APPENDIX J

PHASE II ESA REPORT

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT
29943-30291 CAMINO CAPISTRANO
SAN JUAN CAPISTRANO, CALIFORNIA 92675

PREPARED FOR:

City of San Juan Capistrano
32400 Paseo Adelanto
San Juan Capistrano, California 92675

PREPARED BY:

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Report Date: October 22, 2025
Project Number: 25-2105

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October 22, 2025

City of San Juan Capistrano
32400 Paseo Adelanto
San Juan Capistrano, California 92675

RE: Phase II Environmental Site Assessment Report
29943-30291 Camino Capistrano
San Juan Capistrano, California 92675
Earth Science Project Number: 25-2105

Earth Science LLC is pleased to provide the City of San Juan Capistrano (City) with the results of this Phase II Environmental Site Assessment Report (Report) for the property located at 29943-30291 Camino Capistrano, San Juan Capistrano, California 92675.

The activities documented in this Report were performed in conformance with the scope and limitations detailed in our proposal dated August 15, 2025 (Proposal Number: 25-2105-2).

We appreciate the opportunity to provide environmental services to the City. If you have any questions concerning this Report, please contact our office at (949) 441-0433.

Respectfully,

Sean Rakhshani
Principal

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ACRONYMS AND ABBREVIATIONS

AOCs	Areas of concern
AST	Aboveground storage tank
BAS	Baseline Analytical Services
bgs	Below ground surface
Botella	Botella clay loam, 2.0 to 9.0 percent slopes, warm Mean Annual Air Temperature, Major Land Resource Area 19
CDWR	California Department of Water Resources
CEG	Certified Engineering Geologist
CHG	Certified Hydrogeologist
CHs	Chlorinated Herbicides
City	City of San Juan Capistrano
Corralitos	Corralitos loamy sand, moderately fine substratum
Cropley	Cropley clay, 2.0 to 9.0 percent slopes, warm Mean Annual Air Temperature, Major Land Resource Area 19
DRO	Diesel-range organics
DTSC	California Department of Toxic Substances Control
DTSC SLs	DTSC Note 3 Modified Screening Levels
DTSC SSLs	DTSC Supplemental Screening Levels
Earth Science	Earth Science LLC
ESA	Environmental Site Assessment
GPR	Ground-penetrating radar

ACRONYMS AND ABBREVIATIONS – *CONTINUED*

GRO	Gasoline-range organics
HERO	Human and Ecological Risk Office
HHRA	Human Health Risk Assessment
HSA	Hollow-stem auger
J-Flagged	Analyte detected at a concentration above the laboratory method detection limit and below the laboratory reporting limit; therefore, the result is an estimated concentration
MAAT	Mean Annual Air Temperature
mg/kg	Milligrams per kilogram
MLRA	Major Land Resource Area
MORO	Motor oil-range organics
OCHCA	Orange County Health Care Agency
OCPs	Organochlorine pesticides
PFAS	Per- and Polyfluoroalkyl Substances
PG	Professional Geologist
PGp	Professional Geophysicist
PID	Photo-ionization detector
ppm	Parts per million
PRG	Preliminary Remediation Goal
PVC	Polyvinyl chloride

ACRONYMS AND ABBREVIATIONS – *CONTINUED*

QA/QC	Quality assurance/quality control
REC	Recognized Environmental Condition
Report	Phase II Environmental Site Assessment Report
RSLs	Regional Screening Levels
Site	29943-30291 Camino Capistrano, San Juan Capistrano, California 92675
Soboba	Soboba gravelly loamy sand, 0.0 to 5.0 percent slopes
Sorrento 1	Sorrento loam, 0.0 to 2.0 percent slopes, warm Mean Annual Air Temperature, Major Land Resource Area 19
Sorrento 2	Sorrento loam, 2.0 to 9.0 percent slopes, warm Mean Annual Air Temperature, Major Land Resource Area 19
Sorrento 3	Sorrento clay loam, 2.0 to 9.0 percent slopes, warm Mean Annual Air Temperature, Major Land Resource Area 19
SS&A	Subsurface Surveys & Associates, Inc.
SWRCB	California State Water Resources Control Board
TPH	Total petroleum hydrocarbons
USEPA	United States Environmental Protection Agency
USTs	Underground storage tanks
VOCs	Volatile organic compounds
µg/m³	Micrograms per cubic meter

1 INTRODUCTION

Earth Science LLC (Earth Science) has prepared this Phase II Environmental Site Assessment (ESA) Report (Report) on behalf of the City of San Juan Capistrano (City) for the property located at 29943-30291 Camino Capistrano, San Juan Capistrano, California 92675 (Site); please refer to **Figure 1** for the ***Site Vicinity Map***.

The objective of this project was to investigate the potential presence of Chlorinated Herbicides (CHs), Organochlorine Pesticides (OCPs), Total Petroleum Hydrocarbons (TPH), and Volatile Organic Compounds (VOCs) in the subsurface of the Site as a result of the former onsite agricultural operations.

This Report documents the investigation activities performed at the Site, including the advancement of 10 borings (B-1 through B-10) to terminal depths ranging from 1.0 to 25 feet below ground surface (bgs); the installation of 10 temporary soil gas sampling probes; and the collection and analysis of soil and soil gas samples.

The following sections provide information detailing the Site background; local geology and hydrogeology; Site investigation scope of work; Site investigation results; Report summary; Report certifications and limitations; and Report references.

2 SITE BACKGROUND

The following sections provide details regarding the Site description and previous investigations performed at the Site to date.

2.1 SITE DESCRIPTION

The Site is located in commercial and residential area of San Juan Capistrano, California. The Site is bounded to the north by a residence and Camino Capistrano; to the south by a senior care community, a residential development, and Camino Capistrano; to the east by Camino Capistrano; and to the west by railroad tracks. The Site is comprised of an irregular-shaped lot consisting of six adjoining parcels improved with a two-story residence/ranch house with a partial basement, a garage building, a water tower, a park operation building, a barn, a water well and pump station building, multiple storage containers, paved and unpaved parking areas, a dog park, an equestrian staging area, a Native American village and museum, a vegetable farm, and recreational trails. Trees and vegetation cover the majority of the Site. Trabuco Creek runs through the eastern and southern portions of the Site. Access to the Site is available from Camino Capistrano located along the eastern boundary. Please refer to **Figure 2** for a ***Site Plan*** detailing the current Site boundaries and settings.

2.2 PREVIOUS ENVIRONMENTAL DOCUMENTS

The following is a summary of the relevant, previous environmental documents prepared for the Site, based on information made available to Earth Science as of the date of this Report. The following report was reviewed prior to developing and implementing this Phase II ESA scope of work:

- ***Phase I Environmental Site Assessment Report, 29943, 29991, 30091, 30261, and 30291 Camino Capistrano, San Juan Capistrano, California 92675, July 11, 2025.*** Earth Science prepared this report on behalf of Legacy Ranch Partners, LLC and the City. The key findings and conclusions of the above-referenced report included the following:

    - Based on available historical information, the Site was undeveloped land from at least 1902 up to 1920. The Site was developed as a residence/ranch and Valencia orange tree orchard from 1923 up to at least 2000. In 1993, the Site was purchased by the City. From at least 2002 up to the present day, the Site has been developed as a public park known as Northwest Open Space.

- According to 1992 to 1993 permit records from the City's Development Services Department, Building Division, two 250-gallon underground storage tanks (USTs) containing gasoline, an aboveground storage tank (AST) containing diesel, an AST containing herbicide, and approximately 150 cubic yards of diesel and waste oil contaminated soil were previously located in the vicinity of the present-day barn located in eastern portion of the Site. Additionally, the permit records indicated that historic soil testing was performed at the Site, including 15 borings to terminal depths ranging from 5.0 to 40 feet and diesel contamination was encountered in the subsurface of the Site. The documentation included in the permit records indicated that a final report would be prepared for clean certification as required by the regulatory agency. A note on the permit record states "Final Removal" dated May 18, 1993; however, no UST closure report (typically prepared following the removal of USTs) is available for the Site.

- A response to a public record request was received from the Orange County Health Care Agency (OCHCA), Environmental Health Division stating that the OCHCA does not have any records for the Site except for a notation in an old database that shows that the OCHCA conducted a tank removal inspection on September 17, 1992 at the Site. The OCHCA stated that it does not have any tank removal records; sampling records; tank, dispenser, or piping location information; or disposal records.

- The Site is listed in the California State Water Resources Control Board's (SWRCB's) GeoTracker database as a Public Drinking Water Well site. According to the SWRCB's GeoTracker database records, an inactive City groundwater production well is located at the Site. Testing of the groundwater production well performed from 2001 to 2024 indicated the presence of various contaminants, including emerging contaminants such as Per- and Polyfluoroalkyl Substances (PFAS) at concentrations exceeding the regulatory agency notification and response levels.

- The lack of documentation confirming that the former USTs were removed from the Site, that confirmatory soil sampling from the base pits and sidewalls of the excavations was performed following the UST removals, and that all dispenser piping and contaminated soils were properly removed from the Site and disposed of at appropriate offsite facilities represented a Recognized Environmental Condition (REC).

- The Site was used for agricultural purposes from at least 1923 up to at least 2000 and was part of a large orchard (orange groves). The potential storage and use of hazardous substances (including herbicides and pesticides) associated with the former agricultural operations conducted at the Site represented a REC.

- The documented presence of contamination in the inactive groundwater production well located at the Site at concentrations exceeding the regulatory agency notification and response levels represented a REC.

- Earth Science recommended that a Phase II ESA be performed in order to assess the potential for residual contamination to be present in the area of the former USTs at the Site. It was recommended that the Phase II ESA include a ground-penetrating radar (GPR) survey in order to confirm that all USTs and other subsurface structures associated with the former USTs have been removed.

- Earth Science recommended sampling the shallow soils (where the highest concentrations of residual herbicides and pesticides are likely to be found) near the former herbicide AST and the orchard areas at Site in order to confirm or deny the presence of hazardous substances associated with the former agricultural operations.

- Given that the groundwater production well located at the Site is inactive and that the contamination detected in the samples collected from the well are documented in the SWRCB's GeoTracker online database, no further investigation of the known groundwater contamination in the well was recommended; however, in the event that the groundwater production well located at the Site is placed back into service, it is recommended that the well be sampled and tested in accordance with all Federal, State, and local regulations prior to operating the well.

3 LOCAL GEOLOGY AND HYDROGEOLOGY

The Site is located at elevations ranging from approximately 150 to 215 feet above mean sea level. The topography in the vicinity of the Site gradually slopes towards the southwest (United States Geological Survey 7.5 Minute Topographic Map, San Juan Capistrano, California Quadrangle, 2022).

The Site is located within the floodplain of the Arroyo Trabuco (Trabuco Creek) in the northern Peninsular Range of Southern Orange County California. The San Juan Capistrano area is underlain by Tertiary-age sedimentary rocks that are gently folded in a broad synclinal trough with a north-trending axis. The Site is located within the central portion of the syncline that is underlain by primarily marine siltstone and sandstone of the Capistrano Formation of late Miocene and early Pliocene age. In the vicinity of the Site, the Capistrano Formation is capped unconformably by a thin sequence of non-marine Pleistocene and Recent age alluvial sediments associated with the Arroyo Trabuco (California Department of Water Resources, [CDWR], 1988).

Based on information obtained from the National Cooperative Soil Survey prepared by the United States Department of Agriculture Soil Conservation Service, the soils in the vicinity of the Site are classified as Botella clay loam, 2.0 to 9.0 percent slopes, warm Mean Annual Air Temperature (MAAT), Major Land Resource Area (MLRA) 19 (Botella); Corralitos loamy sand, moderately fine substratum (Corralitos); Cropley clay, 2.0 to 9.0 percent slopes, warm MAAT, MLRA 19 (Cropley); Riverwash; Soboba gravelly loamy sand, 0.0 to 5.0 percent slopes (Soboba); Sorrento loam, 0.0 to 2.0 percent slopes, warm MAAT, MLRA 19 (Sorrento 1); Sorrento loam, 2.0 to 9.0 percent slopes, warm MAAT, MLRA 19 (Sorrento 2); and Sorrento clay loam, 2.0 to 9.0 percent slopes, warm MAAT, MLRA 19 (Sorrento 3). Botella, Corralitos, Cropley, Sorrento 1, Sorrento 2, and Sorrento 3 soils are prime farmland if irrigated and Soboba soils are not prime farmland. Botella, Corralitos, Soboba, Sorrento 1, Sorrento 2, and Sorrento 3 soils are formed in alluvial fans. Cropley soils are formed in terraces and alluvial fans. Riverwash soils are formed in fans.

Trabuco Creek runs through the eastern and southern portions of the Site. The Site is located within the lower Trabuco Creek Division of the San Juan Groundwater Basin, defined as the area down-gradient of the confluence of Oso and Trabuco Creeks. The San Juan Groundwater basin underlies the San Juan Valley and several tributary valleys in southern Orange County. Groundwater within the basin typically flows southwest toward the Pacific Ocean. Recharge within the basin occurs primarily with precipitation through the valley floor and infiltration from the San Juan Creek, Oso Creek, and Arroyo Trabuco (CDWR, 1988).

The primary water-bearing layer within the basin is Quaternary alluvium. This alluvium is composed of a heterogeneous mixture of sand, silt, and gravel ranging in thickness from 65 feet to 125 feet. Sand layers of the Tertiary Santiago Formation may be water-bearing within the region and beneath the basin along with minor amounts of water being extracted from fractured basement rock beneath the basin. Generally, groundwater quality in the area has been reported as poor and does not meet drinking water standards, and is considered of non-beneficial use (CDWR, 1988).

According to reports obtained for nearby properties from the SWRCB's GeoTracker database, first groundwater in the Site vicinity is reported to be encountered at a depth of approximately 40 feet bgs and groundwater at the Site reportedly flows towards the southwest.

Based on the information obtained during the advancement of borings at the Site as part of this Phase II ESA, the encountered geology includes silts and fine to coarse-grained sands with gravels and silts which are dry and are brown, light brown, tan, and gray in color. Groundwater was not encountered down to the maximum investigation depth of 25 feet bgs.

Please refer to the ***Boring Logs*** in **Appendix A** for additional information regarding the Site geology and soil conditions.

4 SITE INVESTIGATION SCOPE OF WORK

The following sections detail the scope of work performed as part of this Site investigation.

4.1 HEALTH AND SAFETY

A Site-specific Health and Safety Plan was prepared and reviewed with all onsite personnel involved in the project prior to the commencement of field activities.

4.2 WORK PLAN

A Site-specific Work Plan was prepared and reviewed with all onsite personnel involved in the project prior to the commencement of field activities.

4.3 UTILITY CLEARANCE

The Site and boring locations were marked-out and Underground Service Alert was notified prior to performing fieldwork activities in order to clear public utilities, as required by law. The Site owner was also provided prior notice of the planned investigation activities to commence on September 17, 2025.

4.4 GEOPHYSICAL SURVEY

A geophysical survey was conducted at the Site on September 17, 2025 by Subsurface Surveys & Associates, Inc. (SS&A). The geophysical survey was conducted to locate potential USTs, backfilled excavation pits, underground utilities, and other pathways at the Site where significant releases may have occurred and which may act as a conduit for contaminant migration. The geophysical survey was also conducted to clear onsite private utilities in the vicinity of the proposed borings to be advanced at the Site which were not covered by the public utility clearance. The geophysical survey was conducted by SS&A using both GPR and electromagnetic equipment. As part of the geophysical survey, SS&A performed a scan of the relevant areas of concern (AOCs) at the Site. The geophysical survey conducted at the Site located underground utilities and two significant subsurface anomalies, which included two backfilled excavation pits in the eastern portion of the Site in locations of the two USTs reported located at the Site. Earth Science utilized the results of the geophysical survey in order to select the optimal boring locations for the investigation and to capture potential contaminated areas and potential contaminated vapor pathways. The key findings of the geophysical survey included the following:

- SS&A detected a small backfilled excavation near the location of the former northern-most shed, which was historically located in the eastern portion of the Site near the present-day barn. This excavation measured approximately 9.0 feet by 7.5 feet and did not contain any objects within its detected boundaries. This backfilled excavation may have formerly contained one of the two USTs reportedly located at the Site.

- SS&A detected a second small backfilled excavation near the location of the two former southern-most sheds, which were historically located in the eastern portion of the Site near the present-day barn. This excavation measured approximately 8.5 feet by 5.0 feet and did not contain any objects within its detected boundaries. This backfilled excavation may have formerly contained one of the two USTs reportedly located at the Site.

- SS&A located various underground utility lines at the Site; however, no existing USTs were detected by SS&A within the surveyed areas.

The locations of the significant features which were identified during the geophysical survey are depicted on the ***Boring Location Map – Area of Concern Number 1*** in **Figure 3**. Please refer to the ***Geophysical Investigation Report*** in **Appendix B** for additional information regarding the geophysical survey results.

4.5 DRILLING EQUIPMENT

On September 17, 2025, West End Environmental Sampling, Inc. mobilized the required drilling equipment and personnel in order to advance 10 borings at the Site. Six 1.0-foot deep borings were drilled at the Site using a hand-operated hollow-stem auger (HSA). Two 10-foot borings and two 25-foot deep borings were drilled at the Site using a tracked-mounted, direct-push Geoprobe 6610DT drill rig utilizing a dual-tube conductor casing. All drilling and sampling equipment was cleaned using a high-pressure washer prior to beginning field work. All drilling and sampling equipment was decontaminated between samples and boreholes to prevent cross contamination.

4.6 BORING LOCATIONS AND DEPTHS

A total of 10 borings (B-1 through B-10) were advanced to terminal depths ranging from 1.0 to 25 feet bgs in order to perform soil logging, screening, and sampling, and to install temporary soil gas sampling probes. All boring locations were selected based on field conditions/observations, available historical information and a prior environmental report prepared for the Site, the identified AOCs, and the results of the geophysical survey.

Some areas of the Site were not accessible during the investigation due to the presence of the various stored items overlying the ground surfaces. Although access was limited in portions of the Site, Earth Science was generally able to place the borings in the necessary locations in order to adequately assess the Site for the purposes of this investigation. Please refer to **Figure 2** for the ***Site Plan*** which details the locations of the AOCs. The locations of the borings advanced at the Site are depicted on the ***Boring Location Map – Area of Concern Number 1*** in **Figure 3** and on the ***Boring Location Map – Area of Concern Number 2*** in **Figure 4**.

4.7 SOIL AND SOIL GAS SAMPLING METHODOLOGY

Soil samples were continuously logged from grade down to the terminal depth in all 10 borings order to obtain information on the general Site lithology. Soil samples were collected from the six 1.0-foot deep borings using a 0.5-foot long by 3.25-inch diameter sampler within the end of the hand-operated HSA. Soil samples were collected from the two 10-foot borings and two 25-foot deep borings using a sampler with an acetate liner and a sampling point. The sampler was advanced by a direct-push drill rig using hollow rods with the inner rods in-place to prevent soil from entering the sampler. Following the advancement of each core interval, the core was retrieved, the core barrel was disassembled, and the sample liner was removed. All collected soil samples were visually inspected for discoloration, monitored for odors, classified in accordance with the Unified Soil Classification System, and field-screened for VOCs using a photo-ionization detector (PID) calibrated to isobutylene. None of the collected soil samples exhibited any significant evidence of discoloration/staining or odors. VOC concentrations detected during the screening of soil samples with the PID ranged from 0.0 to 0.7 parts per million.

Following the completion of soil logging, screening, and sampling activities, temporary soil gas sampling probes were installed at the Site in borings B-3 through B-6, including soil gas probes screened at 5.0 and 10 feet bgs in borings B-3 and B-4 and soil gas probes screened at 5.0, 10, and 25 feet bgs in borings B-5 and B-6. In each of the four borings (B-3 through B-6), new 1/2-inch diameter polyvinyl chloride (PVC) casing was inserted into the borehole to the terminal depth, and new 1/4-inch diameter Nylaflow® nylon tubing with a 1/4-inch diameter stainless steel filter at the terminal end was inserted into the borehole through the PVC casing to the desired sampling depths. The PVC casing was used as a guide for the tubing to ensure that the desired sampling depth was achieved. Number 3 sand was poured into the boring annulus through the PVC casing to form an approximately 1.0-foot long sand pack around the stainless steel filter. A minimum of 6.0-inches of dry granular Bentonite was installed as a transition seal and a hydrated Bentonite annular seal was placed up to grade. The sampling end of the tubing was fitted with an open/shut valve and each temporary soil gas sampling probe was labeled for identification.

Soil gas samples were collected in accordance with the "*Advisory – Active Soil Gas Investigations, July 2015*," the "*Public Draft Guidance for Screening and Evaluating Vapor Intrusion, February 2020*," and the "*Final Draft Supplemental Guidance: Screening and Evaluating Vapor Intrusion, February 2023*" prepared by the California Department of Toxic Substances Control (DTSC). Baseline Analytical Services (BAS), a mobile environmental analytical laboratory, collected soil gas samples from the temporary soil gas monitoring probes installed at the Site.

Each temporary soil gas monitoring probe was allowed to equilibrate for at least two hours after installation prior to collecting the samples using Tedlar bags. Shut-in tests were performed for all collected samples and three purge volumes were removed from each temporary soil gas sampling probe prior to collecting the samples. The sample collection rate for each soil gas sample was 200 milliliters per minute. A total of 10 soil gas samples were collected from the 10 temporary soil gas sampling probes installed at the Site. In addition to the 10 collected soil gas samples, one duplicate soil gas sample was collected for quality assurance and quality control (QA/QC) purposes.

An equipment blank sample, consisting of an assembled blank probe, tip, and tubing was also sampled, and the results were non-detect for all contaminants. Tracer gas (isopropyl alcohol) was placed around each temporary soil gas sampling probe while sampling to detect ambient air intrusion. The tracer gas was not detected in any of the samples, indicating that the integrity of the annular seal was maintained. Additionally, recovery of all surrogate compounds included with each analysis was within acceptable limits, indicating that the sampling containers and analysis equipment did not leak.

Following completion of all sampling activities, all temporary soil gas sampling probes were removed, the boreholes were backfilled up to grade, and the surfaces at the boring locations were restored to match the existing ground conditions. Please refer to **Table 1**, ***Investigation Summary*** for a description of the soil and soil gas sampling performed at the Site.

4.8 SOIL AND SOIL GAS ANALYSIS

The collected soil samples were immediately transferred into a cooler packed with ice and delivered under chain-of-custody procedures to SunStar Laboratories, Inc. on September 17, 2025. The soil samples collected from the Site at the depth intervals with the greatest likelihood of containing contamination (based on the encountered field conditions/observations, such as PID readings and soil lithology) were prepared for laboratory analysis. In total, 12 soil samples collected from the Site were analyzed as follows:

- The six soil samples collected from 1.0 feet bgs in borings B-1, B-2, and B-7 through B-10 (located in the orchard areas) were analyzed for OCPs in accordance with United States Environmental Protection Agency (USEPA) Method 8081A.

- The two soil samples collected from 1.0 feet bgs in borings B-3 and B-4 (located in the vicinity of a former AST containing herbicides) were analyzed for CHs in accordance with USEPA Method 8151A.

- The soil samples collected from 10 feet bgs in borings B-3 and B-4 (in the vicinity of a former AST containing diesel and in areas reported to contain diesel- and waste oil-contaminated soils) and from 25 feet bgs in boring B-5 and from 5.0 feet bgs in boring B-6 (in the vicinity of two former USTs containing gasoline) were analyzed for TPH as diesel-, gasoline-, and motor oil- range organics (DRO/GRO/MORO) in accordance with USEPA Method 8015B and for VOCs in accordance with USEPA Method 8260B.

Soil gas samples were collected and analyzed via a mobile laboratory operated by BAS. A total of 11 soil gas samples (consisting of 10 samples and one duplicate sample) collected from the temporary soil gas monitoring probes installed at the Site were prepared for laboratory analysis. All soil gas samples were analyzed for VOCs in accordance with USEPA Method 8260B.

Please refer to **Table 1**, ***Investigation Summary*** for a description of the selected soil and soil gas samples which were analyzed.

4.9 QUALITY ASSURANCE AND QUALITY CONTROL

QA/QC and chain-of-custody protocols were followed for all sampling and sample handling activities. QC is achieved through considered procedures and steps which are employed to ensure that the QA objectives are met. The QA objectives of data validation are to ensure that sampling, analysis, and reporting activities provide data that are accurate, precise, representative, and legally defensible. The QC steps and protocols include:

- Procedures for the collection of field samples, discussed above;

- Appropriate methods and protocols for the analysis of samples, discussed above, and;

- Data validation.

No findings which significantly affected the quality of the samples collected or the laboratory analytical results were identified. Please refer to the ***Laboratory Analytical Reports*** in **Appendix C** for further information regarding the laboratory QC methods, protocols, and results.

4.10 WASTE MANAGEMENT

No significant amounts of derived wastes were generated during this investigation. Any remnants of the samples submitted to the analytical laboratories will be held until the maximum sample hold times at which time the sample remnants will be disposed of by the analytical laboratories in a manner consistent with applicable regulations.

5 SITE INVESTIGATION RESULTS

The following sections present the soil and soil gas analysis results from the Site investigation and the applicable regulatory screening levels.

5.1 LABORATORY ANALYTICAL REPORTS

Please refer to the ***Laboratory Analytical Reports*** in **Appendix C** for the results of the analyzed soil and soil gas samples. The investigation results are summarized in **Table 2** (***Soil Analysis Results – Chlorinated Herbicides***), **Table 3** (***Soil Analysis Results – Organochlorine Pesticides***), **Table 4** (***Soil Analysis Results – Total Petroleum Hydrocarbons***), **Table 5** (***Soil Analysis Results – Volatile Organic Compounds***), and **Table 6** (***Soil Gas Analysis Results***).

5.2 COMPARISON OF THE REGULATORY SCREENING LEVELS AND THE INVESTIGATION RESULTS

The following sections describe the applicable regulatory screening levels in relation to the investigation results. All investigation results were compared to the applicable DTSC screening levels. For contaminants where no DTSC screening levels are available, the applicable USEPA screening levels were used.

5.2.1 REGULATORY SCREENING LEVELS

The DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 Modified Screening Levels (DTSC SLs) were developed based on the USEPA Regional Screening Levels (RSLs) for use in the HHRA process at hazardous waste sites and permitted facilities. HERO has a long history of working with the USEPA Region 9 office to integrate California-specific risk assessment concerns into the Preliminary Remediation Goal (PRG) listing and the PRG-screening risk assessment process. The most recent revision of HHRA Note 3 (dated May 2022) incorporates HERO recommendations based on a review of the USEPA RSL tables.

In February of 2020, the DTSC released a "*Public Draft Guidance for Screening and Evaluating Vapor Intrusion*" to promote State-wide standard practice and consistency for screening buildings for vapor intrusion and to establish appropriate sampling to protect building occupants from vapors off-gassing from contaminated sources. The 2020 Guidance document provides recommended attenuation factors which can be used to calculate Supplemental Screening Levels (SSLs) for the evaluation of sub-slab gas and soil gas impacts.

In February of 2023, the DTSC and SWRCB issued a supplemental guidance document titled "*Final Draft Supplemental Guidance: Screening and Evaluating Vapor Intrusion*."

USEPA RSLs (last updated in November of 2024), formerly known as PRGs, are generic, risk-based chemical concentrations developed by the USEPA for use in initial screening-level evaluations of soil and air. RSLs combine human health toxicity values with standard exposure factors to estimate contaminant concentrations that are considered to be health protective of human exposures over a lifetime through direct exposure pathways (e.g., via inhalation and/or ingestion of and/or dermal contact with, impacted soil). RSLs are not legally enforceable standards, but rather are considered guidelines to determine if potential risks associated with encountered contamination may warrant further evaluation.

5.2.2 SOIL ANALYSIS RESULTS

All analytes detected in the analyzed soil samples collected from the Site were at concentrations below the applicable regulatory screening levels. The following analytes were detected in the analyzed soil samples collected from the Site:

- Endrin aldehyde was detected in soil sample B-9-1 at an estimated ("J-Flagged") concentration of 0.0020 milligrams per kilogram (mg/kg). There is no DTSC SL or USEPA RSL for endrin aldehyde in soil.

- P-isopropyltoluene was detected in soil sample B-6-5 at an estimated ("J-Flagged") concentration of 0.00076 mg/kg. There is no DTSC SL for p-isopropyltoluene in soil. The Resident and Industrial USEPA RSLs for p-isopropyltoluene in soil are 170 and 1,100 mg/kg, respectively.

No other analytes were detected in any of the analyzed soil samples collected from the Site.

5.2.3 SOIL GAS ANALYSIS RESULTS

Benzene was detected in two of the 11 analyzed soil gas samples at concentrations exceeding the applicable residential use regulatory screening level, and benzene was detected in one of the 11 analyzed soil gas samples at a concentration exceeding the applicable commercial/industrial use regulatory screening level. Ethylbenzene was detected in two of the 11 analyzed soil gas samples at concentrations exceeding the applicable residential use regulatory screening level. All other analytes detected in the analyzed soil gas samples collected from the Site were at concentrations below the applicable regulatory screening levels. The following analytes were detected in the analyzed soil gas samples collected from the Site:

- 1,2,4-Trimethylbenzene was detected in soil gas samples B-3-SG5, B-3-SG10, B-3-SG10 DUP, B-4-SG5, B-4-SG10, B-5-SG5, B-5-SG10, B-5-SG25, B-6-SG5, B-6-SG10, and B-6-SG25 at concentrations of 38, 58, 53, 10, 9.8, 80, 13, 9.4, 12, 14, and 9.9 micrograms per cubic meter (µg/m³), respectively. The Residential and Commercial/Industrial DTSC SSLs for 1,2,4-trimethylbenzene (derived from the USEPA RSLs) in soil gas are 2,100 and 8,667 µg/m³, respectively.

- 1,3,5-Trimethylbenzene was detected in soil gas samples B-3-SG5, B-3-SG10, B-3-SG10 DUP, B-5-SG10, B-6-SG5, and B-6-SG10 at concentrations of 14, 18, 17, 5.0, 5.4 and 6.6 µg/m³, respectively. The Residential and Commercial/Industrial DTSC SSLs for 1,3,5-trimethylbenzene (derived from the USEPA RSLs) in soil gas are 2,100 and 8,667 µg/m³, respectively.

- Benzene was detected in soil gas samples B-4-SG10 and B-5-SG25 at concentrations of 45 and 8.7 µg/m³, respectively. The Residential and Commercial/Industrial DTSC SSLs for benzene in soil gas are 3.2 and 14 µg/m³, respectively.

- Ethylbenzene was detected in soil gas samples B-3-SG5, B-3-SG10, B-3-SG10 DUP, B-4-SG5, B-4-SG10, B-5-SG5, B-5-SG10, B-5-SG25, B-6-SG5, B-6-SG10, and B-6-SG25 at concentrations of 30, 93, 89, 8.0, 20, 6.5, 7.4, 5.1, 8.6, 10, and 6.1 µg/m³, respectively. The Residential and Commercial/Industrial DTSC SSLs for ethylbenzene (derived from the USEPA RSLs) in soil gas are 37 and 163 µg/m³, respectively.

- N-propylbenzene was detected in soil gas samples B-3-SG5, B-3-SG10, and B-3-SG10 DUP at concentrations of 10, 29, and 27 µg/m³, respectively. The Residential and Commercial/Industrial DTSC SSLs for n-propylbenzene (derived from the USEPA RSLs) in soil gas are 33,333 and 146,667 µg/m³, respectively.

- P-isopropyltoluene was detected in soil gas samples B-6-SG5, B-6-SG10, and B-6-SG25 at concentrations of 450, 38, and 22 µg/m³, respectively. The Residential and Commercial/Industrial DTSC SSLs for p-isopropyltoluene (derived from the USEPA RSLs) in soil gas are 1,400 and 6,000 µg/m³, respectively.

- Toluene was detected in soil gas samples B-4-SG5, B-4-SG10, B-5-SG5, B-5-SG10, B-5-SG25, B-6-SG5, B-6-SG10, and B-6-SG25 at concentrations of 65, 230, 19, 25, 13, 24, 30, and 20 µg/m³, respectively. The Residential and Commercial/Industrial DTSC SSLs for toluene in soil gas are 10,333 and 43,333 µg/m³, respectively.

- Total xylenes was detected in soil gas samples B-3-SG5, B-3-SG10, B-3-SG10 DUP, B-4-SG5, B-4-SG10, B-5-SG5, B-5-SG10, B-5-SG25, B-6-SG5, B-6-SG10, and B-6-SG25 at concentrations of 140, 260, 230, 34, 49, 33, 43, 21, 45, 52, and 34 µg/m³, respectively. The Residential and Commercial/Industrial DTSC SSLs for total xylenes (derived from the USEPA RSLs) in soil gas are 3,333 and 14,667 µg/m³, respectively.

No other analytes were detected in any of the analyzed soil gas samples collected from the Site.

6 SUMMARY

The objective of this project was to investigate the potential presence of CHs, OCPs, TPH, and VOCs in the subsurface of the Site as a result of the former onsite agricultural operations.

This Report documents the investigation activities performed at the Site, including the advancement of 10 borings (B-1 through B-10) to terminal depths ranging from 1.0 to 25 feet bgs; the installation of 10 temporary soil gas sampling probes; and the collection and analysis of soil and soil gas samples.

6.1 FINDINGS

All analytes detected in the analyzed soil samples collected from the Site were at concentrations below the applicable regulatory screening levels.

Benzene was detected in two of the 11 analyzed soil gas samples at concentrations of 45 and 8.7 µg/m³. Both detections of benzene in soil gas exceeded the applicable residential use regulatory screening level of 3.2 µg/m³. One of the two detections of benzene in soil gas exceeded the applicable commercial/industrial use regulatory screening level of 14 µg/m³.

Ethylbenzene was detected in all 11 of the analyzed soil gas samples at concentrations ranging from 5.1 to 93 µg/m³. Two of the 11 detections of ethylbenzene in soil gas exceeded the applicable residential use regulatory screening level of 37 µg/m³; however, none of the detections of ethylbenzene in soil gas exceeded the applicable commercial/industrial use regulatory screening level of 163 µg/m³.

All other analytes detected in the analyzed soil gas samples collected from the Site were at concentrations below the applicable regulatory screening levels.

6.2 CONCLUSIONS

A geophysical survey was conducted at the Site in order to attempt to locate the two USTs which were historically operated at the Site. The geophysical survey located various underground utility lines at the Site; however, no existing USTs were detected within the surveyed areas. The geophysical survey did identify two significant anomalies which appeared to be backfilled excavation pits located in the eastern portion of the Site in the vicinity of the reported areas of the two historic USTs. Earth Science placed a boring within the central portion of each of the two backfilled excavation pits located at the Site; however, no evidence of the presence of USTs or other structures was encountered within these two borings.

The results of this investigation indicate the presence of low concentrations of one OCP (endrin aldehyde) and one VOC (p-isopropyltoluene) in soil at Site and the presence of low to high concentrations of several VOCs in soil gas at Site. No CHs or TPH were detected in the analyzed soil samples collected from the Site.

None of the analytes detected in soil at the Site were at concentrations exceeding the applicable regulatory screening levels. Only benzene and ethylbenzene were detected in soil gas at concentrations exceeding one or more of the applicable regulatory screening levels.

The benzene and ethylbenzene in soil gas exceeding the commercial/industrial and/or residential screening levels were detected in an area adjacent to the barn within the storage yard located in the eastern portion of the Site. The barn is currently unoccupied and is used for the storage of pipes and other materials. Portions of the sides of the barn structure are missing panels or are enclosed with uncovered chain-link fencing, thereby significantly increasing the ventilation of the barn.

The extent of contamination at the Site has not been fully delineated; however, based on the findings of this Phase II ESA and the current use of the Site, particularly the use of the barn and the immediately surrounding area in the eastern portion of the Site for storage purposes, the potential for contaminated vapors to migrate into the building spaces at the Site (also known as a “Vapor Intrusion Condition”) is not a significant concern at this time. In the event that the Site is redeveloped for more sensitive uses such the development of occupied buildings in the vicinity of the existing barn structure, additional investigations and/or mitigation or remedial actions may be warranted.

If a formal regulatory determination pertaining to the contamination at the Site is desired, it is recommended that the responsible party enter into an oversight agreement with an appropriate environmental regulatory agency, such as the OCHCA.

7 CERTIFICATIONS AND LIMITATIONS

This Report was prepared under the direction and review of the professionals listed below. The work described herein was prepared in accordance with generally accepted environmental practices. The completed work includes observations of the Site conditions encountered and the analytical results from samples analyzed by an independent, third-party laboratory during the course of the project. The number and location of samples were selected to provide the required information; however, it cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

The results, findings, and conclusions in this Report are based on the conditions encountered in the areas explored at the Site at the time of the Earth Science's investigation; in the event that varying conditions are encountered in other areas of the Site during grading and/or construction activities that pose a potential environmental concern, additional investigation and/or testing of the Site may be warranted.

All conclusions and/or recommendations are based on observations, laboratory analyses, and governing regulations. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Earth Science warrants that the environmental consulting services contained herein were accomplished in accordance with generally accepted practices in the environmental industry that existed at the time and location of work. No other warranties are implied or expressed.

All reports, both verbal and written, as they pertain to the above-referenced property are for the sole use and benefit of the City. This Report has no other purpose and may not be relied upon by any other person or entity without the prior written consent of Earth Science.

Should you have any questions or comments concerning this Report, please contact our office at (949) 441-0433.

Respectfully,



Sean Rakhshani
Principal

Mark H. Slatten, PG, CEG, CHG, PGp
California Professional Geologist No. 4351

8 REFERENCES

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Human Health Risk Assessment Note Number 3, DTSC-Modified Screening Levels, prepared by the Department of Toxic Substances Control, Human and Ecological Risk Office, dated June 2020 - Revised May 2022.

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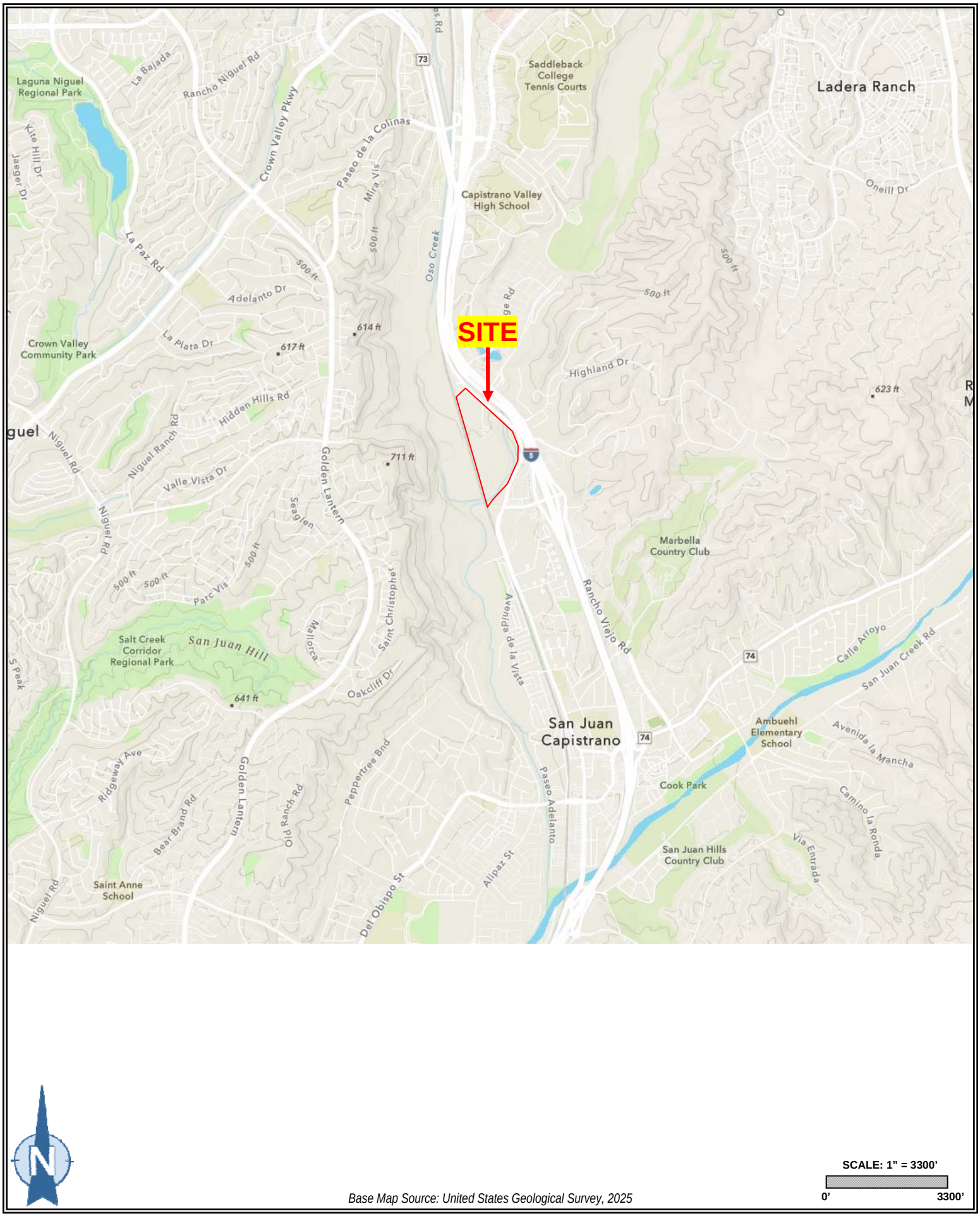
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Regional Screening Levels, prepared by the United States Environmental Protection Agency, dated November 2024.

San Juan Capistrano, California Quadrangle 7.5-Minute Series Topographic Map, prepared by the United States Geological Survey, dated 2022.

United States Department of Agriculture, Soil Conservation Service, National Cooperative Soil Survey, accessed via the Internet.

FIGURE 1: SITE VICINITY MAP



Base Map Source: United States Geological Survey, 2025

FIGURE 1: SITE VICINITY MAP
PROJECT NUMBER: 25-2105

EARTH SCIENCE LLC

FIGURE 2: SITE PLAN



FIGURE 2: SITE PLAN
PROJECT NUMBER: 25-2105

EARTH SCIENCE LLC

FIGURE 3: BORING LOCATION MAP – AREA OF CONCERN NUMBER 1



1.0-FOOT DEEP BORINGS

10-FOOT DEEP BORINGS

25-FOOT DEEP BORINGS

AREAS OF CONCERN (SOURCES: HISTORICAL SITE DOCUMENTS AND GEOPHYSICAL INVESTIGATION RESULTS):

BACKFILLED EXCAVATION PITS/REMOVED UNDERGROUND STORAGE TANKS CONTAINING GASOLINE

FORMER ABOVEGROUND STORAGE TANK CONTAINING DIESEL

FORMER ABOVEGROUND STORAGE TANK CONTAINING HERBICIDES

FORMER DIESEL CONTAMINATED SOIL AREA

FORMER WASTE OIL CONTAMINATED SOIL AREA

HISTORIC FOOTPRINTS OF THE REMOVED SHEDS

N

Base Map Source: Google Earth, 2025

SCALE: 1" = 60'

0' 60'

FIGURE 3: BORING LOCATION MAP – AREA OF CONCERN NUMBER 1

PROJECT NUMBER: 25-2105

EARTH SCIENCE LLC

FIGURE 4: BORING LOCATION MAP – AREA OF CONCERN NUMBER 2



FIGURE 4: BORING LOCATION MAP – AREA OF CONCERN NUMBER 2
PROJECT NUMBER: 25-2105

EARTH SCIENCE LLC

TABLE 1: INVESTIGATION SUMMARY

Table 1: Investigation Summary

Boring Identification	Location	Boring Terminal Depth (Feet Below Ground Surface)	Media Sampled	Depths of Analyzed Samples (Feet Below Ground Surface)	Target Contaminants
B-1	Eastern portion of the Site, in the Area of Concern (AOC) Number 1, in the location of an orchard	1.0	Soil	1.0 (Soil)	Organochlorine Pesticides
B-2	Eastern portion of the Site, in the AOC Number 1, in the location of an orchard	1.0	Soil	1.0 (Soil)	Organochlorine Pesticides
B-3	Eastern portion of the Site, in the AOC Number 1, in the location of a former aboveground storage tank (AST) containing diesel, a former AST containing herbicides, and an area reported to contain diesel-contaminated soil	10.0	Soil and Soil Gas	1.0 (Soil), 5.0 (Soil Gas), and 10.0 (Soil and Soil Gas)	Chlorinated Herbicides, Total Petroleum Hydrocarbons, and Volatile Organic Compounds
B-4	Eastern portion of the Site, in the AOC Number 1, in an area reported to contain waste oil-contaminated soil, and to the west of the location of a former AST containing diesel, a former AST containing herbicides, and an area reported to contain diesel-contaminated soil	10.0	Soil and Soil Gas	1.0 (Soil), 5.0 (Soil Gas), and 10.0 (Soil and Soil Gas)	Chlorinated Herbicides, Total Petroleum Hydrocarbons, and Volatile Organic Compounds
B-5	Eastern portion of the Site, in the AOC Number 1, in the location of a former underground storage tank (UST) containing gasoline which was historically located beneath the northern-most shed formerly located at the barn property	25.0	Soil and Soil Gas	5.0 (Soil Gas), 10.0 (Soil Gas), and 25.0 (Soil and Soil Gas)	Total Petroleum Hydrocarbons and Volatile Organic Compounds
B-6	Eastern portion of the Site, in the AOC Number 1, in the location of a former UST containing gasoline which was historically located near the two southern-most sheds formerly located at the barn property	25.0	Soil and Soil Gas	5.0 (Soil and Soil Gas), 10.0 (Soil Gas), and 25.0 (Soil Gas)	Total Petroleum Hydrocarbons and Volatile Organic Compounds
B-7	Western portion of the Site, in the AOC Number 2, in the location of an orchard	1.0	Soil	1.0 (Soil)	Organochlorine Pesticides
B-8	Central portion of the Site, in the AOC Number 2, in the location of an orchard	1.0	Soil	1.0 (Soil)	Organochlorine Pesticides
B-9	Western portion of the Site, in the AOC Number 2, in the location of an orchard	1.0	Soil	1.0 (Soil)	Organochlorine Pesticides
B-10	Southwestern portion of the Site, in the AOC Number 2, in the location of an orchard	1.0	Soil	1.0 (Soil)	Organochlorine Pesticides

TABLE 2: SOIL ANALYSIS RESULTS – CHLORINATED HERBICIDES

Table 2: Soil Analysis Results - Chlorinated Herbicides

Analysis Method	United States Environmental Protection Agency (USEPA) 8151A
Units	Milligrams Per Kilogram (mg/kg)
Sample Identification	All Analyzed Chlorinated Herbicides
B-3-1	ND
B-4-1	ND
DTSC SLs - Residential	NA
DTSC SLs - Commercial/Industrial	NA

Notes:

ND = not detected at a concentration above the laboratory method detection limit

DTSC SLs = California Department of Toxic Substances Control, Human and Ecological Risk Office, Human Health Risk Assessment Note Number: 3, Modified Screening Levels, May 2022

NA = not applicable

TABLE 3: SOIL ANALYSIS RESULTS – ORGANOCHLORINE PESTICIDES

Table 3: Soil Analysis Results - Organochlorine Pesticides

Analysis Method	United States Environmental Protection Agency (USEPA) 8081A	
Units	Milligrams Per Kilogram (mg/kg)	
Sample Identification	Endrin Aldehyde	All Other Analyzed Organochlorine Pesticides
B-1-1	ND	ND
B-2-1	ND	ND
B-7-1	ND	ND
B-8-1	ND	ND
B-9-1	0.0020 J	ND
B-10-1	ND	ND
DTSC SLs - Residential	NRSL	NA
DTSC SLs - Commercial/Industrial	NRSL	NA

Notes:

ND = not detected at a concentration above the laboratory method detection limit

J = analyte detected at a concentration above the laboratory method detection limit and below the laboratory reporting limit; therefore, the result is an estimated concentration

DTSC SLs = California Department of Toxic Substances Control, Human and Ecological Risk Office, Human Health Risk Assessment Note Number: 3, Modified Screening Levels, May 2022

NRSL = no regulatory screening level

NA = not applicable

TABLE 4: SOIL ANALYSIS RESULTS – TOTAL PETROLEUM HYDROCARBONS

Table 4: Soil Analysis Results - Total Petroleum Hydrocarbons

Analysis Method	United States Environmental Protection Agency (USEPA) 8015B		
Units	Milligrams Per Kilogram (mg/kg)		
Sample Identification	TPH as DRO	TPH as GRO	TPH as MORO
B-3-10	ND	ND	ND
B-4-10	ND	ND	ND
B-5-25	ND	ND	ND
B-6-5	ND	ND	ND
DTSC SLs - Residential	2400*	97**	2400*
DTSC SLs - Commercial/Industrial	18000*	500**	18000*

Notes:

TPH as DRO = total petroleum hydrocarbons as diesel range organics (carbon range C13-C28)

TPH as GRO = total petroleum hydrocarbons as gasoline range organics (carbon range C6-C12)

TPH as MORO = motor oil range organics (carbon range C29-C40)

ND = not detected at a concentration above the laboratory method detection limit

DTSC SLs = California Department of Toxic Substances Control, Human and Ecological Risk Office, Human Health Risk Assessment Note Number: 3, Modified Screening Levels, May 2022

* = DTSC SL is for carbon range C17-C32, which most closely corresponds to TPH as DRO and TPH as MORO

** = DTSC SL is for carbon range C9-C16, which most closely corresponds to TPH as GRO

TABLE 5: SOIL ANALYSIS RESULTS – VOLATILE ORGANIC COMPOUNDS

Table 5: Soil Analysis Results - Volatile Organic Compounds

Analysis Method	United States Environmental Protection Agency (USEPA) 8260B	
Units	Milligrams Per Kilogram (mg/kg)	
Sample Identification	p-Isopropyltoluene	All Other Analyzed VOCs
B-3-10	ND	ND
B-4-10	ND	ND
B-5-25	ND	ND
B-6-5	0.00076 J	ND
DTSC SLs - Residential	170*	NA
DTSC SLs - Commercial/Industrial	1100*	NA

Notes:

VOCs = volatile organic compounds

ND = not detected at a concentration above the laboratory method detection limit

J = analyte detected at a concentration above the laboratory method detection limit and below the laboratory reporting limit; therefore, the result is an estimated concentration

DTSC SLs = California Department of Toxic Substances Control, Human and Ecological Risk Office, Human Health Risk Assessment Note Number: 3, Modified Screening Levels, May 2022

* = There is no DTSC SL for the analyte; therefore, the listed screening level is derived from the USEPA Regional Screening Level with a Target Hazard Quotient (THQ) of 1.0, November 2024

NA = not applicable

TABLE 6: SOIL GAS ANALYSIS RESULTS

Table 6: Soil Gas Analysis Results

Analysis Method	United States Environmental Protection Agency (USEPA) 8260B								
Units	Micrograms Per Cubic Meter (µg/m³)								
Sample Identification	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Benzene	Ethylbenzene	n-Propylbenzene	p-Isopropyltoluene	Toluene	Total Xylenes	All Other Analyzed VOCs
B-3-SG5	38	14	ND	30	10	ND	ND	140	ND
B-3-SG10	58	18	ND	**93**	29	ND	ND	260	ND
B-3-SG10 DUP	53	17	ND	**89**	27	ND	ND	230	ND
B-4-SG5	10	ND	ND	8.0	ND	ND	65	34	ND
B-4-SG10	9.8	ND	**45**	20	ND	ND	230	49	ND
B-5-SG5	80	ND	ND	6.5	ND	ND	19	33	ND
B-5-SG10	13	5.0	ND	7.4	ND	ND	25	43	ND
B-5-SG25	9.4	ND	**8.7**	5.1	ND	ND	13	21	ND
B-6-SG5	12	5.4	ND	8.6	ND	450	24	45	ND
B-6-SG10	14	6.6	ND	10	ND	38	30	52	ND
B-6-SG25	9.9	ND	ND	6.1	ND	22	20	34	ND
DTSC SSLs - Residential	2100*	2100*	3.2	37*	33333*	1400*	10333	3333*	NA
DTSC SSLs - Commercial/Industrial	8667*	8667*	14	163*	146667*	6000*	43333	14667*	NA

Notes:

VOCs = volatile organic compounds

ND = not detected at a concentration above the laboratory method detection limit

Values in **RED** = exceed one or more of the regulatory screening levels

DUP = duplicate sample

DTSC SSLs = California Department of Toxic Substances Control, Supplemental Screening Levels, Final Draft Supplemental Guidance: Screening and Evaluating Vapor Intrusion, February 2023, with a recommended attenuation factor of 0.03

* = There is no DTSC SSL for the analyte; therefore, the listed screening level is derived from the USEPA Regional Screening Level with a Target Hazard Quotient (THQ) of 1.0, November 2024

NA = not applicable

APPENDIX A: BORING LOGS

Boring Number:	B-1		**Page 1 of 1**
Location:	Eastern area, AOC #1, in the orchard	**Date Started:**	September 17, 2025
Site Address:	29943-30291 Camino Capistrano	**Date Completed:**	September 17, 2025
	San Juan Capistrano, California 92675	**Depth to Groundwater:**	Not applicable
Project Number:	25-2105	**Field Technician(s):**	BW and SR
Drill Rig Type:	Hand-operated hollow-stem auger (HSA)	**Earth Science LLC**	
Sampling Equipment:	0.50-Inch-diameter HSA sampler	5319 University Drive, Suite 20	
Borehole Diameter:	3.25-Inch	Irvine, CA 92612	

Depth	Sample	PID	USCS	Description	Notes
0.0		0.0	TS	Topsoil surface	
0.25		0.0	SM	Sand, fine-grained, silty, dry, gray	
0.50		0.0			
0.75		0.0			
1.00	B-1-1	0.0			**Total depth = 1.0 foot below ground surface**
1.25					**After completion of sampling, backfilled boring to grade**
1.50					
1.75					
2.00					
2.25					
2.50					
2.75					
3.00					
3.25					
3.50					
3.75					
4.00					
4.25					
4.50					
4.75					
5.00					
5.25					
5.50					
5.75					
6.00					
6.25					

Boring Number:	B-2		**Page 1 of 1**
Location:	Eastern area, AOC #1, in the orchard	**Date Started:**	September 17, 2025
Site Address:	29943-30291 Camino Capistrano	**Date Completed:**	September 17, 2025
	San Juan Capistrano, California 92675	**Depth to Groundwater:**	Not applicable
Project Number:	25-2105	**Field Technician(s):**	BW and SR
Drill Rig Type:	Hand-operated hollow-stem auger (HSA)	**Earth Science LLC**	
Sampling Equipment:	0.50-Inch-diameter HSA sampler	5319 University Drive, Suite 20	
Borehole Diameter:	3.25-Inch	Irvine, CA 92612	

Depth	Sample	PID	USCS	Description	Notes
0.0		0.0	TS	Topsoil surface	
0.25		0.0	SM	Sand, fine-grained, silty, dry, gray	
0.50		0.0			
0.75		0.0			
1.00	B-2-1	0.0			**Total depth = 1.0 foot below ground surface**
1.25					**After completion of sampling, backfilled boring to grade**
1.50					
1.75					
2.00					
2.25					
2.50					
2.75					
3.00					
3.25					
3.50					
3.75					
4.00					
4.25					
4.50					
4.75					
5.00					
5.25					
5.50					
5.75					
6.00					
6.25					

Boring Number:	B-3			**Page 1 of 1**	
Location:	Eastern area, AOC #1, former ASTs/diesel-impacted soil			**Date Started:**	September 17, 2025
Site Address:	29943-30291 Camino Capistrano			**Date Completed:**	September 17, 2025
	San Juan Capistrano, California 92675			**Depth to Groundwater:**	Not applicable
Project Number:	25-2105			**Field Technician(s):**	BW and SR
Drill Rig Type:	Truck-mounted, direct-push drill rig (Geoprobe 5400)			**Earth Science LLC**	
Sampling Equipment:	1.125-Inch-diameter sampler and acetate liner			5319 University Drive, Suite 20	
Borehole Diameter:	2.0-Inch			Irvine, CA 92612	

Depth	Sample	PID	USCS	Description	Notes
0.0		0.0	TS	Topsoil surface	
0.5		0.0	SP	Sand, fine-grained with trace gravel, dry, tan	
1.0	B-3-1	0.0			
1.5		0.0			
2.0		0.0	ML	Silt, dry, gray	
2.5		0.0			
3.0		0.0			
3.5		0.0			
4.0		0.0	SM	Sand, fine-grained, silty with gravel, dry, tan	
4.5		0.0			
5.0	B-3-SG5	0.0			
5.5		0.0			
6.0		0.0			
6.5		0.0			
7.0		0.0			
7.5		0.0			
8.0		0.0			
8.5		0.0			
9.0		0.0	ML	Silt with gravel, dry, tan	
9.5		0.0			
10.0	B-3-10 & B-3-SG10 & DUP	0.0			**Total depth = 10.0 feet below ground surface**
10.5					**After completion of sampling, backfilled boring to grade**
11.0					
11.5					
12.0					
12.5					

Boring Number:	B-4			**Page 1 of 1**	
Location:	Eastern area, AOC #1, former waste oil-impacted soil			**Date Started:**	September 17, 2025
Site Address:	29943-30291 Camino Capistrano			**Date Completed:**	September 17, 2025
	San Juan Capistrano, California 92675			**Depth to Groundwater:**	Not applicable
Project Number:	25-2105			**Field Technician(s):**	BW and SR
Drill Rig Type:	Truck-mounted, direct-push drill rig (Geoprobe 5400)			**Earth Science LLC**	
Sampling Equipment:	1.125-Inch-diameter sampler and acetate liner			5319 University Drive, Suite 20	
Borehole Diameter:	2.0-Inch			Irvine, CA 92612	

Depth	Sample	PID	USCS	Description	Notes
0.0		0.0	TS	Topsoil surface	
0.5		0.0	SP	Sand, fine-grained with trace gravel, dry, tan	
1.0	B-4-1	0.0			
1.5		0.0			
2.0		0.0	ML	Silt, dry, gray	
2.5		0.0			
3.0		0.0			
3.5		0.0			
4.0		0.0	SM	Sand, fine-grained, silty with gravel, dry, tan	
4.5		0.0			
5.0	B-4-SG5	0.0			
5.5		0.0			
6.0		0.0			
6.5		0.0			
7.0		0.0			
7.5		0.0			
8.0		0.0			
8.5		0.0			
9.0		0.0	ML	Silt with gravel, dry, tan	
9.5		0.0			
10.0	B-4-10 & B-4-SG10	0.0			**Total depth = 10.0 feet below ground surface**
10.5					**After completion of sampling, backfilled boring to grade**
11.0					
11.5					
12.0					
12.5					

Boring Number:	B-5			**Page 1 of 1**	
Location:	Eastern area, AOC #1, former UST under northern shed			**Date Started:**	September 17, 2025
Site Address:	29943-30291 Camino Capistrano			**Date Completed:**	September 17, 2025
	San Juan Capistrano, California 92675			**Depth to Groundwater:**	Not applicable
Project Number:	25-2105			**Field Technician(s):**	BW and SR
Drill Rig Type:	Truck-mounted, direct-push drill rig (Geoprobe 5400)			**Earth Science LLC**	
Sampling Equipment:	1.125-Inch-diameter sampler and acetate liner			5319 University Drive, Suite 20	
Borehole Diameter:	2.0-Inch			Irvine, CA 92612	

Depth	Sample	PID	USCS	Description	Notes
0.0		0.0	TS	Topsoil surface	
1.0		0.0	SP	Sand, fine-grained with gravel, dry, tan	
2.0		0.0	ML	Silt with gravel, dry, brown/gray	
3.0		0.0			
4.0		0.0	ML	Silt with gravel, dry, tan	
5.0	**B-5-SG5**	0.0			
6.0		0.0			
7.0		0.0			
8.0		0.0			
9.0		0.0			
10.0	**B-5-SG10**	0.0			
11.0		0.0	ML	Silt with trace gravel, dry, tan	
12.0		0.0			
13.0		0.0			
14.0		0.0			
15.0		0.0			
16.0		0.0			
17.0		0.0			
18.0		0.0			
19.0		0.0			
20.0		0.0			
21.0		0.0	ML	Silt with trace gravel, dry, light brown	
22.0		0.0	SP	Sand, fine to coarse-grained with gravel, dry, tan	
23.0		0.0			
24.0		0.0			
25.0	**B-5-25, B-5-SG25**	0.0			**Total depth = 25.0 feet below ground surface; after completion of sampling, backfilled boring to grade**

Boring Number:	B-6			**Page 1 of 1**	
Location:	Eastern area, AOC #1, former UST near southern sheds			**Date Started:**	September 17, 2025
Site Address:	29943-30291 Camino Capistrano			**Date Completed:**	September 17, 2025
	San Juan Capistrano, California 92675			**Depth to Groundwater:**	Not applicable
Project Number:	25-2105			**Field Technician(s):**	BW and SR
Drill Rig Type:	Truck-mounted, direct-push drill rig (Geoprobe 5400)			**Earth Science LLC**	
Sampling Equipment:	1.125-Inch-diameter sampler and acetate liner			5319 University Drive, Suite 20	
Borehole Diameter:	2.0-Inch			Irvine, CA 92612	

Depth	Sample	PID	USCS	Description	Notes
0.0		0.0	TS	Topsoil surface	
1.0		0.0	SP	Sand, fine-grained with gravel, dry, tan	
2.0		0.0	ML	Silt with gravel, dry, brown/gray	
3.0		0.0			
4.0		**0.6**	ML	Silt with gravel, dry, gray	
5.0	**B-6-5 & B-6-SG5**	**0.7**	ML	Silt with gravel, dry, brown	
6.0		0.0			
7.0		0.0			
8.0		0.0			
9.0		0.0			
10.0	**B-6-SG10**	0.0			
11.0		0.0			
12.0		0.0			
13.0		0.0			
14.0		0.0			
15.0		0.0			
16.0		0.0			
17.0		0.0			
18.0		0.0			
19.0		0.0			
20.0		0.0			
21.0		0.0			
22.0		0.0	SM	Sand, fine to medium-grained, silty, dry, tan	
23.0		0.0			
24.0		0.0			
25.0	**B-6-SG25**	0.0			**Total depth = 25.0 feet below ground surface; after completion of sampling, backfilled boring to grade**

Boring Number:	B-7		**Page 1 of 1**
Location:	Western area, AOC #2, in the orchard	**Date Started:**	September 17, 2025
Site Address:	29943-30291 Camino Capistrano	**Date Completed:**	September 17, 2025
	San Juan Capistrano, California 92675	**Depth to Groundwater:**	Not applicable
Project Number:	25-2105	**Field Technician(s):**	BW and SR
Drill Rig Type:	Hand-operated hollow-stem auger (HSA)	**Earth Science LLC**	
Sampling Equipment:	0.50-Inch-diameter HSA sampler	5319 University Drive, Suite 20	
Borehole Diameter:	3.25-Inch	Irvine, CA 92612	

Depth	Sample	PID	USCS	Description	Notes
0.0		0.0	TS	Topsoil surface	
0.25		0.0	SM	Sand, fine-grained, silty, dry, gray	
0.50		0.0			
0.75		0.0			
1.00	B-7-1	0.0			**Total depth = 1.0 foot below ground surface**
1.25					**After completion of sampling, backfilled boring to grade**
1.50					
1.75					
2.00					
2.25					
2.50					
2.75					
3.00					
3.25					
3.50					
3.75					
4.00					
4.25					
4.50					
4.75					
5.00					
5.25					
5.50					
5.75					
6.00					
6.25		0.0	ML	Clayey silt, slightly moist, light brown/gray	**Total depth = 25.0 feet below ground surface; after completion of sampling, backfilled boring to grade**

Boring Number:	B-8		**Page 1 of 1**
Location:	Central area, AOC #2, in the orchard	**Date Started:**	September 17, 2025
Site Address:	29943-30291 Camino Capistrano	**Date Completed:**	September 17, 2025
	San Juan Capistrano, California 92675	**Depth to Groundwater:**	Not applicable
Project Number:	25-2105	**Field Technician(s):**	BW and SR
Drill Rig Type:	Hand-operated hollow-stem auger (HSA)	**Earth Science LLC**	
Sampling Equipment:	0.50-Inch-diameter HSA sampler	5319 University Drive, Suite 20	
Borehole Diameter:	3.25-Inch	Irvine, CA 92612	

Depth	Sample	PID	USCS	Description	Notes
0.0		0.0	TS	Topsoil surface	
0.25		0.0	SM	Sand, fine-grained, silty, dry, gray	
0.50		0.0			
0.75		0.0			
1.00	B-8-1	0.0			**Total depth = 1.0 foot below ground surface**
1.25					**After completion of sampling, backfilled boring to grade**
1.50					
1.75					
2.00					
2.25					
2.50					
2.75					
3.00					
3.25					
3.50					
3.75					
4.00					
4.25					
4.50					
4.75					
5.00					
5.25					
5.50					
5.75					
6.00					
6.25		0.0	ML	Clayey silt, slightly moist, light brown/gray	**Total depth = 25.0 feet below ground surface; after completion of sampling, backfilled boring to grade**

Boring Number:	B-9		**Page 1 of 1**
Location:	Western area, AOC #2, in the orchard	**Date Started:**	September 17, 2025
Site Address:	29943-30291 Camino Capistrano	**Date Completed:**	September 17, 2025
	San Juan Capistrano, California 92675	**Depth to Groundwater:**	Not applicable
Project Number:	25-2105	**Field Technician(s):**	BW and SR
Drill Rig Type:	Hand-operated hollow-stem auger (HSA)	**Earth Science LLC**	
Sampling Equipment:	0.50-Inch-diameter HSA sampler	5319 University Drive, Suite 20	
Borehole Diameter:	3.25-Inch	Irvine, CA 92612	

Depth	Sample	PID	USCS	Description	Notes
0.0		0.0	TS	Topsoil surface	
0.25		0.0	SM	Sand, fine-grained, silty, dry, gray	
0.50		0.0			
0.75		0.0			
1.00	B-9-1	0.0			**Total depth = 1.0 foot below ground surface**
1.25					**After completion of sampling, backfilled boring to grade**
1.50					
1.75					
2.00					
2.25					
2.50					
2.75					
3.00					
3.25					
3.50					
3.75					
4.00					
4.25					
4.50					
4.75					
5.00					
5.25					
5.50					
5.75					
6.00					
6.25		0.0	ML	Clayey silt, slightly moist, light brown/gray	**Total depth = 25.0 feet below ground surface; after completion of sampling, backfilled boring to grade**

Boring Number:	B-10		**Page 1 of 1**
Location:	Southwestern area, AOC #2, in the orchard	**Date Started:**	September 17, 2025
Site Address:	29943-30291 Camino Capistrano	**Date Completed:**	September 17, 2025
	San Juan Capistrano, California 92675	**Depth to Groundwater:**	Not applicable
Project Number:	25-2105	**Field Technician(s):**	BW and SR
Drill Rig Type:	Hand-operated hollow-stem auger (HSA)	**Earth Science LLC**	
Sampling Equipment:	0.50-Inch-diameter HSA sampler	5319 University Drive, Suite 20	
Borehole Diameter:	3.25-Inch	Irvine, CA 92612	

Depth	Sample	PID	USCS	Description	Notes
0.0		0.0	TS	Topsoil surface	
0.25		0.0	SM	Sand, fine-grained, silty, dry, gray	
0.50		0.0			
0.75		0.0			
1.00	B-10-1	0.0			**Total depth = 1.0 foot below ground surface**
1.25					**After completion of sampling, backfilled boring to grade**
1.50					
1.75					
2.00					
2.25					
2.50					
2.75					
3.00					
3.25					
3.50					
3.75					
4.00					
4.25					
4.50					
4.75					
5.00					
5.25					
5.50					
5.75					
6.00					
6.25		0.0	ML	Clayey silt, slightly moist, light brown/gray	**Total depth = 25.0 feet below ground surface; after completion of sampling, backfilled boring to grade**

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% RETAINED ON NO. 200 SIEVE	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS
				SP	POORLY-GRADED SANDS, GRAVELLY SAND
	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
	CC	Cement Concrete
	AC	Asphalt Concrete
	CR	Crushed Rock/ Quarry Spalls
	TS	Topsoil/ Forest Duff/Sod

Measured groundwater level in exploration, well, or piezometer

Groundwater observed at time of exploration

Perched water observed at time of exploration

Graphic Log Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Material Description Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Sampler Symbol Descriptions

Standard Penetration Test (SPT)

Shelby tube

Piston

Direct-Push

Bulk or grab

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

Laboratory / Field Tests

%F	Percent fines
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
OC	Organic content
PM	Permeability or hydraulic conductivity
PP	Pocket penetrometer
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

KEY TO EXPLORATION LOGS

APPENDIX B: GEOPHYSICAL INVESTIGATION REPORT

SubSurface Surveys
& Associates, Inc.
An Applied Geophysical Company

2075 Corte Del Nogal, Suite W
Carlsbad, CA 92011

Office: (760) 476-0492
Fax: (760) 476-0493

September 22, 2025

Project/Invoice No. 25-398

Earth Science
5319 University Drive, Suite 20
Irvine, California 92612

Attn: **Sean Rakhshani**

Re: Geophysical Investigation Report: 30291 Camino Capistrano. San Juan Capistrano, California 92675

This report is to present the results of our geophysical survey carried out at 30291 Camino Capistrano. San Juan Capistrano, California 92675 (Figure 1). The survey was performed on September 18, 2025, and its purpose was to detect and delineate, insofar as possible, underground fuel storage tanks (UST), backfilled excavation resulting from a former UST's removal, and any remaining UST-related pipes, conduits, or substructures still in place.

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.

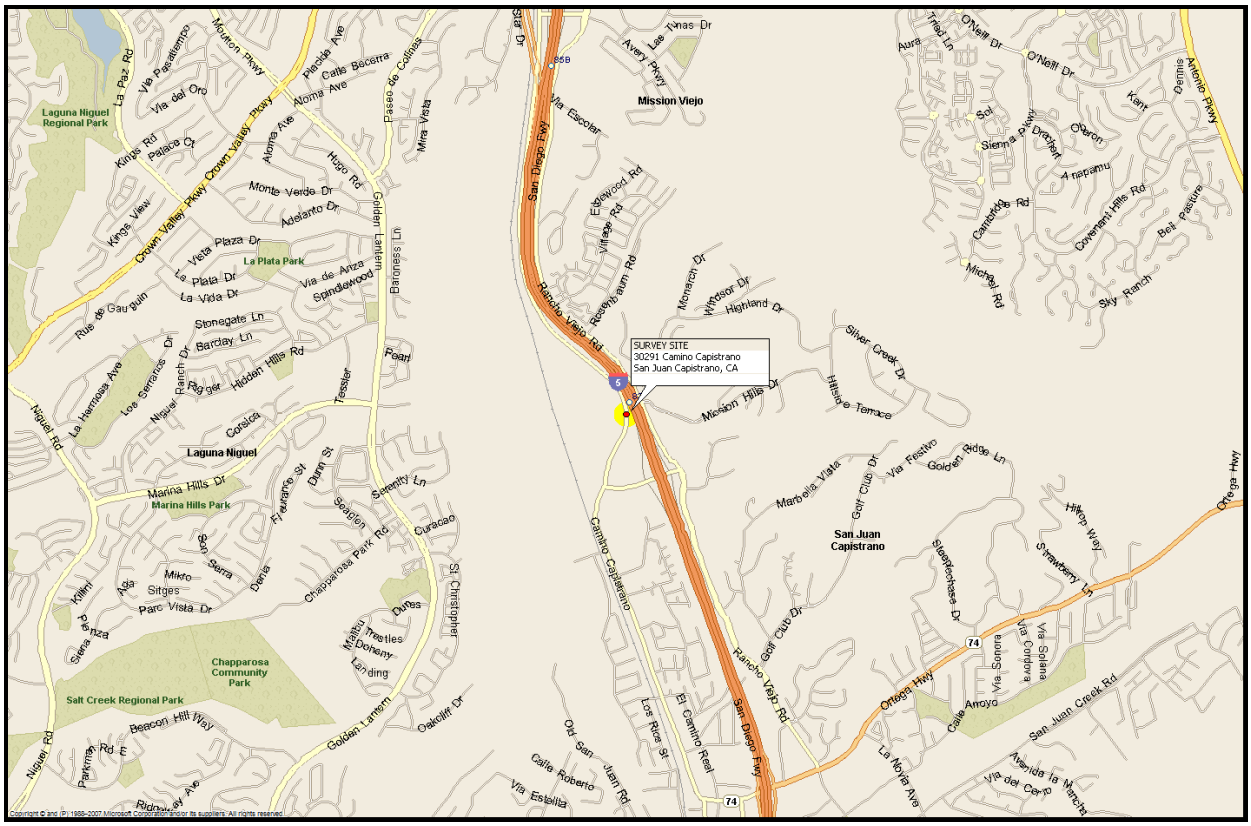


FIGURE 1. Site location map.

Survey Design – The area of investigation was indicated by the client and included a former orchard. The focus areas were indicated in the field by the client and included the location of former demolished sheds and outbuildings. Note that Figure 3 shows a historical image from 2004 with the former sheds still onsite and Figure 2 shows the current site conditions from 2025.

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 ground cover and metal pipes). 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 TW-6 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 RD 8200 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 (60 Hz), RF signals (4-35 kHz), as well as to actively trace other utilities using a discrete signal. Where risers are present, the utility locator transmitter can be connected directly to the object, and a signal (256 Hz to 200 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 site maps (Figures 2 & 3) and site photographs of notable findings (Figures 4-8).

Detected items were painted out on site and are additionally highlighted in all accompanying graphics in coordinated colors including pink for unknown lines and orange for backfilled excavations. Please review the site map and photographs for the locations and orientations of all detected items.

It was reported that two 250 gallon UST's had previously been located onsite. One underneath a former shed and one located just east of several former sheds (Figures 2 & 3). No UST's were detected within the survey area.

A small backfilled excavation was detected near the location of the former shed (Figures 2-6). This excavation measured approximately 9 feet by 7.5 feet and did not contain any objects within its detected boundaries. This backfilled excavation is a candidate for the former location of one of the 250-gallon UST. However, due to the demolition of structures, grading and staged materials within the focus areas it cannot be discounted that this excavation is not the result of the installation or removal of a former UST and the backfilled excavation associated with the UST was not detected or obscured by the condition of the site.

A small second backfilled excavation was detected near the location of the former outbuildings (Figures 2 & 7-8). This excavation measured approximately 8.5 feet by 5 feet and did not contain any objects within its detected boundaries. This backfilled excavation is a candidate for one of the former 250 gallon UST's reported to be onsite. However due to the demolition of former outbuildings and site grading it cannot be discounted that this excavation is NOT related to a former UST and instead related to other site usage. Additionally, the demolition of former buildings and site grading could have obscured or obliterated

evidence of the former UST's.

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.

Dustin Renck
Staff Geophysicist, SubSurface Surveys

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



Sub Surface Surveys	SITE: **30291 Camino Capistrano** **San Juan Capistrano, California 92675**	TITLE: **Site Interpertation Map**	SURVEY DATE: **September 18, 2025**
		PREPARED FOR: **Earth Science**	SSS PROJECT NO: **24-467B**

LEGEND:

- Former Building
- Building
- Focus Area
- Backfiled Excavation
- Power Pole

N

SCALE
0 30ft

FIGURE 2



Sub Surface Surveys	SITE: **30291 Camino Capistrano** **San Juan Capistrano, California 92675**	TITLE: **Site Interpertation Map**	SURVEY DATE: **September 18, 2025**
		PREPARED FOR: **Earth Science**	SSS PROJECT NO: **24-467B**

LEGEND:

- Former Building
- Building
- Focus Area
- Backfiled Excavation
- Power Pole

N

SCALE
0 30ft

FIGURE 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8

No Photo

Sub Surface Surveys	SITE: **30291 Camino Capistrano** **San Juan Capistrano, California 92675**	TITLE: **Site Photographs**	SURVEY DATE: **September 18, 2025**
		PREPARED FOR: **Earth Science**	SSS PROJECT NO: **25-398**

APPENDIX C: LABORATORY ANALYTICAL REPORTS

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

23 September 2025

Sean Rakhshani
Earth Science LLC
5319 University Drive, Suite 20
Irvine, CA 92612

RE: SJC Farm

Enclosed are the results of analyses for samples received by the laboratory on 09/17/25 14:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Lena Davidkov
Project Manager

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1-1	T253857-01	Soil	09/17/25 07:50	09/17/25 14:55
B-2-1	T253857-02	Soil	09/17/25 07:55	09/17/25 14:55
B-3-1	T253857-03	Soil	09/17/25 08:15	09/17/25 14:55
B-3-10	T253857-04	Soil	09/17/25 08:25	09/17/25 14:55
B-4-1	T253857-05	Soil	09/17/25 08:40	09/17/25 14:55
B-4-10	T253857-06	Soil	09/17/25 08:45	09/17/25 14:55
B-5-25	T253857-07	Soil	09/17/25 09:25	09/17/25 14:55
B-6-5	T253857-08	Soil	09/17/25 10:30	09/17/25 14:55
B-7-1	T253857-09	Soil	09/17/25 11:45	09/17/25 14:55
B-8-1	T253857-10	Soil	09/17/25 11:55	09/17/25 14:55
B-9-1	T253857-11	Soil	09/17/25 12:00	09/17/25 14:55
B-10-1	T253857-12	Soil	09/17/25 12:10	09/17/25 14:55

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949.297.5027 Fax

Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

DETECTIONS SUMMARY

Sample ID: B-1-1 **Laboratory ID:** T253857-01

No Results Detected

Sample ID: B-2-1 **Laboratory ID:** T253857-02

No Results Detected

Sample ID: B-3-1 **Laboratory ID:** T253857-03

No Results Detected

Sample ID: B-3-10 **Laboratory ID:** T253857-04

No Results Detected

Sample ID: B-4-1 **Laboratory ID:** T253857-05

No Results Detected

Sample ID: B-4-10 **Laboratory ID:** T253857-06

No Results Detected

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Sample ID: B-5-25 **Laboratory ID:** T253857-07

No Results Detected

Sample ID: B-6-5 **Laboratory ID:** T253857-08

Analyte	Result	Reporting Limit	Units	Method	Notes
p-Isopropyltoluene	**0.00076**	0.0025	mg/kg	EPA 8260B	J

Sample ID: B-7-1 **Laboratory ID:** T253857-09

No Results Detected

Sample ID: B-8-1 **Laboratory ID:** T253857-10

No Results Detected

Sample ID: B-9-1 **Laboratory ID:** T253857-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Endrin aldehyde	**0.0020**	0.0050	mg/kg	EPA 8081A	J

Sample ID: B-10-1 **Laboratory ID:** T253857-12

No Results Detected

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5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32



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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-1-1

T253857-01(Soil)

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
alpha-BHC	ND	0.00056	0.0050	mg/kg	1	25I0403	09/18/25	09/19/25	EPA 8081A	
gamma-BHC (Lindane)	ND	0.00096	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0014	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.00064	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.00059	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.00066	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.00098	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.00093	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.00083	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.00081	0.0050	"	"	"	"	"	"	
4,4´-DDE	ND	0.00078	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0011	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDD	ND	0.0012	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDT	ND	0.00080	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0017	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.00061	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.00040	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0013	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.0058	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene			*71.7 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl			*43.9 %*	*35-140*		"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-2-1

T253857-02(Soil)

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
alpha-BHC	ND	0.00056	0.0050	mg/kg	1	25I0403	09/18/25	09/19/25	EPA 8081A	
gamma-BHC (Lindane)	ND	0.00096	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0014	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.00064	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.00059	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.00066	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.00098	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.00093	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.00083	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.00081	0.0050	"	"	"	"	"	"	
4,4´-DDE	ND	0.00078	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0011	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDD	ND	0.0012	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDT	ND	0.00080	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0017	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.00061	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.00040	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0013	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.0058	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene			*59.2 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl			*57.3 %*	*35-140*		"	"	"	"	



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Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-3-1

T253857-03(Soil)

SunStar Laboratories, Inc.

Chlorinated Herbicides by EPA Method 8151A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2,4,5-T	ND	0.00182	0.00500	mg/kg	1	25I0388	09/19/25	09/19/25	8151	
2,4,5-TP (Silvex)	ND	0.00210	0.00500	"	"	"	"	"	"	
2,4-D	ND	0.00185	0.00500	"	"	"	"	"	"	
2,4-DB	ND	0.00087	0.00500	"	"	"	"	"	"	
3,5-Dichlorobenzoic acid	ND	0.00178	0.00500	"	"	"	"	"	"	
4-Nitrophenol	ND	0.00149	0.00500	"	"	"	"	"	"	
Acifluorfen	ND	0.00122	0.00500	"	"	"	"	"	"	
Bentazon	ND	0.00181	0.00500	"	"	"	"	"	"	
Chloramben	ND	0.00210	0.00500	"	"	"	"	"	"	
Dalapon	ND	0.00253	0.0300	"	"	"	"	"	"	
DCPA diacid	ND	0.00172	0.00500	"	"	"	"	"	"	
Dicamba	ND	0.00148	0.00500	"	"	"	"	"	"	
Dichloroprop	ND	0.00195	0.00500	"	"	"	"	"	"	
Dinoseb	ND	0.00218	0.00500	"	"	"	"	"	"	
Pentachlorophenol	ND	0.00218	0.00500	"	"	"	"	"	"	
Picloram	ND	0.00158	0.00500	"	"	"	"	"	"	
Surrogate: 2,4-DCAA			*84.2 %*	*35-150*		*"*	*"*	*"*	*"*	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-3-10

T253857-04(Soil)

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B										
C6-C12 (GRO)	ND	0.76	10	mg/kg	1	25I0387	09/18/25	09/18/25	EPA 8015B	
C13-C28 (DRO)	ND	0.66	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	0.56	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl			*69.3 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B										
Bromobenzene	ND	0.00025	0.0025	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
Bromochloromethane	ND	0.00041	0.0025	"	"	"	"	"	"	
Bromodichloromethane	ND	0.00014	0.0025	"	"	"	"	"	"	
Bromoform	ND	0.00019	0.0025	"	"	"	"	"	"	
Bromomethane	ND	0.00020	0.0025	"	"	"	"	"	"	
n-Butylbenzene	ND	0.00013	0.0025	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.00016	0.0025	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.00016	0.0025	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.00019	0.0025	"	"	"	"	"	"	
Chlorobenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Chloroethane	ND	0.00050	0.0025	"	"	"	"	"	"	
Chloroform	ND	0.000081	0.0025	"	"	"	"	"	"	
Chloromethane	ND	0.00026	0.0025	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.00012	0.0025	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.00019	0.0025	"	"	"	"	"	"	
Dibromochloromethane	ND	0.00012	0.0025	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	0.00045	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.00014	0.0025	"	"	"	"	"	"	
Dibromomethane	ND	0.00020	0.0025	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.00013	0.0025	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.00015	0.0025	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.00012	0.0025	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.00032	0.0025	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.00016	0.0025	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.00031	0.0025	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.00018	0.0025	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.00014	0.0025	"	"	"	"	"	"	

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5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-3-10

T253857-04(Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
trans-1,2-Dichloroethene	ND	0.00017	0.0025	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
1,2-Dichloropropane	ND	0.00012	0.0025	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.00017	0.0025	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.00016	0.0025	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.00014	0.0025	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.00013	0.0025	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.00019	0.0025	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.00012	0.0025	"	"	"	"	"	"	
Isopropylbenzene	ND	0.000097	0.0025	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.000099	0.0025	"	"	"	"	"	"	
Methylene chloride	ND	0.0016	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.00014	0.0025	"	"	"	"	"	"	
n-Propylbenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Styrene	ND	0.00013	0.0025	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.00022	0.0025	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.00016	0.0025	"	"	"	"	"	"	
Tetrachloroethene	ND	0.00019	0.0025	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.00014	0.0025	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.00011	0.0025	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.00025	0.0025	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.00017	0.0025	"	"	"	"	"	"	
Trichloroethene	ND	0.00019	0.0025	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.00011	0.0025	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.00026	0.0025	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.000064	0.0025	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Vinyl chloride	ND	0.00014	0.0025	"	"	"	"	"	"	
Benzene	ND	0.00013	0.0025	"	"	"	"	"	"	
Toluene	ND	0.00012	0.0025	"	"	"	"	"	"	
Ethylbenzene	ND	0.00014	0.0025	"	"	"	"	"	"	
m,p-Xylene	ND	0.00029	0.0050	"	"	"	"	"	"	
o-Xylene	ND	0.00013	0.0025	"	"	"	"	"	"	
Acetone	ND	0.0010	0.0050	"	"	"	"	"	"	

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5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-3-10

T253857-04(Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.										
Volatile Organic Compounds by EPA Method 8260B										
Methyl ethyl ketone	ND	0.0020	0.0050	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
Methyl isobutyl ketone	ND	0.0020	0.0050	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.0010	0.0050	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			*96.5 %*	*75.4-139*		"	"	"	"	
Surrogate: Dibromofluoromethane			*96.9 %*	*73.1-125*		"	"	"	"	
Surrogate: Toluene-d8			*104 %*	*82.6-117*		"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-4-1

T253857-05(Soil)

SunStar Laboratories, Inc.

Chlorinated Herbicides by EPA Method 8151A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2,4,5-T	ND	0.00182	0.00500	mg/kg	1	25I0388	09/19/25	09/19/25	8151	
2,4,5-TP (Silvex)	ND	0.00210	0.00500	"	"	"	"	"	"	
2,4-D	ND	0.00185	0.00500	"	"	"	"	"	"	
2,4-DB	ND	0.00087	0.00500	"	"	"	"	"	"	
3,5-Dichlorobenzoic acid	ND	0.00178	0.00500	"	"	"	"	"	"	
4-Nitrophenol	ND	0.00149	0.00500	"	"	"	"	"	"	
Acifluorfen	ND	0.00122	0.00500	"	"	"	"	"	"	
Bentazon	ND	0.00181	0.00500	"	"	"	"	"	"	
Chloramben	ND	0.00210	0.00500	"	"	"	"	"	"	
Dalapon	ND	0.00253	0.0300	"	"	"	"	"	"	
DCPA diacid	ND	0.00172	0.00500	"	"	"	"	"	"	
Dicamba	ND	0.00148	0.00500	"	"	"	"	"	"	
Dichloroprop	ND	0.00195	0.00500	"	"	"	"	"	"	
Dinoseb	ND	0.00218	0.00500	"	"	"	"	"	"	
Pentachlorophenol	ND	0.00218	0.00500	"	"	"	"	"	"	
Picloram	ND	0.00158	0.00500	"	"	"	"	"	"	
Surrogate: 2,4-DCAA			*80.6 %*	*35-150*		"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-4-10

T253857-06(Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.										
Extractable Petroleum Hydrocarbons by 8015B										
C6-C12 (GRO)	ND	0.76	10	mg/kg	1	25I0387	09/18/25	09/19/25	EPA 8015B	
C13-C28 (DRO)	ND	0.66	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	0.56	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl			*72.9 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B										
Bromobenzene	ND	0.00025	0.0025	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
Bromochloromethane	ND	0.00041	0.0025	"	"	"	"	"	"	
Bromodichloromethane	ND	0.00014	0.0025	"	"	"	"	"	"	
Bromoform	ND	0.00019	0.0025	"	"	"	"	"	"	
Bromomethane	ND	0.00020	0.0025	"	"	"	"	"	"	
n-Butylbenzene	ND	0.00013	0.0025	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.00016	0.0025	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.00016	0.0025	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.00019	0.0025	"	"	"	"	"	"	
Chlorobenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Chloroethane	ND	0.00050	0.0025	"	"	"	"	"	"	
Chloroform	ND	0.000081	0.0025	"	"	"	"	"	"	
Chloromethane	ND	0.00026	0.0025	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.00012	0.0025	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.00019	0.0025	"	"	"	"	"	"	
Dibromochloromethane	ND	0.00012	0.0025	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	0.00045	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.00014	0.0025	"	"	"	"	"	"	
Dibromomethane	ND	0.00020	0.0025	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.00013	0.0025	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.00015	0.0025	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.00012	0.0025	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.00032	0.0025	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.00016	0.0025	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.00031	0.0025	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.00018	0.0025	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.00014	0.0025	"	"	"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-4-10

T253857-06(Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
trans-1,2-Dichloroethene	ND	0.00017	0.0025	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
1,2-Dichloropropane	ND	0.00012	0.0025	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.00017	0.0025	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.00016	0.0025	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.00014	0.0025	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.00013	0.0025	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.00019	0.0025	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.00012	0.0025	"	"	"	"	"	"	
Isopropylbenzene	ND	0.000097	0.0025	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.000099	0.0025	"	"	"	"	"	"	
Methylene chloride	ND	0.0016	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.00014	0.0025	"	"	"	"	"	"	
n-Propylbenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Styrene	ND	0.00013	0.0025	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.00022	0.0025	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.00016	0.0025	"	"	"	"	"	"	
Tetrachloroethene	ND	0.00019	0.0025	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.00014	0.0025	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.00011	0.0025	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.00025	0.0025	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.00017	0.0025	"	"	"	"	"	"	
Trichloroethene	ND	0.00019	0.0025	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.00011	0.0025	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.00026	0.0025	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.000064	0.0025	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Vinyl chloride	ND	0.00014	0.0025	"	"	"	"	"	"	
Benzene	ND	0.00013	0.0025	"	"	"	"	"	"	
Toluene	ND	0.00012	0.0025	"	"	"	"	"	"	
Ethylbenzene	ND	0.00014	0.0025	"	"	"	"	"	"	
m,p-Xylene	ND	0.00029	0.0050	"	"	"	"	"	"	
o-Xylene	ND	0.00013	0.0025	"	"	"	"	"	"	
Acetone	ND	0.0010	0.0050	"	"	"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-4-10

T253857-06(Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methyl ethyl ketone	ND	0.0020	0.0050	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
Methyl isobutyl ketone	ND	0.0020	0.0050	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.0010	0.0050	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			*97.2 %*	*75.4-139*		"	"	"	"	
Surrogate: Dibromofluoromethane			*97.3 %*	*73.1-125*		"	"	"	"	
Surrogate: Toluene-d8			*105 %*	*82.6-117*		"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-5-25

T253857-07(Soil)

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B										
C6-C12 (GRO)	ND	0.76	10	mg/kg	1	25I0387	09/18/25	09/19/25	EPA 8015B	
C13-C28 (DRO)	ND	0.66	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	0.56	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl			*77.0 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B										
Bromobenzene	ND	0.00025	0.0025	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
Bromochloromethane	ND	0.00041	0.0025	"	"	"	"	"	"	
Bromodichloromethane	ND	0.00014	0.0025	"	"	"	"	"	"	
Bromoform	ND	0.00019	0.0025	"	"	"	"	"	"	
Bromomethane	ND	0.00020	0.0025	"	"	"	"	"	"	
n-Butylbenzene	ND	0.00013	0.0025	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.00016	0.0025	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.00016	0.0025	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.00019	0.0025	"	"	"	"	"	"	
Chlorobenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Chloroethane	ND	0.00050	0.0025	"	"	"	"	"	"	
Chloroform	ND	0.000081	0.0025	"	"	"	"	"	"	
Chloromethane	ND	0.00026	0.0025	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.00012	0.0025	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.00019	0.0025	"	"	"	"	"	"	
Dibromochloromethane	ND	0.00012	0.0025	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	0.00045	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.00014	0.0025	"	"	"	"	"	"	
Dibromomethane	ND	0.00020	0.0025	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.00013	0.0025	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.00015	0.0025	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.00012	0.0025	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.00032	0.0025	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.00016	0.0025	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.00031	0.0025	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.00018	0.0025	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.00014	0.0025	"	"	"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-5-25

T253857-07(Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
trans-1,2-Dichloroethene	ND	0.00017	0.0025	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
1,2-Dichloropropane	ND	0.00012	0.0025	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.00017	0.0025	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.00016	0.0025	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.00014	0.0025	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.00013	0.0025	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.00019	0.0025	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.00012	0.0025	"	"	"	"	"	"	
Isopropylbenzene	ND	0.000097	0.0025	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.000099	0.0025	"	"	"	"	"	"	
Methylene chloride	ND	0.0016	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.00014	0.0025	"	"	"	"	"	"	
n-Propylbenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Styrene	ND	0.00013	0.0025	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.00022	0.0025	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.00016	0.0025	"	"	"	"	"	"	
Tetrachloroethene	ND	0.00019	0.0025	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.00014	0.0025	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.00011	0.0025	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.00025	0.0025	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.00017	0.0025	"	"	"	"	"	"	
Trichloroethene	ND	0.00019	0.0025	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.00011	0.0025	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.00026	0.0025	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.000064	0.0025	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Vinyl chloride	ND	0.00014	0.0025	"	"	"	"	"	"	
Benzene	ND	0.00013	0.0025	"	"	"	"	"	"	
Toluene	ND	0.00012	0.0025	"	"	"	"	"	"	
Ethylbenzene	ND	0.00014	0.0025	"	"	"	"	"	"	
m,p-Xylene	ND	0.00029	0.0050	"	"	"	"	"	"	
o-Xylene	ND	0.00013	0.0025	"	"	"	"	"	"	
Acetone	ND	0.0010	0.0050	"	"	"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-5-25

T253857-07(Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methyl ethyl ketone	ND	0.0020	0.0050	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
Methyl isobutyl ketone	ND	0.0020	0.0050	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.0010	0.0050	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			*95.4 %*	*75.4-139*		"	"	"	"	
Surrogate: Dibromofluoromethane			*92.5 %*	*73.1-125*		"	"	"	"	
Surrogate: Toluene-d8			*107 %*	*82.6-117*		"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-6-5

T253857-08(Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.										
Extractable Petroleum Hydrocarbons by 8015B										
C6-C12 (GRO)	ND	0.76	10	mg/kg	1	25I0387	09/18/25	09/19/25	EPA 8015B	
C13-C28 (DRO)	ND	0.66	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	0.56	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl			*71.5 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B										
Bromobenzene	ND	0.00025	0.0025	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
Bromochloromethane	ND	0.00041	0.0025	"	"	"	"	"	"	
Bromodichloromethane	ND	0.00014	0.0025	"	"	"	"	"	"	
Bromoform	ND	0.00019	0.0025	"	"	"	"	"	"	
Bromomethane	ND	0.00020	0.0025	"	"	"	"	"	"	
n-Butylbenzene	ND	0.00013	0.0025	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.00016	0.0025	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.00016	0.0025	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.00019	0.0025	"	"	"	"	"	"	
Chlorobenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Chloroethane	ND	0.00050	0.0025	"	"	"	"	"	"	
Chloroform	ND	0.000081	0.0025	"	"	"	"	"	"	
Chloromethane	ND	0.00026	0.0025	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.00012	0.0025	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.00019	0.0025	"	"	"	"	"	"	
Dibromochloromethane	ND	0.00012	0.0025	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	0.00045	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.00014	0.0025	"	"	"	"	"	"	
Dibromomethane	ND	0.00020	0.0025	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.00013	0.0025	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.00015	0.0025	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.00012	0.0025	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.00032	0.0025	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.00016	0.0025	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.00031	0.0025	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.00018	0.0025	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.00014	0.0025	"	"	"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-6-5

T253857-08(Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
trans-1,2-Dichloroethene	ND	0.00017	0.0025	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
1,2-Dichloropropane	ND	0.00012	0.0025	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.00017	0.0025	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.00016	0.0025	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.00014	0.0025	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.00013	0.0025	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.00019	0.0025	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.00012	0.0025	"	"	"	"	"	"	
Isopropylbenzene	ND	0.000097	0.0025	"	"	"	"	"	"	
p-Isopropyltoluene	**0.00076**	0.000099	0.0025	"	"	"	"	"	"	J
Methylene chloride	ND	0.0016	0.010	"	"	"	"	"	"	
Naphthalene	ND	0.00014	0.0025	"	"	"	"	"	"	
n-Propylbenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Styrene	ND	0.00013	0.0025	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.00022	0.0025	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.00016	0.0025	"	"	"	"	"	"	
Tetrachloroethene	ND	0.00019	0.0025	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.00014	0.0025	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.00011	0.0025	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.00025	0.0025	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.00017	0.0025	"	"	"	"	"	"	
Trichloroethene	ND	0.00019	0.0025	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.00011	0.0025	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.00026	0.0025	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.000064	0.0025	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.00018	0.0025	"	"	"	"	"	"	
Vinyl chloride	ND	0.00014	0.0025	"	"	"	"	"	"	
Benzene	ND	0.00013	0.0025	"	"	"	"	"	"	
Toluene	ND	0.00012	0.0025	"	"	"	"	"	"	
Ethylbenzene	ND	0.00014	0.0025	"	"	"	"	"	"	
m,p-Xylene	ND	0.00029	0.0050	"	"	"	"	"	"	
o-Xylene	ND	0.00013	0.0025	"	"	"	"	"	"	
Acetone	ND	0.0010	0.0050	"	"	"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-6-5

T253857-08(Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.										
Volatile Organic Compounds by EPA Method 8260B										
Methyl ethyl ketone	ND	0.0020	0.0050	mg/kg	1	25I0397	09/18/25	09/20/25	EPA 8260B	
Methyl isobutyl ketone	ND	0.0020	0.0050	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.0010	0.0050	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			*95.7 %*	*75.4-139*		"	"	"	"	
Surrogate: Dibromofluoromethane			*95.3 %*	*73.1-125*		"	"	"	"	
Surrogate: Toluene-d8			*105 %*	*82.6-117*		"	"	"	"	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-7-1

T253857-09(Soil)

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
alpha-BHC	ND	0.00056	0.0050	mg/kg	1	25I0403	09/18/25	09/19/25	EPA 8081A	
gamma-BHC (Lindane)	ND	0.00096	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0014	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.00064	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.00059	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.00066	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.00098	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.00093	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.00083	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.00081	0.0050	"	"	"	"	"	"	
4,4´-DDE	ND	0.00078	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0011	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDD	ND	0.0012	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDT	ND	0.00080	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0017	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.00061	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.00040	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0013	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.0058	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene			*68.1 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl			*75.1 %*	*35-140*		"	"	"	"	



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5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-8-1

T253857-10(Soil)

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
alpha-BHC	ND	0.00056	0.0050	mg/kg	1	25I0403	09/18/25	09/19/25	EPA 8081A	
gamma-BHC (Lindane)	ND	0.00096	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0014	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.00064	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.00059	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.00066	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.00098	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.00093	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.00083	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.00081	0.0050	"	"	"	"	"	"	
4,4´-DDE	ND	0.00078	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0011	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDD	ND	0.0012	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDT	ND	0.00080	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0017	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.00061	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.00040	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0013	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.0058	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene			*65.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl			*53.4 %*	*35-140*		"	"	"	"	



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5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-9-1

T253857-11(Soil)

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
alpha-BHC	ND	0.00056	0.0050	mg/kg	1	25I0403	09/18/25	09/19/25	EPA 8081A	
gamma-BHC (Lindane)	ND	0.00096	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0014	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.00064	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.00059	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.00066	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.00098	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.00093	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.00083	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.00081	0.0050	"	"	"	"	"	"	
4,4´-DDE	ND	0.00078	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0011	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDD	ND	0.0012	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDT	ND	0.00080	0.0050	"	"	"	"	"	"	
Endrin aldehyde	**0.0020**	0.0017	0.0050	"	"	"	"	"	"	J
Endosulfan sulfate	ND	0.00061	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.00040	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0013	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.0058	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene			*54.3 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl			*50.9 %*	*35-140*		"	"	"	"	



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5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

B-10-1

T253857-12(Soil)

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
alpha-BHC	ND	0.00056	0.0050	mg/kg	1	25I0403	09/18/25	09/19/25	EPA 8081A	
gamma-BHC (Lindane)	ND	0.00096	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0014	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.00064	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.00059	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.00066	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.00098	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.00093	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.00083	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.00081	0.0050	"	"	"	"	"	"	
4,4´-DDE	ND	0.00078	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0011	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDD	ND	0.0012	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0011	0.0050	"	"	"	"	"	"	
4,4´-DDT	ND	0.00080	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0017	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.00061	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.00040	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0013	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.0058	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene			*62.4 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl			*58.5 %*	*35-140*		"	"	"	"	



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5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 25I0387 - EPA 3550B GC											
Blank (25I0387-BLK1)					Prepared & Analyzed: 09/18/25						
Surrogate: p-Terphenyl	*84.8*			*mg/kg*	*100*		*84.8*	*65-135*			
C6-C12 (GRO)	ND	0.76	10	"							
C13-C28 (DRO)	ND	0.66	10	"							
C29-C40 (MORO)	ND	0.56	10	"							
LCS (25I0387-BS1)					Prepared & Analyzed: 09/18/25						
Surrogate: p-Terphenyl	*87.3*			*mg/kg*	*100*		*87.3*	*65-135*			
C13-C28 (DRO)	460	0.66	10	"	500		92.1	75-125			
Matrix Spike (25I0387-MS1)		**Source: T253856-01**			Prepared & Analyzed: 09/18/25						
Surrogate: p-Terphenyl	*83.8*			*mg/kg*	*100*		*83.8*	*65-135*			
C13-C28 (DRO)	480	0.66	10	"	500	ND	96.9	75-125			
Matrix Spike Dup (25I0387-MSD1)		**Source: T253856-01**			Prepared & Analyzed: 09/18/25						
Surrogate: p-Terphenyl	*82.2*			*mg/kg*	*100*		*82.2*	*65-135*			
C13-C28 (DRO)	470	0.66	10	"	500	ND	93.4	75-125	3.67	20	



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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 25I0403 - EPA 3550B Soil											
Blank (25I0403-BLK1)					Prepared: 09/18/25 Analyzed: 09/19/25						
Surrogate: Tetrachloro-meta-xylene	*0.00905*			*mg/kg*	*0.0100*		*90.5*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.0101*			*"*	*0.0100*		*101*	*35-140*			
alpha-BHC	ND	0.00056	0.0050	"							
gamma-BHC (Lindane)	ND	0.00096	0.0050	"							
beta-BHC	ND	0.0014	0.0050	"							
delta-BHC	ND	0.00064	0.0050	"							
Heptachlor	ND	0.00059	0.0050	"							
Aldrin	ND	0.00066	0.0050	"							
Heptachlor epoxide	ND	0.00098	0.0050	"							
gamma-Chlordane	ND	0.00093	0.0050	"							
alpha-Chlordane	ND	0.00083	0.0050	"							
Endosulfan I	ND	0.00081	0.0050	"							
4,4´-DDE	ND	0.00078	0.0050	"							
Dieldrin	ND	0.0011	0.0050	"							
Endrin	ND	0.0011	0.0050	"							
4,4´-DDD	ND	0.0012	0.0050	"							
Endosulfan II	ND	0.0011	0.0050	"							
4,4´-DDT	ND	0.00080	0.0050	"							
Endrin aldehyde	ND	0.0017	0.0050	"							
Endosulfan sulfate	ND	0.00061	0.0050	"							
Methoxychlor	ND	0.00040	0.0050	"							
Endrin ketone	ND	0.0013	0.0050	"							
Toxaphene	ND	0.0058	0.020	"							
LCS (25I0403-BS1)					Prepared: 09/18/25 Analyzed: 09/19/25						
Surrogate: Tetrachloro-meta-xylene	*0.00891*			*mg/kg*	*0.0100*		*89.1*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.00949*			*"*	*0.0100*		*94.9*	*35-140*			
gamma-BHC (Lindane)	0.0422	0.00096	0.0050	"	0.0404		104	40-120			

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 25I0403 - EPA 3550B Soil											
LCS (25I0403-BS1)					Prepared: 09/18/25 Analyzed: 09/19/25						
Heptachlor	0.0419	0.00059	0.0050	mg/kg	0.0400		105	40-120			
Aldrin	0.0370	0.00066	0.0050	"	0.0400		92.5	40-120			
Dieldrin	0.0420	0.0011	0.0050	"	0.0402		104	40-120			
Endrin	0.0418	0.0011	0.0050	"	0.0402		104	40-120			
4,4´-DDT	0.0434	0.00080	0.0050	"	0.0404		107	33-147			
Matrix Spike (25I0403-MS1)			**Source: T253854-07**		Prepared: 09/18/25 Analyzed: 09/19/25						
Surrogate: Tetrachloro-meta-xylene	*0.00903*			*mg/kg*	*0.0100*		*90.3*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.00852*			*"*	*0.0100*		*85.2*	*35-140*			
gamma-BHC (Lindane)	0.0455	0.00096	0.0050	"	0.0404	ND	113	30-120			
Heptachlor	0.0440	0.00059	0.0050	"	0.0400	ND	110	30-120			
Aldrin	0.0395	0.00066	0.0050	"	0.0400	ND	98.8	30-120			
Dieldrin	0.0452	0.0011	0.0050	"	0.0402	ND	112	30-120			
Endrin	0.0447	0.0011	0.0050	"	0.0402	ND	111	30-120			
4,4´-DDT	0.0445	0.00080	0.0050	"	0.0404	ND	110	30-120			
Matrix Spike Dup (25I0403-MSD1)			**Source: T253854-07**		Prepared: 09/18/25 Analyzed: 09/19/25						
Surrogate: Tetrachloro-meta-xylene	*0.00747*			*mg/kg*	*0.0100*		*74.7*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.00718*			*"*	*0.0100*		*71.8*	*35-140*			
gamma-BHC (Lindane)	0.0380	0.00096	0.0050	"	0.0404	ND	94.1	30-120	17.8	30	
Heptachlor	0.0367	0.00059	0.0050	"	0.0400	ND	91.8	30-120	18.1	30	
Aldrin	0.0328	0.00066	0.0050	"	0.0400	ND	82.0	30-120	18.5	30	
Dieldrin	0.0384	0.0011	0.0050	"	0.0402	ND	95.6	30-120	16.1	30	
Endrin	0.0390	0.0011	0.0050	"	0.0402	ND	96.9	30-120	13.8	30	
4,4´-DDT	0.0381	0.00080	0.0050	"	0.0404	ND	94.3	30-120	15.5	30	

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5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Chlorinated Herbicides by EPA Method 8151A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 25I0388 - 8151 Prep											
Blank (25I0388-BLK1)					Prepared & Analyzed: 09/19/25						
Surrogate: 2,4-DCAA	*1.33*			*mg/kg*	*1.33*		*99.5*	*35-150*			
2,4,5-T	ND	0.00182	0.00500	"							
2,4,5-TP (Silvex)	ND	0.00210	0.00500	"							
2,4-D	ND	0.00185	0.00500	"							
2,4-DB	ND	0.00087	0.00500	"							
3,5-Dichlorobenzoic acid	ND	0.00178	0.00500	"							
4-Nitrophenol	ND	0.00149	0.00500	"							
Acifluorfen	ND	0.00122	0.00500	"							
Bentazon	ND	0.00181	0.00500	"							
Chloramben	ND	0.00210	0.00500	"							
Dalapon	ND	0.00253	0.0300	"							
DCPA diacid	ND	0.00172	0.00500	"							
Dicamba	ND	0.00148	0.00500	"							
Dichloroprop	ND	0.00195	0.00500	"							
Dinoseb	ND	0.00218	0.00500	"							
Pentachlorophenol	ND	0.00218	0.00500	"							
Picloram	ND	0.00158	0.00500	"							
LCS (25I0388-BS1)					Prepared & Analyzed: 09/19/25						
Surrogate: 2,4-DCAA	*1.19*			*mg/kg*	*1.33*		*89.6*	*35-150*			
2,4,5-T	0.308	0.00182	0.00500	"	0.333		92.5	20-150			
2,4,5-TP (Silvex)	0.331	0.00210	0.00500	"	0.333		99.3	20-150			
2,4-D	0.330	0.00185	0.00500	"	0.333		99.0	20-150			
Matrix Spike (25I0388-MS1)		**Source: T253839-01**			Prepared & Analyzed: 09/19/25						
Surrogate: 2,4-DCAA	*0.985*			*mg/kg*	*1.33*		*73.8*	*35-150*			
2,4,5-T	0.278	0.00182	0.00500	"	0.333	ND	83.4	20-150			
2,4,5-TP (Silvex)	0.310	0.00210	0.00500	"	0.333	ND	93.1	20-150			

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Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Chlorinated Herbicides by EPA Method 8151A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 25I0388 - 8151 Prep											
Matrix Spike (25I0388-MS1)		**Source: T253839-01**			Prepared & Analyzed: 09/19/25						
2,4-D	0.308	0.00185	0.00500	mg/kg	0.333	ND	92.4	20-150			
Matrix Spike Dup (25I0388-MSD1)		**Source: T253839-01**			Prepared & Analyzed: 09/19/25						
Surrogate: 2,4-DCAA	*1.08*			*mg/kg*	*1.33*		*81.1*	*35-150*			
2,4,5-T	0.297	0.00182	0.00500	"	0.333	ND	89.0	20-150	6.46	30	
2,4,5-TP (Silvex)	0.331	0.00210	0.00500	"	0.333	ND	99.2	20-150	6.29	30	
2,4-D	0.340	0.00185	0.00500	"	0.333	ND	102	20-150	9.95	30	

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 25I0397 - EPA 5030 GCMS											
Blank (25I0397-BLK1)					Prepared: 09/18/25 Analyzed: 09/20/25						
Surrogate: 4-Bromofluorobenzene	*0.0474*			*mg/kg*	*0.0500*		*94.8*	*75.4-139*			
Surrogate: Dibromofluoromethane	*0.0468*			*"*	*0.0500*		*93.6*	*73.1-125*			
Surrogate: Toluene-d8	*0.0512*			*"*	*0.0500*		*102*	*82.6-117*			
Bromobenzene	ND	0.00025	0.0025	"							
Bromochloromethane	ND	0.00041	0.0025	"							
Bromodichloromethane	ND	0.00014	0.0025	"							
Bromoform	ND	0.00019	0.0025	"							
Bromomethane	ND	0.00020	0.0025	"							
n-Butylbenzene	ND	0.00013	0.0025	"							
sec-Butylbenzene	ND	0.00016	0.0025	"							
tert-Butylbenzene	ND	0.00016	0.0025	"							
Carbon tetrachloride	ND	0.00019	0.0025	"							
Chlorobenzene	ND	0.00018	0.0025	"							
Chloroethane	ND	0.00050	0.0025	"							
Chloroform	ND	0.000081	0.0025	"							
Chloromethane	ND	0.00026	0.0025	"							
2-Chlorotoluene	ND	0.00012	0.0025	"							
4-Chlorotoluene	ND	0.00019	0.0025	"							
Dibromochloromethane	ND	0.00012	0.0025	"							
1,2-Dibromo-3-chloropropane	ND	0.00045	0.0050	"							
1,2-Dibromoethane (EDB)	ND	0.00014	0.0025	"							
Dibromomethane	ND	0.00020	0.0025	"							
1,2-Dichlorobenzene	ND	0.00013	0.0025	"							
1,3-Dichlorobenzene	ND	0.00015	0.0025	"							
1,4-Dichlorobenzene	ND	0.00012	0.0025	"							
Dichlorodifluoromethane	ND	0.00032	0.0025	"							
1,1-Dichloroethane	ND	0.00016	0.0025	"							



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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 25I0397 - EPA 5030 GCMS											
Blank (25I0397-BLK1)					Prepared: 09/18/25 Analyzed: 09/20/25						
1,2-Dichloroethane	ND	0.00031	0.0025	mg/kg							
1,1-Dichloroethene	ND	0.00018	0.0025	"							
cis-1,2-Dichloroethene	ND	0.00014	0.0025	"							
trans-1,2-Dichloroethene	ND	0.00017	0.0025	"							
1,2-Dichloropropane	ND	0.00012	0.0025	"							
1,3-Dichloropropane	ND	0.00017	0.0025	"							
2,2-Dichloropropane	ND	0.00016	0.0025	"							
1,1-Dichloropropene	ND	0.00014	0.0025	"							
cis-1,3-Dichloropropene	ND	0.00013	0.0025	"							
trans-1,3-Dichloropropene	ND	0.00019	0.0025	"							
Hexachlorobutadiene	ND	0.00012	0.0025	"							
Isopropylbenzene	ND	0.000097	0.0025	"							
p-Isopropyltoluene	ND	0.000099	0.0025	"							
Methylene chloride	0.0108	0.0016	0.010	"							B-03
Naphthalene	ND	0.00014	0.0025	"							
n-Propylbenzene	ND	0.00018	0.0025	"							
Styrene	ND	0.00013	0.0025	"							
1,1,2,2-Tetrachloroethane	ND	0.00022	0.0025	"							
1,1,1,2-Tetrachloroethane	ND	0.00016	0.0025	"							
Tetrachloroethene	ND	0.00019	0.0025	"							
1,2,3-Trichlorobenzene	ND	0.00014	0.0025	"							
1,2,4-Trichlorobenzene	ND	0.00011	0.0025	"							
1,1,2-Trichloroethane	ND	0.00025	0.0025	"							
1,1,1-Trichloroethane	ND	0.00017	0.0025	"							
Trichloroethene	ND	0.00019	0.0025	"							
Trichlorofluoromethane	ND	0.00011	0.0025	"							
1,2,3-Trichloropropane	ND	0.00026	0.0025	"							

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949.297.5027 Fax

Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 25I0397 - EPA 5030 GCMS											
Blank (25I0397-BLK1)					Prepared: 09/18/25 Analyzed: 09/20/25						
1,3,5-Trimethylbenzene	ND	0.000064	0.0025	mg/kg							
1,2,4-Trimethylbenzene	ND	0.00018	0.0025	"							
Vinyl chloride	ND	0.00014	0.0025	"							
Benzene	ND	0.00013	0.0025	"							
Toluene	ND	0.00012	0.0025	"							
Ethylbenzene	ND	0.00014	0.0025	"							
m,p-Xylene	ND	0.00029	0.0050	"							
o-Xylene	ND	0.00013	0.0025	"							
Acetone	ND	0.0010	0.0050	"							
Methyl ethyl ketone	ND	0.0020	0.0050	"							
Methyl isobutyl ketone	ND	0.0020	0.0050	"							
2-Hexanone (MBK)	ND	0.0010	0.0050	"							
LCS (25I0397-BS1)					Prepared: 09/18/25 Analyzed: 09/19/25						
Surrogate: 4-Bromofluorobenzene	*0.0508*			*mg/kg*	*0.0500*		*102*	*75.4-139*			
Surrogate: Dibromofluoromethane	*0.0519*			*"*	*0.0500*		*104*	*73.1-125*			
Surrogate: Toluene-d8	*0.0497*			*"*	*0.0500*		*99.4*	*82.6-117*			
Chlorobenzene	0.0531	0.00018	0.0025	"	0.0500		106	65.2-124			
1,1-Dichloroethene	0.0542	0.00018	0.0025	"	0.0500		108	60.9-131			
Trichloroethene	0.0548	0.00019	0.0025	"	0.0500		110	62.1-126			
Benzene	0.0541	0.00013	0.0025	"	0.0500		108	65.3-127			
Toluene	0.0541	0.00012	0.0025	"	0.0500		108	64.3-122			
Matrix Spike (25I0397-MS1)		**Source: T253857-04**			Prepared: 09/18/25 Analyzed: 09/19/25						
Surrogate: 4-Bromofluorobenzene	*0.0521*			*mg/kg*	*0.0500*		*104*	*75.4-139*			
Surrogate: Dibromofluoromethane	*0.0527*			*"*	*0.0500*		*105*	*73.1-125*			
Surrogate: Toluene-d8	*0.0508*			*"*	*0.0500*		*102*	*82.6-117*			
Chlorobenzene	0.0426	0.00018	0.0025	"	0.0500	ND	85.2	65.2-125			
1,1-Dichloroethene	0.0436	0.00018	0.0025	"	0.0500	ND	87.2	60.9-131			

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Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 25I0397 - EPA 5030 GCMS											
Matrix Spike (25I0397-MS1)		**Source: T253857-04**			Prepared: 09/18/25 Analyzed: 09/19/25						
Trichloroethene	0.0450	0.00019	0.0025	mg/kg	0.0500	ND	90.0	62.1-126			
Benzene	0.0445	0.00013	0.0025	"	0.0500	ND	89.0	65.3-127			
Toluene	0.0457	0.00012	0.0025	"	0.0500	ND	91.4	64.3-125			
Matrix Spike Dup (25I0397-MSD1)		**Source: T253857-04**			Prepared: 09/18/25 Analyzed: 09/19/25						
Surrogate: 4-Bromofluorobenzene	*0.0519*			*mg/kg*	*0.0500*		*104*	*75.4-139*			
Surrogate: Dibromofluoromethane	*0.0538*			*"*	*0.0500*		*108*	*73.1-125*			
Surrogate: Toluene-d8	*0.0505*			*"*	*0.0500*		*101*	*82.6-117*			
Chlorobenzene	0.0415	0.00018	0.0025	"	0.0500	ND	82.9	65.2-125	2.74	20	
1,1-Dichloroethene	0.0440	0.00018	0.0025	"	0.0500	ND	88.0	60.9-131	0.867	20	
Trichloroethene	0.0444	0.00019	0.0025	"	0.0500	ND	88.9	62.1-126	1.30	20	
Benzene	0.0441	0.00013	0.0025	"	0.0500	ND	88.2	65.3-127	0.925	20	
Toluene	0.0450	0.00012	0.0025	"	0.0500	ND	89.9	64.3-125	1.63	20	



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Providing Quality Analytical Services Nationwide

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949.297.5020 Phone
949.297.5027 Fax

Earth Science LLC	Project: SJC Farm	
5319 University Drive, Suite 20	Project Number: 25-2105	**Reported:**
Irvine CA, 92612	Project Manager: Sean Rakhshani	09/23/25 14:32

Notes and Definitions

J	Detected but below the Standard Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
B-03	Analyte present in blank due to being a common laboratory contaminant.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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SunStar Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Earth Science LLC
5319 University Dr, Ste# 20
Irvine, CA 92612

Client: Earth Science LLC
Address: 5319 University Dr, Ste#20, Irvine, CA 92612
Phone: 949-441-0433 Fax: 360-656-0106
Project Manager: Sean Rakhshani (SR)

Date: 09/17/2025 Page: 1 Of 1
Project Name: SJC
Collector: SR Client Project #: 25-2105
Batch #: T253857 EDF #:

Laboratory ID#	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260 b VOCs	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	8051 Chlorinated Herbicides	Comments/Preservative	Total #bfcontainers
81	B-1-1	9/17/25	7:30 AM	Soil	4oz Glass Jar	X							X			X		1
82	B-2-1		7:55															
83	B-3-1		8:15															
84	B-3-10		8:25			X							X			X		1
85	B-4-1		8:40															
86	B-4-10		8:45			X							X			X		1
87	B-5-25		9:25			X							X			X		1
88	B-6-5		10:30			X							X					1
89	B-7-1		11:46															
90	B-8-1		11:55															
91	B-9-1		12:00 PM															
92	B-10-1		12:10															

Relinquished by: (signature) Date / Time: 9/17/2025 2:55pm
Received by: (signature) Date / Time: 9/17/25 14:55

Relinquished by: (signature) Date / Time
Received by: (signature) Date / Time

Relinquished by: (signature) Date / Time
Received by: (signature) Date / Time

Total # of containers: 12
Chain of Custody seals Y/N/NA: NA
Seals intact? Y/N/NA: NA
Received good condition/cold: 4.2°C
Turn around time: Standard

Notes: All results in mg/kg Report to MDL

Sample disposal instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

SunStar Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T253857

Client Name: Earth Science Project: SJC

Delivered by: ☑ Client ☐ SunStar Courier ☐ GLS ☐ FedEx ☐ Other

If Courier, Received by: Date/Time Courier Received:

Lab Received by: Dave Date/Time Lab Received: 9-17-25 14:55

Total number of coolers received: Thermometer ID: SC-1 Calibration due: 11/19/2025

Temperature: Cooler #1	4.1 °C +/- the CF (+ 0.1°C)	=	4.2	°C corrected temperature
Temperature: Cooler #2	°C +/- the CF (+ 0.1°C)	=		°C corrected temperature
Temperature: Cooler #3	°C +/- the CF (+ 0.1°C)	=		°C corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☑ Yes ☐ No ☐ N/A
If NO:		
Samples received on ice?	☐ Yes	☐ No → Complete Non-Conformance Sheet
If on ice, samples received same day collected?	☐ Yes → Acceptable	☐ No → Complete Non-Conformance Sheet

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☑ N/A
Sample containers intact	☑ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☑ Yes	☐ No*	
Total number of containers received match COC	☑ Yes	☐ No*	
Proper containers received for analyses requested on COC	☑ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☐ Yes	☐ No*	☑ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☑ Yes	☐ No*	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: TB 9-17-25

Comments:

Rev. 03 Date 11/1/24

(949) 297-5020 ■ www.sunstarlabs.com ■ 2552 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 9/17/2025 3:53:53PM

WORK ORDER

T253857

Client:	**Earth Science LLC**	**Project Manager:**	**Lena Davidkov**
Project:	**SJC Farm**	**Project Number:**	**25-2105**

Report To:

Earth Science LLC
Sean Rakhshani
5319 University Drive, Suite 20
Irvine, CA 92612

Date Due:	09/24/25 17:00 (5 day TAT)		
Received By:	Dave Berner	Date Received:	09/17/25 14:55
Logged In By:	Lisa Rockhold	Date Logged In:	09/17/25 15:42

Samples Received at:	**4.2°C**		
Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Analysis	Due	TAT	Expires	Comments
T253857-01 B-1-1 [Soil] Sampled 09/17/25 07:50 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	09/24/25 15:00	5	10/01/25 07:50	
T253857-02 B-2-1 [Soil] Sampled 09/17/25 07:55 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	09/24/25 15:00	5	10/01/25 07:55	
T253857-03 B-3-1 [Soil] Sampled 09/17/25 08:15 (GMT-08:00) Pacific Time (US &				
8151 Herbicides	09/24/25 15:00	5	10/01/25 08:15	
T253857-04 B-3-10 [Soil] Sampled 09/17/25 08:25 (GMT-08:00) Pacific Time (US &				
8015 Carbon Chain	09/22/25 15:00	3	10/01/25 08:25	
8260	09/22/25 15:00	3	10/01/25 08:25	
T253857-05 B-4-1 [Soil] Sampled 09/17/25 08:40 (GMT-08:00) Pacific Time (US &				
8151 Herbicides	09/24/25 15:00	5	10/01/25 08:40	
T253857-06 B-4-10 [Soil] Sampled 09/17/25 08:45 (GMT-08:00) Pacific Time (US &				
8015 Carbon Chain	09/22/25 15:00	3	10/01/25 08:45	
8260	09/22/25 15:00	3	10/01/25 08:45	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T253857

Client:	**Earth Science LLC**	**Project Manager:**	**Lena Davidkov**
Project:	**SJC Farm**	**Project Number:**	**25-2105**

Analysis	Due	TAT	Expires	Comments
T253857-07 B-5-25 [Soil] Sampled 09/17/25 09:25 (GMT-08:00) Pacific Time (US &				
8015 Carbon Chain	09/22/25 15:00	3	10/01/25 09:25	
8260	09/22/25 15:00	3	10/01/25 09:25	
T253857-08 B-6-5 [Soil] Sampled 09/17/25 10:30 (GMT-08:00) Pacific Time (US &				
8015 Carbon Chain	09/22/25 15:00	3	10/01/25 10:30	
8260	09/22/25 15:00	3	10/01/25 10:30	
T253857-09 B-7-1 [Soil] Sampled 09/17/25 11:45 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	09/24/25 15:00	5	10/01/25 11:45	
T253857-10 B-8-1 [Soil] Sampled 09/17/25 11:55 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	09/24/25 15:00	5	10/01/25 11:55	
T253857-11 B-9-1 [Soil] Sampled 09/17/25 12:00 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	09/24/25 15:00	5	10/01/25 12:00	
T253857-12 B-10-1 [Soil] Sampled 09/17/25 12:10 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	09/24/25 15:00	5	10/01/25 12:10	

Reviewed By

Date

California Regional Water Quality Control Board/DTSC

Laboratory Report Form (Cover Page 1)

Laboratory Name:	Baseline Analytical Services
Address:	P.O. Box 2243 Huntington Beach, California 92647
Telephone:	(714) 273-2955
Authorized Signature Name, Title (print)	Brian Kato, Laboratory Director
Signature, Date	Brian K. Kato
Laboratory Project Number:	25308
Client Name:	Earth Science, LLC
Project Name:	SJC Phase II ESA
Project Address:	30291 Camino Capistrano San Juan Capistrano, CA
Date(s) Sampled:	9/17/2025
Date(s) Received:	9/17/2025
Date(s) Reported:	9/17/2025
Chain of Custody Received:	Yes

Comments

California Regional Water Quality Control Board/DTSC

Laboratory Report Form (Cover Page 2)

Organic Analyses	Number of Samples	Number of Samples Subcontracted
VOC's (EPA 8260B)	12 (Includes samples, duplicates, & blanks)	

Sample Condition: good

Inorganic Analyses	Number of Samples	Number of Samples Subcontracted

Sample Condition:

Microbiological Analyses	Number of Samples	Number of Samples Subcontracted

Sample Condition:

Other Types of Analyses	Number of Samples

Sample Condition:

Project Name: SJC Phase II ESA (MS Excel Duplicate of RWQCB LabForm10A; Ver12/96)

ANALYTICAL RESULTS FOR ORGANICS (Units: μg/m^3)

METHOD: EPA 8260B MATRIX: Vapor REPORTING UNITS: μg/m^3

DATE ANALYZED:			17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25
Sample ID:			**B-3-SG5**	**B-3-SG10**	**B-3-SG10 DUP**	**B-4-SG5**	**B-4-SG10**	**B-5-SG5**
DILUTION FACTOR:			1	1	1	1	1	1
ANALYTE	MDL	PQL						
Benzene	2.5	5.0	ND	ND	ND	ND	45	ND
Toluene	2.5	5.0	ND	ND	ND	65	230	19
Ethylbenzene	2.5	5.0	30	93	89	8.0	20	6.5
Total Xylenes	2.5	5.0	140	260	230	34	49	33
Methyl t-Butyl Ether (MTBE)	2.5	5.0	ND	ND	ND	ND	ND	ND
t-Butanol (TBA)	25	100	ND	ND	ND	ND	ND	ND
Di-Isopropyl Ether (DIPE)	2.5	5.0	ND	ND	ND	ND	ND	ND
Ethyl t-Butyl Ether (ETBE)	2.5	5.0	ND	ND	ND	ND	ND	ND
t-Amyl Methyl Ether (TAME)	2.5	5.0	ND	ND	ND	ND	ND	ND
Ethanol	250	5000	ND	ND	ND	ND	ND	ND
Acetone	25	100	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	100	ND	ND	ND	ND	ND	ND
n-Butylbenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
Isopropylbenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	2.5	5.0	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone (MIBK)	25	100	ND	ND	ND	ND	ND	ND
Naphthalene	2.5	5.0	ND	ND	ND	ND	ND	ND
n-Propylbenzene	2.5	5.0	10	29	27	ND	ND	ND
Styrene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	2.5	5.0	38	58	53	10	9.8	80
1,3,5-Trimethylbenzene	2.5	5.0	14	18	17	ND	ND	ND
Bromobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
Bromochloromethane	2.5	5.0	ND	ND	ND	ND	ND	ND
Bromoform	2.5	5.0	ND	ND	ND	ND	ND	ND
Bromomethane	2.5	5.0	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	2.5	5.0	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	2.5	5.0	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	2.5	5.0	ND	ND	ND	ND	ND	ND
Chlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
Chloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
Chloroform	2.5	5.0	ND	ND	ND	ND	ND	ND
Chloromethane	2.5	5.0	ND	ND	ND	ND	ND	ND
Dibromochloromethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	2.5	5.0	ND	ND	ND	ND	ND	ND
Dibromomethane	2.5	5.0	ND	ND	ND	ND	ND	ND

ND: Not detected at the indicated method detection limit (MDL)

J: Value is below Practical Quantification Limit and above the Method Detection Limit (MDL)

Project Name: SJC Phase II ESA (MS Excel Duplicate of RWQCB LabForm10A; Ver12/96)

ANALYTICAL RESULTS FOR ORGANICS (Units: μg/m^3)

METHOD: EPA 8260B MATRIX: Vapor REPORTING UNITS: μg/m^3

DATE ANALYZED:			17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25
Sample ID:			**B-3-SG5**	**B-3-SG10**	**B-3-SG10 DUP**	**B-4-SG5**	**B-4-SG10**	**B-5-SG5**
DILUTION FACTOR:			1	1	1	1	1	1
ANALYTE	MDL	PQL						
1,2-Dichlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	2.5	5.0	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	2.5	5.0	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	2.5	5.0	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	2.5	5.0	ND	ND	ND	ND	ND	ND
Freon 113	2.5	5.0	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	2.5	5.0	ND	ND	ND	ND	ND	ND
Methylene Chloride	2.5	5.0	ND	ND	ND	ND	ND	ND
Tetrachloroethene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
Trichloroethene	2.5	5.0	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	2.5	5.0	ND	ND	ND	ND	ND	ND
Vinyl Chloride	2.5	5.0	ND	ND	ND	ND	ND	ND
IPA (tracer analyte)	2.5	5.0	ND	ND	ND	ND	ND	ND

Sample ID:		**B-3-SG5**	**B-3-SG10**	**B-3-SG10 DUP**	**B-4-SG5**	**B-4-SG10**	**B-5-SG5**
Parameter:		Recovery	Recovery	Recovery	Recovery	Recovery	Recovery
Units:		%	%	%	%	%	%
Surrogate	Acceptable Range (%)						
Dibromofluoromethane	70-130	92	92	98	93	96	96
Toluene-D8	70-130	94	97	92	90	93	93
1-Bromo-2-Fluorobenzene	70-130	93	93	93	95	97	97

ND: Not detected at the indicated method detection limit (MDL)

J: Value is below Practical Quantification Limit and above the Method Detection Limit (MDL)

Project Name: SJC Phase II ESA (MS Excel Duplicate of RWQCB LabForm10A; Ver12/96)

ANALYTICAL RESULTS FOR ORGANICS (Units: μg/m^3)

METHOD: EPA 8260B MATRIX: Vapor REPORTING UNITS: μg/m^3

DATE ANALYZED:			17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25
Sample ID:			**B-5-SG10**	**B-5-SG25**	**B-6-SG5**	**B-6-SG10**	**B-6-SG25**	**Equipment Blank**
DILUTION FACTOR:			1	1	1	1	1	1
ANALYTE	MDL	PQL						
Benzene	2.5	5.0	ND	8.7	ND	ND	ND	ND
Toluene	2.5	5.0	25	13	24	30	20	ND
Ethylbenzene	2.5	5.0	7.4	5.1	8.6	10	6.1	ND
Total Xylenes	2.5	5.0	43	21	45	52	34	ND
Methyl t-Butyl Ether (MTBE)	2.5	5.0	ND	ND	ND	ND	ND	ND
t-Butanol (TBA)	25	100	ND	ND	ND	ND	ND	ND
Di-Isopropyl Ether (DIPE)	2.5	5.0	ND	ND	ND	ND	ND	ND
Ethyl t-Butyl Ether (ETBE)	2.5	5.0	ND	ND	ND	ND	ND	ND
t-Amyl Methyl Ether (TAME)	2.5	5.0	ND	ND	ND	ND	ND	ND
Ethanol	250	5000	ND	ND	ND	ND	ND	ND
Acetone	25	100	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	100	ND	ND	ND	ND	ND	ND
n-Butylbenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
Isopropylbenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	2.5	5.0	ND	ND	450	38	22	ND
4-Methyl-2-Pentanone (MIBK)	25	100	ND	ND	ND	ND	ND	ND
Naphthalene	2.5	5.0	ND	ND	ND	ND	ND	ND
n-Propylbenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
Styrene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	2.5	5.0	13	9.4	12	14	9.9	ND
1,3,5-Trimethylbenzene	2.5	5.0	5.0	ND	5.4	6.6	ND	ND
Bromobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
Bromochloromethane	2.5	5.0	ND	ND	ND	ND	ND	ND
Bromoform	2.5	5.0	ND	ND	ND	ND	ND	ND
Bromomethane	2.5	5.0	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	2.5	5.0	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	2.5	5.0	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	2.5	5.0	ND	ND	ND	ND	ND	ND
Chlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
Chloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
Chloroform	2.5	5.0	ND	ND	ND	ND	ND	ND
Chloromethane	2.5	5.0	ND	ND	ND	ND	ND	ND
Dibromochloromethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	2.5	5.0	ND	ND	ND	ND	ND	ND
Dibromomethane	2.5	5.0	ND	ND	ND	ND	ND	ND

ND: Not detected at the indicated method detection limit (MDL)

J: Value is below Practical Quantification Limit and above the Method Detection Limit (MDL)

Project Name: SJC Phase II ESA (MS Excel Duplicate of RWQCB LabForm10A; Ver12/96)

ANALYTICAL RESULTS FOR ORGANICS (Units: μg/m^3)

METHOD: EPA 8260B MATRIX: Vapor REPORTING UNITS: μg/m^3

DATE ANALYZED:			17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25	17-Sep-25
Sample ID:			**B-5-SG10**	**B-5-SG25**	**B-6-SG5**	**B-6-SG10**	**B-6-SG25**	**Equipment Blank**
DILUTION FACTOR:			1	1	1	1	1	1
ANALYTE	MDL	PQL						
1,2-Dichlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	2.5	5.0	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	2.5	5.0	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	2.5	5.0	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	2.5	5.0	ND	ND	ND	ND	ND	ND
Freon 113	2.5	5.0	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	2.5	5.0	ND	ND	ND	ND	ND	ND
Methylene Chloride	2.5	5.0	ND	ND	ND	ND	ND	ND
Tetrachloroethene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	2.5	5.0	ND	ND	ND	ND	ND	ND
Trichloroethene	2.5	5.0	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	2.5	5.0	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	2.5	5.0	ND	ND	ND	ND	ND	ND
Vinyl Chloride	2.5	5.0	ND	ND	ND	ND	ND	ND
IPA (tracer analyte)	2.5	5.0	ND	ND	ND	ND	ND	ND

Sample ID:	**B-5-SG10**	**B-5-SG25**	**B-6-SG5**	**B-6-SG10**	**B-6-SG25**	**Equipment Blank**
Parameter:	Recovery	Recovery	Recovery	Recovery	Recovery	Recovery
Units:	%	%	%	%	%	%
Surrogate	Acceptable Range (%)						
Dibromofluoromethane	70-130	96	90	97	95	94	90
Toluene-D8	70-130	95	98	96	96	96	99
1-Bromo-2-Fluorobenzene	70-130	91	97	100	91	93	95

ND: Not detected at the indicated method detection limit (MDL)

J: Value is below Practical Quantification Limit and above the Method Detection Limit (MDL)

QA/QC Report - Vapor Samples

II. Lab Control Sample (LCS)/Lab Control Sample Duplicate (LCSD)

Date Performed: 17-Sep-25
Batch #: GCVOC1- 17-Sep-25
Instrument ID: GCVOC1
Method: EPA 8260B
Units: µg/L

Analyte	Sample Result	Spike Conc. (µg/L)	LCS (µg/L)	LCS Recovery (%)	Spike Conc. (µg/L)	LCSD (µg/L)	LCSD Recovery (%)	RPD (%)	LCS/LCSD Recovery Limits (%)	Limits (%)
1, 1-Dichloroethene	ND	10	9.4	94	10	9.8	98	4	65-130	0-15
Benzene	ND	10	9.5	95	10	9.2	92	3	65-130	0-15
Trichloroethene	ND	10	9.7	97	10	9.1	91	6	65-130	0-15
Toluene	ND	10	9.6	96	10	9.4	94	2	65-130	0-15
Chlorobenzene	ND	10	9.0	90	10	9.6	96	6	65-130	0-15

ATTACHMENT

(1) Chain-of-Custody Record (COC)

(2) Field Notes

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Client Information	*Project Information*
Earth Science, LLC	Project Name: SJC Phase II ESA
5319 University Drive, Suite 20	Project Address: 30291 Camino Capistrano
Irvine, California 92612	San Juan Capistrano, CA
Report to: Sean Rakhshani	Project Date: 09/17/25

Laboratory Project #: **25308**

Sample ID	Sampling Date	Sampling Time	Lab ID	Soil (S), Water (W), Vapor (V)	Number of Containers	Analysis Requested: VOC's (8260B)					Comments
Equipment Blank	09/17/25	11:38 AM	1	V	1	X					
B-6-SG5	09/17/25	11:45 AM	2	V	1	X					
B-6-SG10	09/17/25	12:05 PM	3	V	1	X					
B-6-SG25	09/17/25	12:19 PM	4	V	1	X					
B-4-SG5	09/17/25	12:36 PM	5	V	1	X					
B-4-SG10	09/17/25	12:54 PM	6	V	1	X					
B-5-SG5	09/17/25	1:12 PM	7	V	1	X					
B-5-SG10	09/17/25	1:30 PM	8	V	1	X					
B-5-SG25	09/17/25	1:46 PM	9	V	1	X					
B-3-SG5	09/17/25	2:01 PM	10	V	1	X					
B-3-SG10	09/17/25	2:18 PM	11	V	1	X					
B-3-SG10 DUP	09/17/25	2:18 PM	12	V	1	X					

1. Sampled and analyzed by:	2. Received by
Signature: x Brian K. Kato	Signature: x
Date/Time: Date/Times Above	Date/Time:
3. Relinquished by	4. Received by
Signature: x	Signature: x
Date/Time:	Date/Time:

Turnaround Time:

Special Instructions/Notes:

Sample Condition:

Sealed? Y / N

Chilled? Y / N

BASELINE ON-SITE ANALYSIS™

Baseline Analytical Services

P. 0. Box 2243, Huntington Beach, CA 92647 Telephone: (714) 273-2955

Field Notes

Client Information	***Project Information***	***Baseline Analytical Information***
Earth Science, LLC	Project Name: SJC Phase II ESA	Analyst Name: Brian Kato
5319 University Drive, Suite 20	Project Address: 30291 Camino Capistrano	Telephone Number: 714.273.2955
Irvine, California 92612	San Juan Capistrano, CA	
Report to: Sean Rakhshani	Start Date: 9/17/25	Email Address: BrianKato@msn.com

(1) Site Conditions: skies are clear; no precipitation

(2) Vapor Well Construction:

A probe tip is set in a sand pack; the probes are attached to tubing that leads to the surface. The tubing ends are sealed with gas-tight plugs.

Sand Pack Specification:

			(cm)
Diameter:	2.0	inches	5.08
Height:	1.0	feet	30.48
Material:	sand		

Tubing Specification:

			(cm)
Outer Diameter:	0.25	inches	0.635
Inner Diameter:	0.19	inches	0.483
Lengths:	**5, 10, 25**	feet (1' added for lead)	

(3) Purge Volume & Time Calculation

Component	Diameter (cm)	X-sect Area (cm^2)	Length or Height (ft)	Length or Height (cm)	Volume (ml)	Sand Pack Volume x 0.35 Porosity (ml)	Tubing Purge Volumes 1PV (ml)	3 PV's (ml)	10 PV's (ml)
5' bgs tubing	0.483	0.183	6.0	183	33	---	33	100	334
10' bgs tubing	0.483	0.183	11.0	335	61	---	61	184	613
25' bgs tubing	0.483	0.183	26.0	792	145	---	145	435	1449
Bentonite	5.08	20.26	1.0	30.5	617	216	216	648	2161
Sand Pack	5.08	20.26	1.0	30.5	617	216	216	648	2161
Total Pack	---	---	---	---	---	---	432	1297	4322
						Purge flow rate (ml/min):	200	200	200
						5' bgs Purge Time (minutes):	---	**7.0**	---
						10' bgs Purge Time (minutes):	---	**7.4**	---
						25' bgs Purge Time (minutes):	---	**8.7**	---

Purge Time Calculation

Total PV = Sand Pack Volume + Tubing Volume

Purge Time = Total PV/Purge flow rate

Porosity use for bentonite: 0.35

Total Pack volume equals sum of sand and bentonite pack volumes

Purge Volume: Based on the 7/15/15 DTSC Soil Gas Advisory, remove 3 purge volumes prior to each sample collection (purge times shown above).

(4) Pump Specifications

Pump Model: AIRCHEK SAMPLER
Vender: SKC, Inc.
Model #: 224-PCXR4

Description: A portable battery-powered pump with an adjustable flow-rate and a built-in flow indicator, meter, & timer. The flow was set for a fixed rate of 200ml/min.