-Dichloroethane	ND	8	µg/m3
1,2-Dichloroethane	ND	8	µg/m3
1,1-Dichloroethene	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	8	µg/m3
Ethylbenzene	ND	8	µg/m3
Isopropylbenzene	ND	8	µg/m3
4-Isopropyltoluene	ND	8	µg/m3
Methylene chloride	ND	8	µg/m3
Naphthalene	ND	40	µg/m3
n-Propylbenzene	ND	8	µg/m3
Styrene	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	16	µg/m3
Tetrachloroethene	ND	8	µg/m3
Toluene	ND	8	µg/m3
1,1,1-Trichloroethane	ND	8	µg/m3
1,1,2-Trichloroethane	ND	8	µg/m3
Trichloroethene	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	8	µg/m3
Vinyl chloride	ND	8	µg/m3
m,p-Xylene	ND	16	µg/m3

Jones Environmental, Inc.



Colby Wakeman  
Lab Director

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Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

**Volatile Organic Compounds by EPA 8260 - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	----------------	-------

**Batch QC2304089 - EPA 8260**

**Sample Blank 1**

o-Xylene	ND	8	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Ethyl-tert-butylether	ND	40	µg/m3							
Di-isopropylether	ND	40	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	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							
n-Heptane (LCC)	ND	80	µg/m3							
Surrogate: Toluene-d8		103.62 %	60 - 140							
Surrogate: Dibromofluoromethane		93.79 %	60 - 140							
Surrogate: 4-Bromofluorobenzene		99.86 %	60 - 140							

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.

Ninyo & Moore  
475 Goddard, Suite 200  
Irvine, CA 92618

Project: 211936010  
Project Number: 211936010  
Project Manager: Dennis Fee

Reported  
04/10/23 10:09

#### Notes and Definitions

DET Analyte DETECTED

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

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.

Jones Environmental, Inc.

A handwritten signature in black ink, appearing to read "Colby", is positioned above the name Colby Wakeman.

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.*





11007 Forest Pl.  
Santa Fe Springs, CA 90670  
(714) 449-9937  
Fax (714) 449-9685  
www.jonesenv.com

# Soil-Gas Chain-of-Custody Record

**Client**  
**Ninyo & Moore**

**Project Name**  
**49th Street Elementary School PEA**

**Project Address**  
**750 E. 49th Street**

**Los Angeles, CA 90011**

**Email**

**Phone**

**Report To**  
**Dennis Fee**

**Sampler**  
**Madison Jones**

**Date**  
**4/6/2023**

**Client Project #**  
**211936010**

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

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

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

**\*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-propanol  
☐ Isopropyl Alcohol  
☐ 1,1-DFA  
☒ heptane

**Analysis Requested**

**Reporting Limits**  
☒ Standard ☐ Low Level\* ☐ MDL\*  
\*surcharge for these limits

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

**LAB USE ONLY**

**Jones Project #**  
**J230852**

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

**Sample Container:**

**GASTIGHT GLASS SYRINGE**  
If different than above, see Notes.

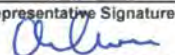
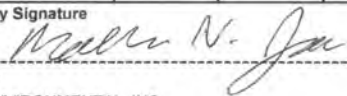
Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	GASOLINE RANGE ORGANICS		Magnehelic Vacuum (In/H <sub>2</sub> O)	Number of Containers	Notes & Special Instructions
SV-1-15'	3	1470	4/6/23	8:20	8:20	J230852-001	200	SUNNY	118012	SG	X	X		<2	1	
SV-1-15' REP	-	-	4/6/23	8:23	8:35	J230852-002	-	-	118012	SG	X	X		<2	1	
SV-1-5'	3	1310	4/6/23	8:37	8:52	J230852-003	200	ZARAK	M100.007	SG	X	X		<2	1	
SV-2-5'	3	1310	4/6/23	9:06	9:08	J230852-004	200	SUNNY	M100.500	SG	X	X		<2	1	
SV-2-15'	3	1470	4/6/23	9:26	9:27	J230852-005	200	ZARAK	M100.501	SG	X	X		<2	1	
SV-3-5'	3	1310	4/6/23	9:35	9:43	J230852-006	200	SUNNY	118012	SG	X	X		10	1	
SV-3-15'	3	1470	4/6/23	9:49	9:59	J230852-007	200	ZARAK	M100.007	SG	X	X		<2	1	
SV-4-5'	3	1310	4/6/23	10:09	10:16	J230852-008	200	SUNNY	M100.500	SG	X	X		<2	1	
SV-4-15'	3	1470	4/6/23	10:18	10:32	J230852-009	200	ZARAK	M100.501	SG	X	X		<2	1	
SV-5-5'	3	1310	4/6/23	10:45	10:48	J230852-010	200	SUNNY	118012	SG	X	X		<2	1	

<b>Representative Signature</b> 	<b>Printed Name</b> Alleen Chea	<b>Laboratory Signature</b> 	<b>Printed Name</b> Madison Jones	10	Total Number of Containers
<b>Company</b> Ninyo & Moore	<b>Date</b> 4/6/2023 <b>Time</b> 12:00	<b>Company</b> JONES ENVIRONMENTAL, INC.	<b>Date</b> 4/6/2023 <b>Time</b> 12:00	<b>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.</b>	
<b>Representative Signature</b>	<b>Printed Name</b>	<b>Laboratory Signature</b>	<b>Printed Name</b>		
<b>Company</b>	<b>Date</b> <b>Time</b>	<b>Company</b>	<b>Date</b> <b>Time</b>		





# Soil-Gas Chain-of-Custody Record

Client <b>Ninyo &amp; Moore</b>						Date <b>4/6/2023</b>		Purge Number: <input type="checkbox"/> 1P <input checked="" type="checkbox"/> 3P <input type="checkbox"/> 7P <input type="checkbox"/> 10P				Report Options EDD _____ EDF* - 10% Surcharge _____				LAB USE ONLY <b>Jones Project #</b> <b>J230852</b>								
Project Name <b>49th Street Elementary School PEA</b>						Client Project # <b>211936010</b>		Shut-In Test: <b>(Y) N</b>				*Global ID _____												
Project Address <b>750 E. 49th Street</b>						Turn Around Requested <input type="checkbox"/> Immediate Attention <input type="checkbox"/> Rush 24 Hours <input type="checkbox"/> Rush 48 Hours <input type="checkbox"/> Rush 72 Hours <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Mobile Lab  Reporting Limits <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Low Level* <input type="checkbox"/> MDL* <small>*surcharge for these limits</small>		Tracer <input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input type="checkbox"/> n-propanol <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input checked="" type="checkbox"/> <u>heptane</u>		Analysis Requested								Page <b>2</b> of <b>2</b>  Sample Container:  GASTIGHT GLASS SYRINGE <small>If different than above, see Notes.</small>						
Email																								
Phone																								
Report To <b>Dennis Fee</b>										Sampler <b>Madison Jones</b>														
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						
SV-5-15'		3	1470	4/6/23	11:05	11:08	J230852-011	200	ZARAK	M100.007	SG	X	X			<2	1							
SV-6-5'		3	1310	4/6/23	11:17	11:23	J230852-012	200	SUNNY	M100.500	SG	X	X			<2	1							
SV-6-15'		3	1470	4/6/23	11:34	11:39	J230852-013	200	ZARAK	M100.501	SG	X	X			<2	1							
Representative Signature 		Printed Name Aileen Chea					Laboratory Signature 					Printed Name Madison Jones					3		Total Number of Containers					
Company Ninyo & Moore		Date 4/6/2023		Time 12:00		Company JONES ENVIRONMENTAL, INC.		Date 4/6/2023		Time 12:00														
Representative Signature		Printed Name					Laboratory Signature					Printed Name					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.							
Company		Date		Time		Company		Date		Time														

Page 40 of 40



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Dennis Fee  
Ninyo & Moore  
475 Goddard St. Suite 200  
Irvine, California 92618

Generated 4/27/2023 5:45:06 PM

## JOB DESCRIPTION

Dioxins\_211936010

## JOB NUMBER

320-98788-1

# Eurofins Sacramento

## 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 Environment Testing Northern California, LLC Project Manager.

## Authorization



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Authorized for release by  
Linda C. Laver, Senior Project Manager  
[Linda.Laver@et.eurofinsus.com](mailto:Linda.Laver@et.eurofinsus.com)  
(916)374-4362

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# Definitions/Glossary

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

## Qualifiers

### Dioxin

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

## 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: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

**Job ID: 320-98788-1**

**Laboratory: Eurofins Sacramento**

## Narrative

### Job Narrative 320-98788-1

#### Comments

The following samples were submitted on a HOLD basis and canceled on April 27, 2023: B36-2.5 (320-98788-2), B36-5 (320-98788-3) and B36-10 (320-98788-4).

#### Receipt

The samples were received on 4/11/2023 9:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.4° C.

#### Dioxin

Method 8290A: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for Prep Batch 320-667350 was outside control limits for 1,2,3,7,8,9-HxCDD. The percent recoveries (%Rec) were within acceptance limits.

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

#### General Chemistry

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

#### Dioxin Prep

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

# Detection Summary

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

**Client Sample ID: B36-0.5**

**Lab Sample ID: 320-98788-1**

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
1,2,3,7,8,9-HxCDF	0.13	J B q	5.3	0.0029	pg/g	1	✳	8290A	Total/NA
1,2,3,4,6,7,8-HpCDD	0.46	J B	5.3	0.0059	pg/g	1	✳	8290A	Total/NA
1,2,3,4,6,7,8-HpCDF	0.29	J B q	5.3	0.0018	pg/g	1	✳	8290A	Total/NA
OCDD	2.3	J B	11	0.0049	pg/g	1	✳	8290A	Total/NA
OCDF	0.47	J B q	11	0.0084	pg/g	1	✳	8290A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Sacramento

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

Client Sample ID: B36-0.5

Lab Sample ID: 320-98788-1

Date Collected: 04/05/23 14:20

Matrix: Solid

Date Received: 04/11/23 09:25

Percent Solids: 89.7

## Method: SW846 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.1	0.0029	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
2,3,7,8-TCDF	ND		1.1	0.0010	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,7,8-PeCDD	ND		5.3	0.0050	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,7,8-PeCDF	ND		5.3	0.0015	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
2,3,4,7,8-PeCDF	ND		5.3	0.0016	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,4,7,8-HxCDD	ND		5.3	0.0015	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,6,7,8-HxCDD	ND		5.3	0.0015	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,7,8,9-HxCDD	ND	*1	5.3	0.0014	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,4,7,8-HxCDF	ND		5.3	0.0030	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,6,7,8-HxCDF	ND		5.3	0.0030	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,7,8,9-HxCDF	0.13	J B q	5.3	0.0029	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
2,3,4,6,7,8-HxCDF	ND		5.3	0.0025	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,4,6,7,8-HpCDD	0.46	J B	5.3	0.0059	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,4,6,7,8-HpCDF	0.29	J B q	5.3	0.0018	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
1,2,3,4,7,8,9-HpCDF	ND		5.3	0.0020	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
OCDD	2.3	J B	11	0.0049	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1
OCDF	0.47	J B q	11	0.0084	pg/g	☆	04/13/23 04:27	04/22/23 01:14	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-2,3,7,8-TCDD	66		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-2,3,7,8-TCDF	61		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-1,2,3,7,8-PeCDD	73		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-1,2,3,7,8-PeCDF	70		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-2,3,4,7,8-PeCDF	70		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-1,2,3,4,7,8-HxCDD	67		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-1,2,3,6,7,8-HxCDD	71		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-1,2,3,4,7,8-HxCDF	62		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-2,3,4,6,7,8-HxCDF	67		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-1,2,3,6,7,8-HxCDF	61		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-1,2,3,7,8,9-HxCDF	62		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-1,2,3,4,6,7,8-HpCDD	75		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-1,2,3,4,6,7,8-HpCDF	61		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-1,2,3,4,7,8,9-HpCDF	66		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-OCDD	66		40 - 135	04/13/23 04:27	04/22/23 01:14	1
13C-OCDF	59		40 - 135	04/13/23 04:27	04/22/23 01:14	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (ASTM D 2216)	10.3		0.1	0.1	%			04/17/23 21:41	1
Percent Solids (ASTM D 2216)	89.7		0.1	0.1	%			04/17/23 21:41	1

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# Isotope Dilution Summary

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

## Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF (40-135)	PeCF (40-135)	HxCDD (40-135)	HxDD (40-135)	HxCDF (40-135)
320-98788-1	B36-0.5	66	61	73	70	70	67	71	62
LCS 320-667350/2-A	Lab Control Sample	67	69	76	79	62	57	53	65
LCSD 320-667350/3-A	Lab Control Sample Dup	67	63	70	67	67	65	66	61
MB 320-667350/1-A	Method Blank	67	62	72	71	65	60	66	59

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	13CHxCF (40-135)	HxDF (40-135)	HxCF (40-135)	HpCDD (40-135)	HpCDF (40-135)	HpCDF2 (40-135)	OCDD (40-135)	OCDF (40-135)
320-98788-1	B36-0.5	67	61	62	75	61	66	66	59
LCS 320-667350/2-A	Lab Control Sample	73	65	71	74	63	73	76	74
LCSD 320-667350/3-A	Lab Control Sample Dup	66	63	64	76	60	64	64	59
MB 320-667350/1-A	Method Blank	67	58	62	71	55	61	61	53

### Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD  
TCDF = 13C-2,3,7,8-TCDF  
PeCDD = 13C-1,2,3,7,8-PeCDD  
PeCDF = 13C-1,2,3,7,8-PeCDF  
PeCF = 13C-2,3,4,7,8-PeCDF  
HxCDD = 13C-1,2,3,4,7,8-HxCDD  
HxDD = 13C-1,2,3,6,7,8-HxCDD  
HxCDF = 13C-1,2,3,4,7,8-HxCDF  
13CHxCF = 13C-2,3,4,6,7,8-HxCDF  
HxDF = 13C-1,2,3,6,7,8-HxCDF  
HxCF = 13C-1,2,3,7,8,9-HxCDF  
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD  
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF  
HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF  
OCDD = 13C-OCDD  
OCDF = 13C-OCDF

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

## Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-667350/1-A

Matrix: Solid

Analysis Batch: 669567

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 667350

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0	0.0018	pg/g		04/13/23 04:27	04/21/23 22:49	1
2,3,7,8-TCDF	ND		1.0	0.0014	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,7,8-PeCDD	ND		5.0	0.0080	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,7,8-PeCDF	0.361	J	5.0	0.0050	pg/g		04/13/23 04:27	04/21/23 22:49	1
2,3,4,7,8-PeCDF	ND		5.0	0.0063	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,4,7,8-HxCDD	ND		5.0	0.0090	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,6,7,8-HxCDD	ND		5.0	0.0087	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,7,8,9-HxCDD	0.400	J q	5.0	0.0081	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,4,7,8-HxCDF	0.286	J q	5.0	0.0076	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,6,7,8-HxCDF	0.320	J q	5.0	0.0078	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,7,8,9-HxCDF	0.380	J	5.0	0.0069	pg/g		04/13/23 04:27	04/21/23 22:49	1
2,3,4,6,7,8-HxCDF	0.401	J	5.0	0.0063	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,4,6,7,8-HpCDD	0.539	J	5.0	0.0077	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,4,6,7,8-HpCDF	0.650	J	5.0	0.0012	pg/g		04/13/23 04:27	04/21/23 22:49	1
1,2,3,4,7,8,9-HpCDF	0.555	J	5.0	0.0013	pg/g		04/13/23 04:27	04/21/23 22:49	1
OCDD	1.99	J q	10	0.014	pg/g		04/13/23 04:27	04/21/23 22:49	1
OCDF	1.02	J	10	0.015	pg/g		04/13/23 04:27	04/21/23 22:49	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-2,3,7,8-TCDD	67		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-2,3,7,8-TCDF	62		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-1,2,3,7,8-PeCDD	72		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-1,2,3,7,8-PeCDF	71		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-2,3,4,7,8-PeCDF	65		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-1,2,3,4,7,8-HxCDD	60		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-1,2,3,6,7,8-HxCDD	66		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-1,2,3,4,7,8-HxCDF	59		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-2,3,4,6,7,8-HxCDF	67		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-1,2,3,6,7,8-HxCDF	58		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-1,2,3,7,8,9-HxCDF	62		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-1,2,3,4,6,7,8-HpCDD	71		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-1,2,3,4,6,7,8-HpCDF	55		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-1,2,3,4,7,8,9-HpCDF	61		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-OCDD	61		40 - 135	04/13/23 04:27	04/21/23 22:49	1
13C-OCDF	53		40 - 135	04/13/23 04:27	04/21/23 22:49	1

Lab Sample ID: LCS 320-667350/2-A

Matrix: Solid

Analysis Batch: 670441

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 667350

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,3,7,8-TCDD	20.0	18.6		pg/g		93	73 - 141
2,3,7,8-TCDF	20.0	19.2		pg/g		96	71 - 153
1,2,3,7,8-PeCDD	100	85.1		pg/g		85	77 - 126
1,2,3,7,8-PeCDF	100	81.4		pg/g		81	72 - 128
2,3,4,7,8-PeCDF	100	90.9		pg/g		91	72 - 127
1,2,3,4,7,8-HxCDD	100	82.6		pg/g		83	73 - 126
1,2,3,6,7,8-HxCDD	100	91.1		pg/g		91	76 - 142
1,2,3,7,8,9-HxCDD	100	106		pg/g		106	70 - 136

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# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

## Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-667350/2-A

Matrix: Solid

Analysis Batch: 670441

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 667350

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3,4,7,8-HxCDF	100	89.2		pg/g		89	73 - 127
1,2,3,6,7,8-HxCDF	100	90.8		pg/g		91	77 - 126
1,2,3,7,8,9-HxCDF	100	86.9		pg/g		87	77 - 125
2,3,4,6,7,8-HxCDF	100	88.1		pg/g		88	77 - 126
1,2,3,4,6,7,8-HpCDD	100	83.2		pg/g		83	79 - 121
1,2,3,4,6,7,8-HpCDF	100	89.4		pg/g		89	78 - 138
1,2,3,4,7,8,9-HpCDF	100	85.0		pg/g		85	76 - 123
OCDD	200	172		pg/g		86	76 - 136
OCDF	200	182		pg/g		91	75 - 130

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C-2,3,7,8-TCDD	67		40 - 135
13C-2,3,7,8-TCDF	69		40 - 135
13C-1,2,3,7,8-PeCDD	76		40 - 135
13C-1,2,3,7,8-PeCDF	79		40 - 135
13C-2,3,4,7,8-PeCDF	62		40 - 135
13C-1,2,3,4,7,8-HxCDD	57		40 - 135
13C-1,2,3,6,7,8-HxCDD	53		40 - 135
13C-1,2,3,4,7,8-HxCDF	65		40 - 135
13C-2,3,4,6,7,8-HxCDF	73		40 - 135
13C-1,2,3,6,7,8-HxCDF	65		40 - 135
13C-1,2,3,7,8,9-HxCDF	71		40 - 135
13C-1,2,3,4,6,7,8-HpCDD	74		40 - 135
13C-1,2,3,4,6,7,8-HpCDF	63		40 - 135
13C-1,2,3,4,7,8,9-HpCDF	73		40 - 135
13C-OCDD	76		40 - 135
13C-OCDF	74		40 - 135

Lab Sample ID: LCSD 320-667350/3-A

Matrix: Solid

Analysis Batch: 669567

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 667350

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
2,3,7,8-TCDD	20.0	18.9		pg/g		95	73 - 141	2	20
2,3,7,8-TCDF	20.0	18.5		pg/g		93	71 - 153	4	20
1,2,3,7,8-PeCDD	100	86.2		pg/g		86	77 - 126	1	20
1,2,3,7,8-PeCDF	100	85.8		pg/g		86	72 - 128	5	20
2,3,4,7,8-PeCDF	100	86.3		pg/g		86	72 - 127	5	20
1,2,3,4,7,8-HxCDD	100	83.4		pg/g		83	73 - 126	1	20
1,2,3,6,7,8-HxCDD	100	84.6		pg/g		85	76 - 142	7	20
1,2,3,7,8,9-HxCDD	100	85.1	*1	pg/g		85	70 - 136	22	20
1,2,3,4,7,8-HxCDF	100	84.5		pg/g		84	73 - 127	5	20
1,2,3,6,7,8-HxCDF	100	85.1		pg/g		85	77 - 126	6	20
1,2,3,7,8,9-HxCDF	100	86.3		pg/g		86	77 - 125	1	20
2,3,4,6,7,8-HxCDF	100	87.4		pg/g		87	77 - 126	1	20
1,2,3,4,6,7,8-HpCDD	100	78.8		pg/g		79	79 - 121	6	20
1,2,3,4,6,7,8-HpCDF	100	87.3		pg/g		87	78 - 138	2	20
1,2,3,4,7,8,9-HpCDF	100	84.1		pg/g		84	76 - 123	1	20
OCDD	200	170		pg/g		85	76 - 136	1	20

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# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

## Method: 8290A - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 320-667350/3-A

Matrix: Solid

Analysis Batch: 669567

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 667350

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
OCDF			200	177		pg/g		89	75 - 130	3	20
	LCSD	LCSD									
Isotope Dilution	%Recovery	Qualifier	Limits								
13C-2,3,7,8-TCDD	67		40 - 135								
13C-2,3,7,8-TCDF	63		40 - 135								
13C-1,2,3,7,8-PeCDD	70		40 - 135								
13C-1,2,3,7,8-PeCDF	67		40 - 135								
13C-2,3,4,7,8-PeCDF	67		40 - 135								
13C-1,2,3,4,7,8-HxCDD	65		40 - 135								
13C-1,2,3,6,7,8-HxCDD	66		40 - 135								
13C-1,2,3,4,7,8-HxCDF	61		40 - 135								
13C-2,3,4,6,7,8-HxCDF	66		40 - 135								
13C-1,2,3,6,7,8-HxCDF	63		40 - 135								
13C-1,2,3,7,8,9-HxCDF	64		40 - 135								
13C-1,2,3,4,6,7,8-HpCDD	76		40 - 135								
13C-1,2,3,4,6,7,8-HpCDF	60		40 - 135								
13C-1,2,3,4,7,8,9-HpCDF	64		40 - 135								
13C-OCDD	64		40 - 135								
13C-OCDF	59		40 - 135								

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

## Specialty Organics

### Prep Batch: 667350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-98788-1	B36-0.5	Total/NA	Solid	8290	
MB 320-667350/1-A	Method Blank	Total/NA	Solid	8290	
LCS 320-667350/2-A	Lab Control Sample	Total/NA	Solid	8290	
LCSD 320-667350/3-A	Lab Control Sample Dup	Total/NA	Solid	8290	

### Analysis Batch: 669567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-98788-1	B36-0.5	Total/NA	Solid	8290A	667350
MB 320-667350/1-A	Method Blank	Total/NA	Solid	8290A	667350
LCSD 320-667350/3-A	Lab Control Sample Dup	Total/NA	Solid	8290A	667350

### Analysis Batch: 670441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-667350/2-A	Lab Control Sample	Total/NA	Solid	8290A	667350

## General Chemistry

### Analysis Batch: 668260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-98788-1	B36-0.5	Total/NA	Solid	D 2216	

# Lab Chronicle

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

**Client Sample ID: B36-0.5**

**Date Collected: 04/05/23 14:20**

**Date Received: 04/11/23 09:25**

**Lab Sample ID: 320-98788-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1			668260	04/17/23 21:41	JP	EET SAC

**Client Sample ID: B36-0.5**

**Date Collected: 04/05/23 14:20**

**Date Received: 04/11/23 09:25**

**Lab Sample ID: 320-98788-1**

**Matrix: Solid**

**Percent Solids: 89.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8290			10.59 g	20.0 uL	667350	04/13/23 04:27	FC	EET SAC
Total/NA	Analysis	8290A		1	1 Sample	1 Sample	669567	04/22/23 01:14	GRB	EET SAC

## Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

Laboratory: Eurofins Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-22-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
D 2216		Solid	Percent Moisture
D 2216		Solid	Percent Solids

# Method Summary

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

Method	Method Description	Protocol	Laboratory
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	EET SAC
D 2216	Percent Moisture	ASTM	EET SAC
8290	Soxhlet Extraction of Dioxins and Furans	SW846	EET SAC

**Protocol References:**

ASTM = ASTM International

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

**Laboratory References:**

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Sample Summary

Client: Ninyo & Moore  
Project/Site: Dioxins\_211936010

Job ID: 320-98788-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-98788-1	B36-0.5	Solid	04/05/23 14:20	04/11/23 09:25

- 1
- 2
- 3
- 4
- 5
- 6
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FRN 12

CHAIN-OF-CUSTODY RECORD

DATE: 4/5/23

PAGE: 1 OF 1

LABORATORY CLIENT: Ninyo & Moore		CLIENT PROJECT NAME / NO.: 211936010																					
ADDRESS: 475 Goddard, Suite 200		LAB CONTACT OR QUOTE NO.																					
CITY: Irvine	STATE: CA	ZIP: 92618																					
TEL: 949-753-7070	E-MAIL: dfee@ninyoandmoore.com	PROJECT CONTACT: Dennis Fee (dfee@ninyoandmoore.com)																					
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):		LOG CODE:																					
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		GLOBAL ID:																					
<input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER		SAMPLER(S) (PRINT): Aileen Chrea																					
<div style="text-align: center;">           320-98788 Chain of Custody       </div>																							
SPECIAL INSTRUCTIONS: QUOTE # 320 21439		REQUESTED ANALYSES Please check box or fill in blank as needed.																					
LAB USE ONLY	SAMPLE ID	SAMPLING		NO. OF CONT.	Field Filtered	Preserved	Unpreserved	TPH	TPH □ C6-C36 □ C6-C44	BTEX / MTBE □ 8260 □	VOCs (8260)	Oxyanions (8260)	Prep (5035) □ En Core □ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs □ 8270 □ 8270 SIM	T22 Metals □ 6010/747X □ 6020/747X	Cr(VI) □ 7196 □ 7199 □ 218 6	Dioxins & Furans by 8290A	HOLD		
		DATE	TIME																			MATRIX	
	B36-0.5	4/5/23	1420	soil	1																		
	B36-2.5		1423																				
	B36-5		1440																				
	B36-10		1442																				
Relinquished by: (Signature) <i>Aileen Chrea</i> Date: 4/5/23 Time: 1806																							
Relinquished by: (Signature) <i>Aileen Chrea</i> Date: 4/10/23 Time: 1500																							
Relinquished by: (Signature) <i>Aileen Chrea</i> Date: 4/10/23 Time: 1500																							

4-9/4-8 5-12 3 yuc

## Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 320-98788-1

Login Number: 98788

List Source: Eurofins Sacramento

List Number: 1

Creator: Oropeza, Salvador

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2025

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27893A

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 5/11/2023

Date Reported: 5/15/2023

Chain of Custody Received: ☒

Analytical Method: 6010B,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27893A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 4°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference # NAM 27893A  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B40A-0.5	27893-006	5/6/2023	5/6/2023	Soil
B34-NE2-2.5	27893-008	5/6/2023	5/6/2023	Soil

Mr. Dennis Fee  
 Ninyo & Moore  
 475 Goddard Ste 200  
 Irvine, CA, 92618

Lab Reference # NAM 27893A  
 Project Name: LAUSD 49th Street PEA  
 Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B40A-0.5		27893-006	5/6/2023	11:50	5/6/2023	8:48	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Arsenic	6010B	2.3	mg/kg	05/10/23 14:25	05/15/23 10:19	--	1	
B34-NE2-2.5		27893-008	5/6/2023	11:50	5/6/2023	9:17	Soil		
	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
	Lead	6010B	94	mg/kg	05/10/23 14:25	05/15/23 10:22	--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBHV0509232	Arsenic	6010B	<2.0	mg/kg	05/09/23 15:35	05/11/23 11:40	--	1	
MBHV0509232	Lead	6010B	<0.80	mg/kg	05/09/23 15:35	05/11/23 11:40	--	1	

**QA/QC Report  
for  
Metals**

Reference #: NAM 27893A

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**6010B**

Laboratory Sample #: 27891-021

Date of Extraction: 05/09/23 15:35

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Arsenic	05/11/23 11:49	05/11/23 11:52	2.80	20.0	22.4	21.5	98	94	4	75-125	20	--
Lead	05/11/23 11:49	05/11/23 11:52	2.90	20.0	21.4	20.8	92	89	3	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**6010B**

Laboratory Sample #: HV0509232

Date of Extraction: 05/09/23 15:35

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Arsenic	05/11/23 11:43	05/11/23 11:46	--	20.0	19.1	18.7	96	94	2	80-120	20	--
Lead	05/11/23 11:43	05/11/23 11:46	--	20.0	19.7	19.3	99	96	2	80-120	20	--



## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

### 1 of Custody Record



Phone: (714) 832-0064 Fax: (714) 832-0067

Phone: (480) 736-0960 Fax: (480) 736-0970

2

CUSTOMER INFORMATION			PROJECT INFORMATION																Standard: _____		
Company: Ninyo & Moore			Project Name: LAUSD 49th Street PEA																72 Hour: <u>X</u>		
Send Report To: Dennis Fee			Project Number: 211936010																48 Hour: _____		
Email: <u>dfee@ninyoandmoore.com</u>			PO #:																24 Hour: _____		
Address: 475 Goddard Irvine, CA 92618			Address (City / State): Los Angeles, CA																REMARKS / INSTRUCTIONS		
Phone: (949) 753-7070 Fax:			Sampled By: <u>Aileen Chea</u>																		
Customer Sample IDs			No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type														
B4-W4-0.5			1	5/6/23	0803	SS	902 jar											HOLD			
B4-W4-2.5					0806													HOLD			
B4-W3-0.5					0813			X													
B4-W3-2.5					0815														HOLD		
B4IA-0.5					0837			X													
B4IA-0.5					0848														HOLD		
B34-NE2-0.5					0908														HOLD		
B34-NE2-2.5					0917														HOLD		
B34-NE-0.5					0921				X												
B34-NE-2.5					0926				X												
B34-NW-0.5					0931															HOLD	
B34-NW2-0.5					0938															HOLD	
B34-NW2-2.5					0944															HOLD	
B34-SW-0.5					0950				X												
No. of Samples: <u>14</u>			Method of Shipment:			Preservative: <u>1 = Ice</u>			2 = HCl 3 = HNO <sub>3</sub> 4 = H <sub>2</sub> SO <sub>4</sub> 5 = NaOH 6 = Other												
Relinquished By: <u>Aileen Chea/Chen</u>			Date: <u>5/6/23</u>			Received By:			Date:			Sample Matrix:			DW - Drinking Water						
Company: <u>Ninyo &amp; Moore</u>			Time: <u>1150</u>			Company:			Time:			GW - Groundwater			AQ - Aqueous						
Relinquished By:			Date:			Received By:			Date:			WW - Wastewater			SS - Soil / Solid						
Company:			Time:			Company:			Time:			SW - Stormwater			OT - Other						
Relinquished By:			Date:			Received For OCA By: <u>Mark</u>			Date: <u>5/6/23</u>			Sample Integrity: <u>4.0 to 4.5 °C</u>			Intact: _____ On Ice: <u>Yes</u> No @ _____ °C						
Company:			Time:			Company: <u>OCA, CA</u>			Time: <u>1150</u>												

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

### Chain of Custody Record



4620 East Elwood Street, Suite 4

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Phone: (480) 736-0960 Fax: (480) 736-0970

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Lab Job No.: 27893 Page: 2 of 2

Page: 2 of 2

## ANALYSIS REQUEST / PRESERVATION

CUSTOMER INFORMATION		PROJECT INFORMATION													
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA													
Send Report To: Dennis Fee		Project Number: 211936010													
Email: dfec@ninyoandmoore.com		PO #:													
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA													
Phone: (949) 753-7070 Fax:		EDD Required: Scribe EDD													
		Sampled By: Aileen Chea													
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type										
B34-SW-2.5	1	5/6/23	0954	SS	9oz jar										
B34-SW2-0.5	↓	↓	1010	↓	↓										
B34-SW2-2.5	↓	↓	1021	↓	↓										
</															

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

# Sample Receipt Report

Laboratory Reference NAM 27893

Logged in by MM

Received: 05/06/23 11:50

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

17 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>4</u>	Thermometer ID: <u>IR#3</u>	Adjusted Temp.: <u>4+(-0)=4</u>	
Shipping Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

Notes

Client Notified

By

On



**Orange Coast Analytical, Inc.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**LABORATORY REPORT FORM**

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576

Expiration Date: 2025

Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:

Mark Noorani

Client: Ninyo & Moore

Laboratory Reference: NAM 27893B

Project Name: LAUSD 49th Street PEA

Project Number: 211936010

Date Received: 5/12/2023

Date Reported: 5/16/2023

Chain of Custody Received: ☒

Analytical Method: 6010B,

Mark Noorani, Laboratory Director

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27893B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

### ***Case Narrative***

#### **Sample Receipt:**

All samples on the Chain of Custody were received by OCA at 4°C, on ice.

#### **Holding Times:**

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

#### **Analytical Methods:**

Sample analysis was performed following the analytical methods listed on the cover page.

#### **Data Qualifiers:**

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

#### **Definition of Terms:**

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

#### **Comments:**

None

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27893B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

***Client Sample Summary***

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B4-W3-0.5	27893-003	5/6/2023	5/6/2023	Soil
B41A-0.5	27893-005	5/6/2023	5/6/2023	Soil

Mr. Dennis Fee  
Ninyo & Moore  
475 Goddard Ste 200  
Irvine, CA, 92618

Lab Reference #: NAM 27893B  
Project Name: LAUSD 49th Street PEA  
Project #: 211936010

**Metals**

Client Sample ID		Lab Sample Number	Date Received		Date Sampled		Matrix		
B4-W3-0.5		27893-003	5/6/2023	11:50	5/6/2023	8:13	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>	
STLC Arsenic	6010B	3.2	mg/L	05/15/23 16:30	05/16/23 13:31		--	1	
B41A-0.5		27893-005	5/6/2023	11:50	5/6/2023	8:37	Soil		
<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>		<u>Qual</u>	<u>DF</u>	
STLC Arsenic	6010B	6.6	mg/L	05/15/23 16:30	05/16/23 13:35		--	1	
Method Blank							Soil		
<u>MB ID</u>	<u>ANALYTE</u>	<u>EPA Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Qual</u>	<u>DF</u>	
MBHV0515236	STLC Arsenic	6010B	<0.20	mg/L	05/15/23 16:30	05/16/23 13:09	--	1	



**QA/QC Report  
for  
Metals**

Reference #: NAM 27893B

Reporting units: ppm

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

**STLC CCR**

Laboratory Sample #: 27893-003

Date of Extraction: 05/15/23 16:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
STLC Arsenic	05/16/23 13:18	05/16/23 13:28	3.20	1.00	4.36	4.26	116	106	2	75-125	20	--

**Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD)**

**STLC CCR**

Laboratory Sample #: HV0515236

Date of Extraction: 05/15/23 16:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
STLC Arsenic	05/16/23 13:13	05/16/23 13:15	--	1.00	0.981	0.965	98	96	2	80-120	20	--

## Definition of terms:

R	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: $\{(MS-R1) / SP\ CONC\} \times 100$
%MSD	Percent recovery of MSD: $\{(MSD-R1) / SP\ CONC\} \times 100$
RPD (for MS/MSD)	Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: $\{(LCS) / SP\ CONC\} \times 100$
%LCSD	Percent recovery of LCSD: $\{(LCSD) / SP\ CONC\} \times 100$
RPD (for LCS/LCSD)	Relative Percent Difference: $\{(LCS-LCSD) / (LCS+LCSD)\} \times 100 \times 2$
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

## Analysis Request &amp; Chain of Custody Record

Lab Job No.:

27893

Page:

1

of

2



ORANGE COAST ANALYTICAL, INC.

www.ocalab.com

3002 Dow Avenue, Suite 532

4620 East Elwood Street, Suite 4

Tustin, CA 92780

Phoenix, AZ 85040

Phone: (714) 832-0064 Fax: (714) 832-0067

Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION					ANALYSIS REQUEST / PRESERVATION										REQUESTED TURN-AROUND-TIME	
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);"> Asenic by EPA 6010B Lead by EPA 6010B </div> <div> </div> </div>										Standard: _____	
Send Report To: Dennis Fee		Project Number: 211936010															72 Hour: <input checked="" type="checkbox"/>	
Email: dfree@ninyoandmoore.com		PO #:															48 Hour: _____	
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA															24 Hour: _____	
Phone: (949) 753-7070 Fax:		Sampled By: Aileen Chea															REMARKS / INSTRUCTIONS	
Customer Sample IDs		No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type												
1	B4-W4-0.5	1	5/6/23	0803	SS	902 jar											HOLD	
2	B4-W4-2.5			0806													HOLD	
3	B4-W3-0.5			0813			X											
4	B4-W3-2.5			0815													HOLD	
5	B41A-0.5			0837			X											
6	B40A-0.5			0848													HOLD	
7	B34-NE2-0.5			0908													HOLD	
8	B34-NE2-2.5			0917													HOLD	
9	B34-NE-0.5			0921														
10	B34-NE-2.5			0926														
11	B34-NW-0.5			0931													HOLD	
12	B34-NW2-0.5			0938													HOLD	
13	B34-NW2-2.5			0944													HOLD	
14	B34-SW-0.5			0950			X											
No. of Samples: 14		Method of Shipment:		Preservative: 1 = Ice		2 = HCl		3 = HNO <sub>3</sub>		4 = H <sub>2</sub> SO <sub>4</sub>		5 = NaOH		6 = Other				
Relinquished By: Aileen Chea/Orlun		Date: 5/6/23		Received By:		Date:		Sample Matrix:		DW - Drinking Water								
Company: Ninyo & Moore		Time: 1150		Company:		Time:		GW - Groundwater		AQ - Aqueous								
Relinquished By:		Date:		Received By:		Date:		WW - Wastewater		SS - Soil / Solid								
Company:		Time:		Company:		Time:		SW - Stormwater		OT - Other								
Relinquished By:		Date:		Received For OCA By: Mark		Date: 5/6/23		Sample Integrity: 4.0 + 0.34.5 2										
Company:		Time:		Company: OCA, CA		Time: 1150		Intact: _____		On Ice: <input checked="" type="checkbox"/> Yes		No @ _____ °C						

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

### of Custody Record



4620 East Elwood Street, Suite 4

Phoenix, AZ 85040

Phone: (480) 736-0960 Fax: (480) 736-0970

Lab Job No.:

27892

Page:

2

of

2

## ANALYSIS REQUEST / PRESERVATION

REQUESTED TURN-AROUND-TIME	NO. OF SUBMITTERS	NO. OF SOLUTIONS	NO. OF PROBLEMS	NO. OF SUBMITTERS WITH SOLUTIONS	NO. OF PROBLEMS WITH SOLUTIONS
10	1	1	1	1	1
20	1	1	1	1	1
30	1	1	1	1	1
40	1	1	1	1	1
50	1	1	1	1	1
60	1	1	1	1	1
70	1	1	1	1	1
80	1	1	1	1	1
90	1	1	1	1	1
100	1	1	1	1	1
110	1	1	1	1	1
120	1	1	1	1	1
130	1	1	1	1	1
140	1	1	1	1	1
150	1	1	1	1	1
160	1	1	1	1	1
170	1	1	1	1	1
180	1	1	1	1	1
190	1	1	1	1	1
200	1	1	1	1	1
210	1	1	1	1	1
220	1	1	1	1	1
230	1	1	1	1	1
240	1	1	1	1	1
250	1	1	1	1	1
260	1	1	1	1	1
270	1	1	1	1	1
280	1	1	1	1	1
290	1	1	1	1	1
300	1	1	1	1	1
310	1	1	1	1	1
320	1	1	1	1	1
330	1	1	1	1	1
340	1	1	1	1	1
350	1	1	1	1	1
360	1	1	1	1	1
370	1	1	1	1	1
380	1	1	1	1	1
390	1	1	1	1	1
400	1	1	1	1	1
410	1	1	1	1	1
420	1	1	1	1	1
430	1	1	1	1	1
440	1	1	1	1	1
450	1	1	1	1	1
460	1	1	1	1	1
470	1	1	1	1	1
480	1	1	1	1	1
490	1	1	1	1	1
500	1	1	1	1	1
510	1	1	1	1	1
520	1	1	1	1	1
530	1	1	1	1	1
540	1	1	1	1	1
550	1	1	1	1	1
560	1	1	1	1	1
570	1	1	1	1	1
580	1	1	1	1	1
590	1	1	1	1	1
600	1	1	1	1	1
610	1	1	1	1	1
620	1	1	1	1	1
630	1	1	1	1	1
640	1	1	1	1	1
650	1	1	1	1	1
660	1	1	1	1	1
670	1	1	1	1	1
680	1	1	1	1	1
690	1	1	1	1	1
700	1	1	1	1	1
710	1	1	1	1	1
720	1	1	1	1	1
730	1	1	1	1	1
740	1	1	1	1	1
750	1	1	1	1	1
760	1	1	1	1	1
770	1	1	1	1	1
780	1	1	1	1	1

Standard:

72 Hour: ~~X~~

48 Hour:

24 Hour: \_\_\_\_\_

## REMARKS / INSTRUCTIONS

CUSTOMER INFORMATION		PROJECT INFORMATION					
Company: Ninyo & Moore		Project Name: LAUSD 49th Street PEA					
Send Report To: Dennis Fee		Project Number: 211936010					
Email: dfree@ninyoandmoore.com		PO #:					
Address: 475 Goddard Irvine, CA 92618		Address (City / State): Los Angeles, CA					
Phone: (949) 753-7070 Fax:		EDD Required: <u>Scribe EDD</u>					
		Sampled By: <u>Aileen Chea</u>					
Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type		
B34-SW-2.5	1	5/6/23	0954	SS	902 jar		
B34-SW2-0.5	↓	↓	1010	↓	↓		
B34-SW2-2.5	↓	↓	1021	↓	↓		
AC 5/6/23							

No. of Samples: 3 Method of Shipment: \_\_\_\_\_ Preservative: 1 = Ice 2 = HCl 3 = HNO<sub>3</sub> 4 = H<sub>2</sub>SO<sub>4</sub> 5 = NaOH 6 = Other

Relinquished By: Aileen Chea/Aileen Date: 5/6/23  
Time: 1150

Date:

DW - Drinking Water

AQ - Aqueous

SS - Soil / Solid

OT - Other

Date:

Date: 5-6-22

$$4.0 + 6 = 4.6$$

Time:

Time: 1150

Intact: On Ice: Yes / No @

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

# Sample Receipt Report

Laboratory Reference NAM 27893

Logged in by MM

Received: 05/06/23 11:50

Company Name: Ninyo & Moore

Method of Shipment: Hand Delivered

Project Manager: Mr. Dennis Fee

Shipping Container: Cooler

Project Name: LAUSD 49th Street PEA

# Shipping Containers: 1

Project #: 211936010

Sample Quantity

17 Soil

Chain of Custody	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Samples On Ice	Yes, Wet <input checked="" type="checkbox"/>	Yes, Blue <input type="checkbox"/>	No <input type="checkbox"/>
Observed Temp. (°C): <u>4</u>	Thermometer ID: <u>IR#3</u>	Adjusted Temp.: <u>4+(-0)=4</u>	
Shipping Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Shipping Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples Intact	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Sample Custody Seals Intact	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Custody Seals Signed & Dated	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Proper Test Containers	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Proper Test Preservations	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Samples Within Hold Times	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
VOAs Have Zero Headspace	Yes <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample Labels	Complete <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	None <input type="checkbox"/>
Sample Information Matches COC	Yes <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	No <input type="checkbox"/>

Notes

Client Notified

By

On



# APPENDIX G

## 95 Percent UCL Calculations

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Data Sets with Non-Detects											
2												
3	User Selected Options											
4	Date/Time of Computation			ProUCL 5.2 5/16/2023 6:48:36 AM								
5	From File			WorkSheet.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10												
11	Lead											
12												
13	General Statistics											
14	Total Number of Observations				80		Number of Distinct Observations				64	
15							Number of Missing Observations				0	
16	Minimum				1.4		Mean				26.91	
17	Maximum				360		Median				7	
18	SD				53.17		Std. Error of Mean				5.944	
19	Coefficient of Variation				1.976		Skewness				4.406	
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic				0.486		Shapiro Wilk GOF Test					
23	1% Shapiro Wilk P Value				0		Data Not Normal at 1% Significance Level					
24	Lilliefors Test Statistic				0.316		Lilliefors GOF Test					
25	1% Lilliefors Critical Value				0.115		Data Not Normal at 1% Significance Level					
26	Data Not Normal at 1% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL					95% UCLs (Adjusted for Skewness)						
30	95% Student's-t UCL				36.8		95% Adjusted-CLT UCL (Chen-1995)				39.81	
31							95% Modified-t UCL (Johnson-1978)				37.29	
32												
33	Gamma GOF Test											
34	A-D Test Statistic				4.299		Anderson-Darling Gamma GOF Test					
35	5% A-D Critical Value				0.799		Data Not Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic				0.196		Kolmogorov-Smirnov Gamma GOF Test					
37	5% K-S Critical Value				0.104		Data Not Gamma Distributed at 5% Significance Level					
38	Data Not Gamma Distributed at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)				0.69		k star (bias corrected MLE)				0.672	
42	Theta hat (MLE)				39.01		Theta star (bias corrected MLE)				40.03	
43	nu hat (MLE)				110.4		nu star (bias corrected)				107.6	
44	MLE Mean (bias corrected)				26.91		MLE Sd (bias corrected)				32.82	
45						Approximate Chi Square Value (0.05)				84.62		
46	Adjusted Level of Significance				0.047		Adjusted Chi Square Value				84.24	
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL				34.2		95% Adjusted Gamma UCL				34.35	
50												

	A	B	C	D	E	F	G	H	I	J	K	L
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic					0.935	Shapiro Wilk Lognormal GOF Test					
53	10% Shapiro Wilk P Value					6.6604E-4	Data Not Lognormal at 10% Significance Level					
54	Lilliefors Test Statistic					0.158	Lilliefors Lognormal GOF Test					
55	10% Lilliefors Critical Value					0.0907	Data Not Lognormal at 10% Significance Level					
56	Data Not Lognormal at 10% Significance Level											
57												
58	Lognormal Statistics											
59	Minimum of Logged Data					0.336	Mean of logged Data					2.414
60	Maximum of Logged Data					5.886	SD of logged Data					1.216
61												
62	Assuming Lognormal Distribution											
63	95% H-UCL					32.91	90% Chebyshev (MVUE) UCL					34.96
64	95% Chebyshev (MVUE) UCL					40.35	97.5% Chebyshev (MVUE) UCL					47.84
65	99% Chebyshev (MVUE) UCL					62.55						
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data do not follow a Discernible Distribution											
69												
70	Nonparametric Distribution Free UCLs											
71	95% CLT UCL					36.68	95% BCA Bootstrap UCL					41.47
72	95% Standard Bootstrap UCL					36.82	95% Bootstrap-t UCL					44.24
73	95% Hall's Bootstrap UCL					44.5	95% Percentile Bootstrap UCL					37.74
74	90% Chebyshev(Mean, Sd) UCL					44.74	95% Chebyshev(Mean, Sd) UCL					52.82
75	97.5% Chebyshev(Mean, Sd) UCL					64.03	99% Chebyshev(Mean, Sd) UCL					86.05
76												
77	Suggested UCL to Use											
78	95% Student's-t UCL					36.8						
79												
80	The calculated UCLs are based on assumptions that the data were collected in a random and unbiased manner.											
81	Please verify the data were collected from random locations.											
82	If the data were collected using judgmental or other non-random methods,											
83	then contact a statistician to correctly calculate UCLs.											
84												
85	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
86	Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.											
87	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											



	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Uncensored Full Data Sets											
2												
3	User Selected Options											
4	Date/Time of Computation			ProUCL 5.2 5/17/2023 3:19:27 PM								
5	From File			WorkSheet.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10												
11	PCB											
12												
13	General Statistics											
14	Total Number of Observations				33		Number of Distinct Observations				5	
15							Number of Missing Observations				0	
16	Minimum				12.5		Mean				32.2	
17	Maximum				250		Median				12.5	
18	SD				48.82		Std. Error of Mean				8.498	
19	Coefficient of Variation				1.516		Skewness				3.256	
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic				0.475		Shapiro Wilk GOF Test					
23	1% Shapiro Wilk Critical Value				0.906		Data Not Normal at 1% Significance Level					
24	Lilliefors Test Statistic				0.445		Lilliefors GOF Test					
25	1% Lilliefors Critical Value				0.177		Data Not Normal at 1% Significance Level					
26	Data Not Normal at 1% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL					95% UCLs (Adjusted for Skewness)						
30	95% Student's-t UCL				46.59		95% Adjusted-CLT UCL (Chen-1995)				51.32	
31							95% Modified-t UCL (Johnson-1978)				47.39	
32												
33	Gamma GOF Test											
34	A-D Test Statistic				7.643		Anderson-Darling Gamma GOF Test					
35	5% A-D Critical Value				0.774		Data Not Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic				0.483		Kolmogorov-Smirnov Gamma GOF Test					
37	5% K-S Critical Value				0.157		Data Not Gamma Distributed at 5% Significance Level					
38	Data Not Gamma Distributed at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)				1.083		k star (bias corrected MLE)				1.005	
42	Theta hat (MLE)				29.72		Theta star (bias corrected MLE)				32.04	
43	nu hat (MLE)				71.49		nu star (bias corrected)				66.33	
44	MLE Mean (bias corrected)				32.2		MLE Sd (bias corrected)				32.12	
45						Approximate Chi Square Value (0.05)				48.59		
46	Adjusted Level of Significance				0.0419		Adjusted Chi Square Value				47.8	
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL				43.95		95% Adjusted Gamma UCL				44.67	
50												

	A	B	C	D	E	F	G	H	I	J	K	L
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic					0.542	Shapiro Wilk Lognormal GOF Test					
53	10% Shapiro Wilk Critical Value					0.942	Data Not Lognormal at 10% Significance Level					
54	Lilliefors Test Statistic					0.475	Lilliefors Lognormal GOF Test					
55	10% Lilliefors Critical Value					0.139	Data Not Lognormal at 10% Significance Level					
56	Data Not Lognormal at 10% Significance Level											
57												
58	Lognormal Statistics											
59	Minimum of Logged Data					2.526	Mean of logged Data					2.944
60	Maximum of Logged Data					5.521	SD of logged Data					0.859
61												
62	Assuming Lognormal Distribution											
63	95% H-UCL					38.83	90% Chebyshev (MVUE) UCL					40.67
64	95% Chebyshev (MVUE) UCL					46.84	97.5% Chebyshev (MVUE) UCL					55.4
65	99% Chebyshev (MVUE) UCL					72.2						
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data do not follow a Discernible Distribution											
69												
70	Nonparametric Distribution Free UCLs											
71	95% CLT UCL					46.17	95% BCA Bootstrap UCL					51.14
72	95% Standard Bootstrap UCL					46.06	95% Bootstrap-t UCL					57.39
73	95% Hall's Bootstrap UCL					56.97	95% Percentile Bootstrap UCL					47.35
74	90% Chebyshev(Mean, Sd) UCL					57.69	95% Chebyshev(Mean, Sd) UCL					69.24
75	97.5% Chebyshev(Mean, Sd) UCL					85.27	99% Chebyshev(Mean, Sd) UCL					116.8
76												
77	Suggested UCL to Use											
78	95% Student's-t UCL					46.59						
79												
80	The calculated UCLs are based on assumptions that the data were collected in a random and unbiased manner.											
81	Please verify the data were collected from random locations.											
82	If the data were collected using judgmental or other non-random methods,											
83	then contact a statistician to correctly calculate UCLs.											
84												
85	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
86	Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.											
87	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
88												



# APPENDIX H

## Vapor Intrusion Risk Calculation Tables

**Table G1**  
**Exposure Parameters for Onsite Receptors**  
**49th Street Elementary School**  
**Los Angeles, California**

Exposure/Site Specific Parameters	Units	School Exposure Parameters		
		School Staff	Student	Source
Chemical Concentration in Air (CA)		--	--	chemical-specific
Exposure Frequency (EF)	days/year	250	180	Cal-EPA, 2003
Exposure Duration (ED)	years	25	6	Cal-EPA, 2003
Exposure Time (ET)	hr/day	8	8	Cal-EPA, 2003
Averaging Time for Noncarcinogens (AT <sub>n</sub> )	hours	219,000	52,560	USEPA 2009
Averaging Time for Carcinogens (AT <sub>c</sub> )	hours	613,200	613,200	USEPA 2009

**Table G2**  
**Indoor Air Exposure Point Concentrations**  
**Estimated Using a Default Attenuation Factor of 0.001**  
**49th Street Elementary School**  
**Los Angeles, California**

Chemical of Potential Concern (COPC)	CAS Number	Maximum Detected Soil Gas Concentration (µg/m <sup>3</sup> )	Estimated Indoor Chemical Air Concentration (ug/m <sup>3</sup> )
1,2,4-Trimethylbenzene	95636	22	2.20E-02
Ethylbenzene	100414	32	3.20E-02
Freons	75694	82	8.20E-02
Tetrachloroethene	127184	91	9.10E-02
Toluene	108883	92	9.20E-02
Xylenes, total	95476	181	1.81E-01

Notes:

Attenuation factor (unitless) = 0.001

µg/L = micrograms per liter

NA = Not applicable or not available

**Table G3**  
**Indoor Air Exposure Point Concentrations**  
**Estimated Using a Default Attenuation Factor of 0.03**  
**49th Street Elementary School**  
**Los Angeles, California**

Chemical of Potential Concern (COPC)	CAS Number	Maximum Detected Soil Gas Concentration (µg/m <sup>3</sup> )	Estimated Indoor Chemical Air Concentration (ug/m <sup>3</sup> )
1,2,4-Trimethylbenzene	95636	22	6.60E-01
Ethylbenzene	100414	32	9.60E-01
Freons	75694	82	2.46E+00
Tetrachloroethene	127184	91	2.73E+00
Toluene	108883	92	2.76E+00
Xylenes, total	95476	181	5.43E+00

Notes:

Attenuation factor (unitless) = 0.03

µg/L = micrograms per liter

NA = Not applicable or not available

**Table G4**  
**Toxicity Criteria of Chemicals of Potential Concern**  
**49th Street Elementary School**  
**Los Angeles, California**

<b>Chemical</b>	<b>Chronic Inhalation Reference Concentration (RfC) (ug/m<sup>3</sup>)</b>	<b>Inhalation Unit Risk  (ug/m<sup>3</sup>)<sup>-1</sup></b>
<b>VOCs</b>		
1,2,4-Trimethylbenzene	6.0E+01	NA
Ethylbenzene	1.0E+03	2.5E-06
Freons	1.2E+03	NA
Tetrachloroethene	4.0E+01	6.1E-06
Toluene	3.0E+02	NA
Xylenes, total	1.0E+02	NA

**Notes:**

Source = Cal/EPA HHRA Note No. 10, 2019

**Table G5**  
**Health Hazards from Inhalation of Indoor Air for Student Exposure Scenario**  
**Estimated Using a Default Attenuation Factor of 0.001**  
**49th Street Elementary School**  
**Los Angeles, California**

COPC	Indoor Air Conc. (ug/m <sup>3</sup> )	Inhalation Reference Concentration (ug/m <sup>3</sup> )	Student Exposure Scenario	
			Average Exposure Conc_nc (ug/m <sup>3</sup> )	Hazard Quotient (Unitless)
			Student	Student
<b>VOCs</b>				
1,2,4-Trimethylbenzene	2.2E-02	6.0E+01	3.6E-03	6.E-05
Ethylbenzene	3.2E-02	1.0E+03	5.3E-03	5.E-06
Freons	8.2E-02	1.2E+03	1.3E-02	1.E-05
Tetrachloroethene	9.1E-02	4.0E+01	1.5E-02	4.E-04
Toluene	9.2E-02	3.0E+02	1.5E-02	5.E-05
Xylenes, total	1.8E-01	1.0E+02	3.0E-02	3.E-04
<b>Total Hazard Index</b>				<b>8.E-04</b>

Notes:  
ug/m<sup>3</sup> = Micrograms per cubic meter



**Table G6**  
**Health Hazards from Inhalation of Indoor Air for Student Exposure Scenario**  
**Estimated Using a Default Attenuation Factor of 0.03**  
**49th Street Elementary School**  
**Los Angeles, California**

COPC	Indoor  Air  Conc.  (ug/m <sup>3</sup> )	Inhalation  Reference  Concentration  (ug/m <sup>3</sup> )	Student Exposure Scenario	
			Average Exposure Conc_nc (ug/m <sup>3</sup> )	Hazard Quotient (Unitless)
			Student	Student
<b>VOCs</b>				
1,2,4-Trimethylbenzene	6.6E-01	6.0E+01	1.1E-01	2.E-03
Ethylbenzene	9.6E-01	1.0E+03	1.6E-01	2.E-04
Freons	2.5E+00	1.2E+03	4.0E-01	3.E-04
Tetrachloroethene	2.7E+00	4.0E+01	4.5E-01	1.E-02
Toluene	2.8E+00	3.0E+02	4.5E-01	2.E-03
Xylenes, total	5.4E+00	1.0E+02	8.9E-01	9.E-03
<b>Total Hazard Index</b>				<b>2.E-02</b>

Notes:

ug/m<sup>3</sup> = Micrograms per cubic meter

**Table G7**  
**Health Hazards from Inhalation of Indoor Air for School Staff Exposure Scenario**  
**Estimated Using a Default Attenuation Factor of 0.001**  
**49th Street Elementary School**  
**Los Angeles, California**

COPC	Indoor Air Concentration (ug/m <sup>3</sup> )	Inhalation Reference Concentration (ug/m <sup>3</sup> )	School Staff Exposure Scenario	
			Average Exposure Conc_nc (ug/m <sup>3</sup> )	Hazard Quotient (Unitless)
<b>VOCs</b>				
1,2,4-Trimethylbenzene	2.2E-02	6.0E+01	5.0E-03	8.E-05
Ethylbenzene	3.2E-02	1.0E+03	7.3E-03	7.E-06
Freons	8.2E-02	1.2E+03	1.9E-02	2.E-05
Tetrachloroethene	9.1E-02	4.0E+01	2.1E-02	5.E-04
Toluene	9.2E-02	3.0E+02	2.1E-02	7.E-05
Xylenes, total	1.8E-01	1.0E+02	4.1E-02	4.E-04
<b>Total Hazard Index</b>				<b>1.E-03</b>

Notes:

ug/m<sup>3</sup> = Micrograms per cubic meter

**Table G8**  
**Health Hazards from Inhalation of Indoor Air for School Staff Exposure Scenario**  
**Estimated Using a Default Attenuation Factor of 0.03**  
**49th Street Elementary School**  
**Los Angeles, California**

COPC	Indoor Air Concentration (ug/m <sup>3</sup> )	Inhalation Reference Concentration (ug/m <sup>3</sup> )	School Staff Exposure Scenario	
			Average Exposure Conc_nc (ug/m <sup>3</sup> )	Hazard Quotient (Unitless)
<b>VOCs</b>				
1,2,4-Trimethylbenzene	6.6E-01	6.0E+01	1.5E-01	3.E-03
Ethylbenzene	9.6E-01	1.0E+03	2.2E-01	2.E-04
Freons	2.5E+00	1.2E+03	5.6E-01	5.E-04
Tetrachloroethene	2.7E+00	4.0E+01	6.2E-01	2.E-02
Toluene	2.8E+00	3.0E+02	6.3E-01	2.E-03
Xylenes, total	5.4E+00	1.0E+02	1.2E+00	1.E-02
<b>Total Hazard Index</b>				<b>3.E-02</b>

Notes:  
ug/m<sup>3</sup> = Micrograms per cubic meter

**Table G9**  
**Cancer Risks from Inhalation of Indoor Air for Student Exposure Scenario**  
**Estimated Using a Default Attenuation Factor of 0.001**  
**49th Street Elementary School**  
**Los Angeles, California**

COPC	Indoor Air	Inhalation	Student Exposure Scenario	
	Chemical	Unit	Lifetime Exposure	Cancer Risk
	Conc.	Risk	Conc_c	(Unitless)
	(ug/m <sup>3</sup> )	(ug/m <sup>3</sup> ) <sup>-1</sup>	(ug/m <sup>3</sup> )	
			Student	Student
<b>VOCs</b>				
1,2,4-Trimethylbenzene	2.2E-02	NA	3.1E-04	NA
Ethylbenzene	3.2E-02	2.5E-06	4.5E-04	1.E-09
Freons	8.2E-02	NA	1.2E-03	NA
Tetrachloroethene	9.1E-02	6.1E-06	1.3E-03	8.E-09
Toluene	9.2E-02	NA	1.3E-03	NA
Xylenes, total	1.8E-01	NA	2.6E-03	NA
<b>Total Cancer Risk</b>			<b>9.E-09</b>	
Notes: ug/m <sup>3</sup> = Micrograms per cubic meter				

**Table G10**  
**Cancer Risks from Inhalation of Indoor Air for Student Exposure Scenario**  
**Estimated Using a Default Attenuation Factor of 0.03**  
**49th Street Elementary School**  
**Los Angeles, California**

COPC	Indoor Air	Inhalation	Student Exposure Scenario	
	Chemical	Unit	Lifetime Exposure Conc_c	Cancer Risk
	Conc. (ug/m <sup>3</sup> )	Risk (ug/m <sup>3</sup> ) <sup>-1</sup>	(ug/m <sup>3</sup> )	(Unitless)
<b>VOCs</b>			<b>Student</b>	<b>Student</b>
1,2,4-Trimethylbenzene	6.6E-01	NA	9.3E-03	NA
Ethylbenzene	9.6E-01	2.5E-06	1.4E-02	3.E-08
Freons	2.5E+00	NA	3.5E-02	NA
Tetrachloroethene	2.7E+00	6.1E-06	3.8E-02	2.E-07
Toluene	2.8E+00	NA	3.9E-02	NA
Xylenes, total	5.4E+00	NA	7.7E-02	NA
<b>Total Cancer Risk</b>				<b>3.E-07</b>

Notes:

ug/m<sup>3</sup> = Micrograms per cubic meter

**Table G11**  
**Cancer Risks from Inhalation of Indoor Air for School Staff Exposure Scenario**  
**Estimated Using a Default Attenuation Factor of 0.001**  
**49th Street Elementary School**  
**Los Angeles, California**

COPC	Indoor Air  Chemical  Concentration  (ug/m <sup>3</sup> )	Inhalation  Unit  Risk  (ug/m <sup>3</sup> ) <sup>-1</sup>	School Staff Exposure Scenario	
			Lifetime Exposure Conc_c (ug/m <sup>3</sup> )	Cancer  Risk  (Unitless)
<b>VOCs</b>				
1,2,4-Trimethylbenzene	2.2E-02	NA	1.8E-03	NA
Ethylbenzene	3.2E-02	2.5E-06	2.6E-03	7.E-09
Freons	8.2E-02	NA	6.7E-03	NA
Tetrachloroethene	9.1E-02	6.1E-06	7.4E-03	5.E-08
Toluene	9.2E-02	NA	7.5E-03	NA
Xylenes, total	1.8E-01	NA	1.5E-02	NA
<b>Total Cancer Risk</b>				<b>5.E-08</b>

Notes:

ug/m<sup>3</sup> = Micrograms per cubic meter

**Table G12**  
**Cancer Risks from Inhalation of Indoor Air for School Staff Exposure Scenario**  
**Estimated Using a Default Attenuation Factor of 0.03**  
**49th Street Elementary School**  
**Los Angeles, California**

COPC	Indoor Air	Inhalation	School Staff Exposure Scenario	
	Chemical Concentration (ug/m <sup>3</sup> )	Unit Risk (ug/m <sup>3</sup> ) <sup>-1</sup>	Lifetime Exposure Conc_c (ug/m <sup>3</sup> )	Cancer Risk (Unitless)
<b>VOCs</b>				
1,2,4-Trimethylbenzene	6.6E-01	NA	5.4E-02	NA
Ethylbenzene	9.6E-01	2.5E-06	7.8E-02	2.E-07
Freons	2.5E+00	NA	2.0E-01	NA
Tetrachloroethene	2.7E+00	6.1E-06	2.2E-01	1.E-06
Toluene	2.8E+00	NA	2.3E-01	NA
Xylenes, total	5.4E+00	NA	4.4E-01	NA
<b>Total Cancer Risk</b>				<b>2.E-06</b>

Notes:

ug/m<sup>3</sup> = Micrograms per cubic meter



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