PARTNER

More Than Just Assessments.
Solutions.

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

845 Stewart Drive
Sunnyvale, California 94085

Report Date
October 31, 2024

Partner Project No.
24-466341.2

Prepared for:
City Ventures
444 Spear Street, Suite 200
San Francisco, California 94105

PARTNER

October 31, 2024

Adam Foster
City Ventures
444 Spear Street, Suite 200
San Francisco, California 94105

Subject: Phase II Environmental Site Assessment
Report 845 Stewart Drive
Sunnyvale, California 94085
Partner Project No. 24-466341.2

Dear Mr. Foster:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the assessment performed at the above-referenced property. The following report describes the field activities, methods, and findings of the Phase II Subsurface Investigation conducted at the above-referenced property.

This assessment was performed consistent with acceptable industry standards. The independent conclusions represent Partner's best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

We appreciate the opportunity to provide these services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact Jay Grenfell at (415) 992-3755.

Sincerely,

Partner Engineering and Science, Inc.

Michel Helou
Project Manager

Hunter White
Senior Project Manager

Jay Grenfell
National Client Manager

Joe Mangine, PG
Senior Project Manager

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Purpose 1
1.2 Executive Summary 1
1.3 Limitations 1
1.4 User Reliance 2
2.0 SITE BACKGROUND 3
2.1 Site Description 3
2.2 Site History 3
2.3 Geology and Hydrogeology 4
3.0 FIELD ACTIVITIES 5
3.1 Preparatory Activities 5
3.1.1 Utility Clearance 5
3.1.2 Health and Safety Plan 5
3.2 Drilling Equipment 5
3.3 Sample Locations 5
3.4 Soil Sampling 5
3.5 Groundwater Sampling 6
3.6 Soil Gas Sampling 6
3.6.1 Soil Gas Sampling Construction 6
3.6.2 Sub-Slab Soil Gas Sampling Construction 7
3.6.3 Soil Gas Sampling Methodology 7
3.7 Post-Sampling Activities 8
4.0 DATA ANALYSIS 9
4.1 Laboratory Analysis 9
4.2 Regulatory Agency Comparison Criteria 9
4.3 Soil Sample Data Analysis 9
4.4 Groundwater Sample Data Analysis 9
4.5 Soil Gas Sample Data Analysis 10
4.6 Discussion 10
4.6.1 Soil 10
4.6.2 Groundwater 11
4.6.3 Soil Gas 11
5.0 SUMMARY AND CONCLUSIONS 12
FIGURES 14

PARTNER

The following Figures, Tables, and Appendices are attached at the end of this report.

FIGURES

1. Site Vicinity Map
2. Topographic Map
3. Sample Location Map

TABLES

1. Summary of Investigation Scope
2. Soil Sample CVOCs Laboratory Results
3. Groundwater Sample CVOCs Laboratory Results
4. Soil Gas Sample CVOCs Laboratory Results

APPENDICES

A. Boring Logs
B. Laboratory Analytical Reports

1.0 INTRODUCTION

1.1 Purpose

The purpose of the investigation was to evaluate the potential impact of chlorinated volatile organic compounds (CVOCs) to soil, groundwater, and/or soil gas at the Subject Property as a consequence of the nearby TRW Microwave Superfund site and other known off-site releases. City Ventures provided project authorization of Partner Proposal Number P24-466341.1.

1.2 Executive Summary

As discussed in detail in the body of this report, exceedances of volatile organic compounds (VOCs) in soil gas, related to off-site contamination sources (with no evidence of any on-site contamination sources) indicate a potential vapor intrusion concern for the current and/or future occupants of the subject property.

It is Partner Engineering's understanding that, based on the potential vapor intrusion concern, and in an abundance of caution and on a voluntary basis, the developer has committed to installing vapor barriers and passive venting systems below contemplated residential construction as part of the client's project proposal to the City of Sunnyvale, in order to prevent vapor intrusion into indoor air, so that there are no exceedances of ESLs and other regulatory thresholds in relation to indoor air. These systems are a human health-protective measure frequently implemented throughout the State of California and are a measure considered effective by the scientific community and the regulatory community in regard to preventing vapor intrusion, and are a measure deemed to be diligent and consistent with accepted industry standards. Therefore, to be amply clear, these vapor barriers and passive venting systems are more than adequately protective in relation to use of the Subject Property for residential purposes.

There is no requirement to obtain regulatory oversight in regard to the installation of the vapor barriers and venting systems, such that they may be incorporated into contemplated building construction on a self-directed basis. Accordingly, Partner Engineering recommends installing these systems below contemplated residential construction at the Subject Property but, otherwise, recommends no further action or investigation regarding the issues discussed above because the proposed measures are adequate and sufficient for ensuring indoor air is not affected at concentrations exceeding residential screening levels.

1.3 Limitations

This report presents a summary of work conducted by Partner. The work includes observations of site conditions encountered and the analytical results provided by an independent third-party laboratory of samples collected during the course of the project. The number and location of samples were selected to provide the required information. It cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

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

Partner warrants that the environmental consulting services contained herein were accomplished in accordance with generally accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

1.4 User Reliance

Partner was engaged by City Ventures (the Addressee), or its authorized representative, to perform this investigation. The engagement agreement specifically states the scope and purpose of the investigation, as well as the contractual obligations and limitations of both parties (the Master Services Agreement, or "MSA"). This report and the information therein, are for the exclusive use of the Addressee. This report has no other purpose and may not be relied upon, or used, by any other person or entity without the written consent of Partner. Third parties that obtain this report, or the information therein, shall have no rights of recourse or recovery against Partner, its officers, employees, vendors, successors or assigns. In the event of any conflict between the terms and conditions of this report and the terms and conditions of the MSA, the MSA shall control.

2.0 SITE BACKGROUND

2.1 Site Description

The subject property consists of one parcel of land comprising approximately 1.171 acres located on the northwest corner of the Stewart Drive and De Guigne Drive intersection within a commercial area of Sunnyvale, Santa Clara County, California. The subject property is currently developed with a single-story building and is occupied by Agape Grill and Bar (Suite A). The remaining suites (Suites B through D) are vacant. In addition to the structure, the subject property is improved with asphalt-paved parking/driveways and associated landscaping.

The subject property is bound by a commercial property to the north, De Guigne Drive to the east beyond which is a commercial property, Stewart Drive and De Guigne Drive intersection to the southeast beyond which is a commercial property, Stewart Drive to the south beyond which is a commercial property, and a commercial property to the west. Refer to Figure 1 for a site vicinity map showing site features and surrounding properties.

2.2 Site History

Partner completed a *Phase I Environmental Site Assessment Report* (Phase I) for the subject property, dated October 31, 2024 on behalf of City Ventures. According to the reviewed historical sources, the subject property was previously undeveloped as early as 1897; developed with agricultural land between 1939 and *circa* 1968; became vacant land in 1974 (per aerial photograph) and developed with the current structure in 1974 (per assessor).

The following recognized environmental condition (REC) was identified in the Phase I:

- The subject property is located approximately 150 feet to the east-northeast of the TRW Microwave, Inc. (Building 825) Superfund site (TRW Microwave Superfund Site) - United States Environmental Protection Agency (EPA) Case Number 2020398. According to available information, in 1983, a subsurface investigation confirmed soil, groundwater, and soil gas was impacted with trichloroethene (TCE) at this site from the use of and storage of TCE in underground storage tanks (USTs). Cleanup is currently ongoing and overseen by the EPA (lead agency) as well as the San Francisco Bay Regional Water Quality Control Board (RWQCB). Remedial actions have included a soil vapor extraction (SVE) system, groundwater removal, and enhanced anaerobic biodegradation (EAB) treatment. In 1984, the RWQWCB issued Cleanup and Abatement Order 84-004 for this site. Cleanup and Abatement Orders were also issued to upgradient and downgradient dischargers Signetics (811 Arques Avenue/440 North Wolfe Road) and Advanced Micro Devices (AMD) (901/902 Thompson Place and 915 DeGuine Avenue) to characterize and cleanup groundwater conditions at their respective properties as well as off-site downgradient groundwater. Impacts associated with the Signetics and AMD sites were determined to have comingled with the TRW Microwave Superfund site. Based on the close proximity of this site to the subject property, potential impacts from these sites to the subject property could not be ruled out and is considered a REC to the subject property.

It is Partner's understanding that is the subject property is planned for potential residential and/or commercial redevelopment.

2.3 Geology and Hydrogeology

Review of the United States Geological Survey (USGS) *Mountain View, California* Quadrangle topographic map indicates the subject property is situated approximately 50 feet above mean sea level, and the local topography is sloping gently to the north. Refer to Figure 2 for a topographic map of the site vicinity.

The subject property is situated within the Santa Clara Valley, which is an intermontane basin in the coastal region of the State of California. The rocks that underlie the basins and form the surrounding mountains are primarily marine sediments and metamorphic and igneous rocks all of which are Mesozoic age but locally include rocks of the Cenozoic age. The Santa Clara Valley is underlain by geologically young basin deposits. Previous geotechnical studies indicate the deposits in the vicinity of the alignment are young fine-grained alluvium (horizontally stratified clay and silt) and slightly older fine- to coarse-grained alluvium (moderately to poorly bedded, poorly sorted clay, silt, sand and gravel). Soils in the vicinity have highly variable percentages of clay, silt, sand and gravel, and stratigraphic contacts between soil types vary from sharp to gradational.

Based on borings advanced during this investigation, the underlying subsurface consisted of a varying combination of silty clay, clayey silt, and silty sand with gravel from the ground surface to approximately 16 feet below ground surface (bgs). Groundwater was first observed between 8 and 12 feet bgs and static groundwater was measured between 6.1 and 7.4 feet bgs. Refer to Appendix A for boring logs from this investigation.

3.0 FIELD ACTIVITIES

The Phase II Subsurface Investigation scope included the advancement of five borings (B1 through B5) and the installation of three temporary sub-slab probes (SS-1 through SS-3) to collect representative soil, groundwater, and/or soil gas samples. Refer to Table 1 for a summary of the sample identification, sampling schedule, and laboratory analyses for this investigation.

3.1 Preparatory Activities

Prior to the initiation of fieldwork, Partner completed the following activities.

3.1.1 Utility Clearance

Partner delineated the work area with white spray paint and notified Underground Service Alert (USA) to clear public utility lines as required by law at least two business days prior to drilling activities. USA 811 issued ticket number 2024101702887 for the project.

In addition, Partner subcontracted with Elite Precision GPR LLC (Elite) on October 22, 2024 to clear boring/probe locations of utilities. Elite systematically free-traversed each proposed boring/probe location with a ground penetration radar (GPR) unit and an electromagnetic (EM) pipe locator. The data was interpreted in real time for evidence of utility lines and/or other subsurface features of potential concern. Based on the findings of the GPR survey, no subsurface utilities were identified within the proposed boring/probe locations.

3.1.2 Health and Safety Plan

Partner prepared a site-specific Health and Safety Plan, which was reviewed with on-site personnel involved in the project prior to the commencement of drilling activities.

3.2 Drilling Equipment

On October 22, 2024, Partner subcontracted with Environmental Control Associates (ECA) (State of California Water Well Drilling Contractor License Number 695970) to provide and operate drilling equipment. ECA, under the direction of Partner, advanced borings B1 through B5 with a truck-mounted Geoprobe 5410 direct-push rig and installed sub-slab probes SS-1 through SS-3 with a hand-held rotary hammer drill. Sampling equipment was decontaminated between sample intervals and locations to prevent cross-contamination.

3.3 Sample Locations

Borings B1 through B5 were advanced on the northeast, north, northwest, west, and southwest portions of the subject property, respectively. Sub-slab probes SS-1 through SS-3 were installed in the southeast, northeast, and south interior areas of the subject property building (Suite D for SS-1 and SS-2, and Suite C for SS-3), respectively.

Refer to Figure 3 for a map indicating sample locations.

3.4 Soil Sampling

Borings B1 through B5 were overlain by asphalt, which was penetrated using a punch bit attachment advanced by the direct-push drill rig. Each boring was advanced to a terminal depth of 16 feet bgs.

Soil samples were collected using a 4-foot long by 2.25-inch diameter MacroCore sampler with a 4-foot long acetate liner, which was advanced by the direct-push drill rig using 4-foot long by 1.5-inch diameter drill rods. The sampler was driven into the subsurface to allow undisturbed soil to enter the open MacroCore barrel and retrieved in 4-foot intervals to recover the soil-filled liners.

A lengthwise section of each acetate liner was removed with a splitting tool to expose the soil. The soil column was visually inspected for discoloration, monitored for odors, and classified in accordance with the Unified Soil Classification System (USCS). Select intervals were placed in sealable plastic bags and field-screened with a photoionization detector (PID) calibrated to isobutylene. None of the samples exhibited discoloration or an odor and none of the PID readings suggested the presence of elevated volatile organics concentrations.

Soil depths selected for laboratory analysis were sampled directly from the liners using a disposable plastic syringe and retained in one methanol-preserved and two sodium bisulfate-preserved volatile organics analysis (VOA) vials in accordance with United States Environmental Protection Agency (EPA) Method 5035 sampling protocol. The VOA vials were labeled for identification and stored in an iced cooler.

Soil samples were collected from borings B1, B2, and B4 at 5 and 11 feet bgs, from boring B3 at 5, 11, and 15 feet bgs, and from boring B5 at 5 and 7 feet bgs.

3.5 Groundwater Sampling

After soil sampling to the terminal depth, groundwater samples were collected from each boring by withdrawing the drill rods from the subsurface and installing ¾-inch diameter temporary monitoring wells within the open boreholes. Each temporary monitoring well consisted of a 10-foot long, 0.010-inch factory-slotted polyvinyl chloride (PVC) screen at the terminal end and blank PVC risers from the top of the screen interval to the ground surface.

Groundwater samples were retrieved from each temporary monitoring well using a new section of 3/8-inch diameter polyethylene tubing fed through a peristaltic pump and conveyed into seven hydrochloric acid-preserved VOA vials. Each vial was filled with no observable headspace or air bubbles to minimize the potential for volatilization, labeled for identification, and stored in an iced cooler.

New screens and tubing were used for each temporary monitoring well. The risers were decontaminated between boreholes to prevent cross-contamination.

Groundwater samples were successfully collected from temporary monitoring wells at borings B1 through B5, which were screened from 6 to 16 feet bgs.

3.6 Soil Gas Sampling

3.6.1 Soil Gas Sampling Construction

Upon completion of soil and groundwater sampling, soil gas probes screened at 5 feet bgs were constructed within the boreholes. The boreholes were backfilled with dry, granular bentonite to approximately 6 inches below the desired sampling depth. A new section of ¼-inch diameter Nylaflow tubing with a new ¼-inch diameter polypropylene filter at the terminal end was inserted into the borehole to the desired sampling depth. One-inch diameter PVC casing was used as a guide for the tubing to ensure that the desired sampling depth was achieved. Sand was poured into the boring annulus to form an approximately 1-foot-long sand

pack around the polypropylene filter, at which time the PVC piping was withdrawn. Approximately 1 foot of dry, granular bentonite was placed atop the sand pack and the remainder of the borehole was backfilled with hydrated bentonite to the ground surface to form a seal. The sampling end of the tubing was fitted with a cap and the probe was labeled for identification.

3.6.2 Sub-Slab Soil Gas Sampling Construction

Each sub-slab soil gas probe, consisting of a new section of ¼-inch diameter Nylaflow tubing with a new ¼-inch diameter polypropylene filter at the terminal end, was manually inserted into a ½-inch diameter hole drilled within the concrete building slab using the rotary hammer drill. Sand was poured into the annulus to form a sand pack around the probe screen and approximately 2 inches of dry, granular bentonite was placed atop the sand pack. The annulus was backfilled with hydrated bentonite to the ground surface to form a seal and the sampling end of the probe was fitted with a cap and the probe was labeled for identification.

3.6.3 Soil Gas Sampling Methodology

Soil gas samples were collected in general accordance with the July 2015 Department of Toxic Substances Control (DTSC) and Los Angeles RWQCB "Advisory – Active Soil Gas Investigations."

Soil gas samples were collected using 1-liter, stainless-steel, cylindrical SUMMA canisters. The sampling containers were provided by SunStar Laboratories, Inc. (SunStar) a state-certified laboratory (California Department of Public Health Environmental Laboratory Accreditation Program certificate number 2250) in Lake Forest, California, which subjected each canister to a rigorous cleaning process using a combination of dilution, heat, and high vacuum. After cleaning, the canisters were batch certified to be free of target contaminants to a specified reporting limit via gas chromatography/mass spectroscopy prior to delivery.

Partner received the SUMMA canisters evacuated to approximately minus 30 inches of mercury. The SUMMA canisters were fitted with stainless-steel flow controllers, which SunStar calibrated to maintain constant flow (approximately 0.1 liter per minute) for approximately 5 to 10 minutes of sampling time.

Each probe was allowed to equilibrate for a minimum of 2 hours (for soil gas probes) or 30 minutes (for sub-slab soil gas probes) after installation prior to sampling. After equilibration, the sample probe was purged of ambient air using a laboratory-supplied purge pump. A tracer compound [1,1-diflouroethane (1,1-DFA)] was placed around each probe at the ground surface while sampling to detect ambient air intrusion. Once the purge was complete, the sampling end of the probe was fitted to the sampling canister and the port valve was opened, causing air to enter the sample container due to the pressure differential. Partner closed the valves after the canister was evacuated to approximately minus 1 to 2 inches of mercury, with pertinent data (e.g., time, canister vacuum) recorded at the start and end of sampling.

The SUMMA canisters were labeled for identification and stored away from direct sunlight prior to analysis.

Soil gas samples were collected from each boring (B1 through B5) at approximately 5 feet bgs. Sub-slab soil gas samples were collected from each soil gas probe (SS-1 through SS-3) at approximately 6 inches bgs.

3.7 Post-Sampling Activities

Temporary monitoring wells and probes were removed from the subsurface and the boreholes were backfilled with hydrated bentonite chips and capped with concrete patch following sampling activities.

No significant amounts of derived wastes were generated during this investigation.

4.0 DATA ANALYSIS

4.1 Laboratory Analysis

Partner collected 11 soil samples, five groundwater samples, and eight soil gas samples on October 22, 2024, which were transported in an iced cooler (soil and groundwater samples) or at ambient temperature (soil gas samples) under chain-of-custody protocol to SunStar for analysis. Based on field-screening results, visual observations, and/or olfactory observations, one soil sample per boring (five soil samples total) and each groundwater sample (five groundwater samples total) was analyzed for CVOCs [specifically 1,1-dichloroethene (DCE); cis-1,2-DCE; trans-1,2-DCE; tetrachloroethene (PCE); TCE; and vinyl chloride] via EPA Method 8260B. Each soil gas sample (eight soil gas samples total) was analyzed for CVOCs via EPA Method TO-15. The remaining soil samples were placed on hold at the laboratory.

Laboratory analytical results are included in Appendix B and discussed below.

4.2 Regulatory Agency Comparison Criteria

The San Francisco Bay RWQCB has established Environmental Screening Levels (ESLs) as an initial screening level evaluation. ESLs aid in assessing the potential threats to human health, terrestrial/aquatic habitats, and/or drinking water resources due to contaminants in soil, soil gas, and/or groundwater. Under most circumstances, the presence of contamination below applicable ESLs can be assumed to not pose a significant, chronic (i.e., long-term) adverse risk to the applicable receptor of concern. Conversely, sites that exceed ESLs generally require further evaluation and/or remediation. Please note that the ESLs were developed using default assumptions (e.g., standard exposure factors) and, consequently, are only meant for screening level assessments. The ESLs should not be considered enforceable regulatory standards. Cleanup levels ultimately dependent on site-specific factors and are established by the regulatory agencies on a case-by-case basis.

4.3 Soil Sample Data Analysis

Cis-1,2-DCE; PCE, and TCE were detected in one or more of the analyzed soil samples at concentrations above the laboratory reporting limits (RLs); however, none of these CVOC detections exceed the applicable ESLs. No other CVOCs were detected in the analyzed soil samples at concentrations above laboratory RLs and the RLs do not exceed the applicable ESLs.

Refer to Table 2 for a summary of the soil sample CVOCs laboratory analysis results.

4.4 Groundwater Sample Data Analysis

Cis-1,2-DCE; PCE, and TCE were detected in one or more of the analyzed groundwater samples at concentrations above the laboratory RLs. Of these CVOC detections, the following exceed the applicable ESLs:

- Cis-1,2-DCE was detected in groundwater samples B3-GW through B5-GW at concentrations of 7.9, 7.2, and 6.5 micrograms per liter (µg/L), respectively, which exceed the direct exposure ESL of 6.0 µg/L; and

- TCE was detected in groundwater samples B1-GW through B5-GW at concentrations of 15, 22, 24, 39, and 25 µg/L, respectively, which exceed the direct exposure ESL of 5.0 µg/L and the vapor intrusion ESL (commercial/industrial) of 7.5 µg/L.

None of the remaining CVOC detections were at concentrations exceeding the applicable ESLs. No other CVOCs were detected in the analyzed groundwater samples at concentrations above laboratory RLs and the RLs do not exceed the applicable ESLs.

Refer to Table 3 for a summary of the groundwater sample CVOCs laboratory analysis results.

4.5 Soil Gas Sample Data Analysis

Cis-1,2-DCE; PCE, and TCE were detected in one or more of the analyzed soil gas samples at concentrations above the RLs. Of these CVOC detections, the following exceed the applicable ESLs:

- PCE was detected in soil gas samples B1-SG, B3-SG, and B5-SG at concentrations of 19, 26, and 31 micrograms per cubic meter (µg/m^3), respectively, which exceed the residential ESL of 15 µg/m^3 but do not exceed the commercial/industrial ESL of 67 µg/m^3; and
- TCE was detected in soil gas samples B1-SG through B5-SG at concentrations of 84, 61, 570, 270, and 690 µg/m^3, respectively, which exceed the residential ESL of 16 µg/m^3 and/or the commercial/industrial ESL of 100 µg/m^3.

None of the remaining CVOCs detected in the analyzed soil gas samples were at concentrations exceeding the applicable ESLs. No other CVOCs were detected in the analyzed soil gas samples at concentrations above laboratory RLs and the RLs do not exceed the applicable ESLs.

The tracer compound, 1,1-DFA, was detected in four of the eight analyzed soil gas samples at concentrations of above the laboratory RL. According to the DTSC, the detection of a tracer compound at concentrations of less than 10 times the laboratory RL of the target analyte are considered insignificant. For the purposes of this investigation, the lowest RL (2.6 µg/m^3 for vinyl chloride) was utilized for comparison, resulting in a significance threshold of 26 µg/m^3. The 1,1-DFA concentrations detected in soil gas samples B2-SG through B5-SG (ranging between 100 and 440 µg/m^3) exceed the significance threshold, which is indicative of a potential breach in the sampling train resulting in the introduction of ambient air into the sampling train. Therefore, the reported concentrations of target compounds in soil gas from these samples may be an underestimation if the compounds were not in the ambient air, or an overestimation of the actual conditions if the detected compounds are in ambient air. Based on the foregoing, this limitation is not anticipated to materially impact the findings of this investigation.

Refer to Table 4 for a summary of the soil gas sample CVOCs laboratory analysis results.

4.6 Discussion

4.6.1 Soil

Residual concentrations of CVOCs were detected in soil; however, these detections do not exceed applicable regulatory screening criteria and therefore do not pose a threat to human health and/or the environment.

4.6.2 Groundwater

Cis-1,2-DCE was detected in three of the five groundwater samples (B3-GW through B5-GW) and TCE was detected in each of the groundwater samples (B1-GW through B5-GW) at concentrations exceeding the applicable regulatory screening criteria. The cis-1,2-DCE impacts to groundwater appear to be limited in extent and the TCE impacts to groundwater appear to be consistently distributed throughout the subject property, and the source appears to be the nearby TRW Microwave Superfund site. No evidence indicating any on-site sources has been identified.

The regulatory exceedances of CVOCs indicate a potential threat to human health and/or the environment. Partner notes that it is unlikely that shallow groundwater beneath the subject property will be used directly as a source of drinking water in the foreseeable future, and the subject property and surrounding area is currently serviced by the local municipal water system.

Based on TCE and cis-1,2-DCE groundwater concentration contour maps located in a January 2019 Haley Aldrich *Combined 2018 Annual Groundwater Monitoring Report and Annual in Situ Bioremediation Program Report*, the concentrations of TCE and cis-1,2-DCE in on-site groundwater are from the plume associated with the off-site TRW Microwave Superfund site and are not from any on-site source.

4.6.3 Soil Gas

PCE was detected in three of the eight soil gas samples (B1-SG, B3-SG, and B5-SG) and TCE was detected in five of the eight soil gas samples (B1-SG through B5-SG) at concentrations exceeding the applicable regulatory screening criteria. None of the sub-slab soil gas samples (SS-1 through SS-3) contained CVOCs at concentrations exceeding the applicable regulatory screening criteria. The source of the PCE and TCE impacts to soil gas appears to be the TRW Microwave Superfund site, with no evidence indicating any on-site source(s). The regulatory exceedances in soil gas indicate a potential vapor intrusion concern for the current and/or future occupants of the subject property.

It is Partner Engineering's understanding that, based on the potential vapor intrusion concern, and in an abundance of caution and on a voluntary basis, the developer has committed to installing vapor barriers and passive venting systems below contemplated residential construction as part of the client's project proposal to the City of Sunnyvale, in order to prevent vapor intrusion into indoor air, so that there are no exceedances of ESLs and other regulatory thresholds in relation to indoor air. These systems are a human health-protective measure frequently implemented throughout the State of California and are a measure considered effective by the scientific community and the regulatory community in regard to preventing vapor intrusion, and are a measure deemed to be diligent and consistent with accepted industry standards. Therefore, to be amply clear, these vapor barriers and passive venting systems are more than adequately protective in relation to use of the Subject Property for residential purposes.

There is no requirement to obtain regulatory oversight in regard to the installation of the vapor barriers and venting systems, such that they may be incorporated into contemplated building construction on a self-directed basis. Accordingly, Partner Engineering recommends installing these systems below contemplated residential construction at the Subject Property but, otherwise, recommends no further action or investigation regarding the issues discussed above because the proposed measures are adequate and sufficient for ensuring indoor air is not affected at concentrations exceeding residential screening levels.

5.0 SUMMARY AND CONCLUSIONS

Partner conducted a Phase II Subsurface Investigation at the subject property to evaluate the potential impact of CVOCs to soil, groundwater, and/or soil gas as a consequence of the nearby TRW Microwave Superfund site and additional off-site releases. The scope of the Phase II Subsurface Investigation included the advancement of five borings (B1 through B5) and the installation of three temporary sub-slab probes (SS-1 through SS-3) to collect representative soil, groundwater, and/or soil gas samples. Five soil samples, five groundwater, and eight soil gas samples were analyzed for CVOCs.

Subsurface lithology encountered in the upper 16 feet bgs consisted of varying combination of silty clay, clayey silt, and silty sand with gravel. Groundwater was first observed between 8 and 12 feet bgs and static groundwater was measured between 6.1 and 7.4 feet bgs.

Soil and Groundwater

Residual concentrations of CVOCs were detected in soil; however, these detections do not exceed applicable regulatory screening criteria and therefore do not pose a threat to human health and/or the environment.

Cis-1,2-DCE was detected in three of the five groundwater samples (B3-GW through B5-GW) and TCE was detected in each of the groundwater samples (B1-GW through B5-GW) at concentrations exceeding the applicable regulatory screening criteria. The cis-1,2-DCE impacts to groundwater appear to be limited in extent and the TCE impacts to groundwater appear to be consistently distributed throughout the subject property, and the source is likely attributed to the nearby TRW Microwave Superfund site. The regulatory exceedances of CVOCs indicate a potential threat to human health and/or the environment. Partner notes that it is unlikely that shallow groundwater beneath the subject property will be used directly as a source of drinking water in the foreseeable future, and the subject property and surrounding area is currently serviced by the local municipal water system.

Based on TCE and cis-1,2-DCE groundwater concentration contour maps located in a January 2019 Haley Aldrich *Combined 2018 Annual Groundwater Monitoring Report and Annual in Situ Bioremediation Program Report*, the concentrations of TCE and cis-1,2-DCE in on-site groundwater is from the plume associated with the off-site TRW Microwave Superfund site and are not from any on-site source.

Based on the soil and groundwater results, Partner recommends the development and implementation of a Soil and Groundwater Management Plan (SGMP) and a Health and Safety Plan (HASP) to address any impacts discovered during future redevelopment activities (though none are anticipated).

Soil Gas

PCE was detected in three of the eight soil gas samples (B1-SG, B3-SG, and B5-SG) and TCE was detected in five of the eight soil gas samples (B1-SG through B5-SG) at concentrations exceeding the applicable regulatory screening criteria. None of the sub-slab soil gas samples (SS-1 through SS-3) contained CVOCs at concentrations exceeding the applicable regulatory screening criteria. The source of the PCE and TCE impacts to soil gas is likely attributed to the TRW Microwave Superfund site. The regulatory exceedances in soil gas indicate a potential vapor intrusion concern for the current and/or future occupants of the subject property.

It is Partner Engineering's understanding that, based on the potential vapor intrusion concern, and in an abundance of caution and on a voluntary basis, the developer has committed to installing vapor barriers and passive venting systems below contemplated residential construction as part of the client's project proposal to the City of Sunnyvale, in order to prevent vapor intrusion into indoor air, so that there are no exceedances of ESLs and other regulatory thresholds in relation to indoor air. These systems are a human health-protective measure frequently implemented throughout the State of California and are a measure considered effective by the scientific community and the regulatory community in regard to preventing vapor intrusion, and are a measure deemed to be diligent and consistent with accepted industry standards. Therefore, to be amply clear, these vapor barriers and passive venting systems are more than adequately protective in relation to use of the Subject Property for residential purposes.

There is no requirement to obtain regulatory oversight in regard to the installation of the vapor barriers and venting systems, such that they may be incorporated into contemplated building construction on a self-directed basis. Accordingly, Partner Engineering recommends installing these systems below contemplated residential construction at the Subject Property but, otherwise, recommends no further action or investigation regarding the issues discussed above because the proposed measures are adequate and sufficient for ensuring indoor air is not affected at concentrations exceeding residential screening levels.

FIGURES

PARTNER
2154 Torrance Boulevard
Torrance, California 90501
Project Number: 24-466341.2

N

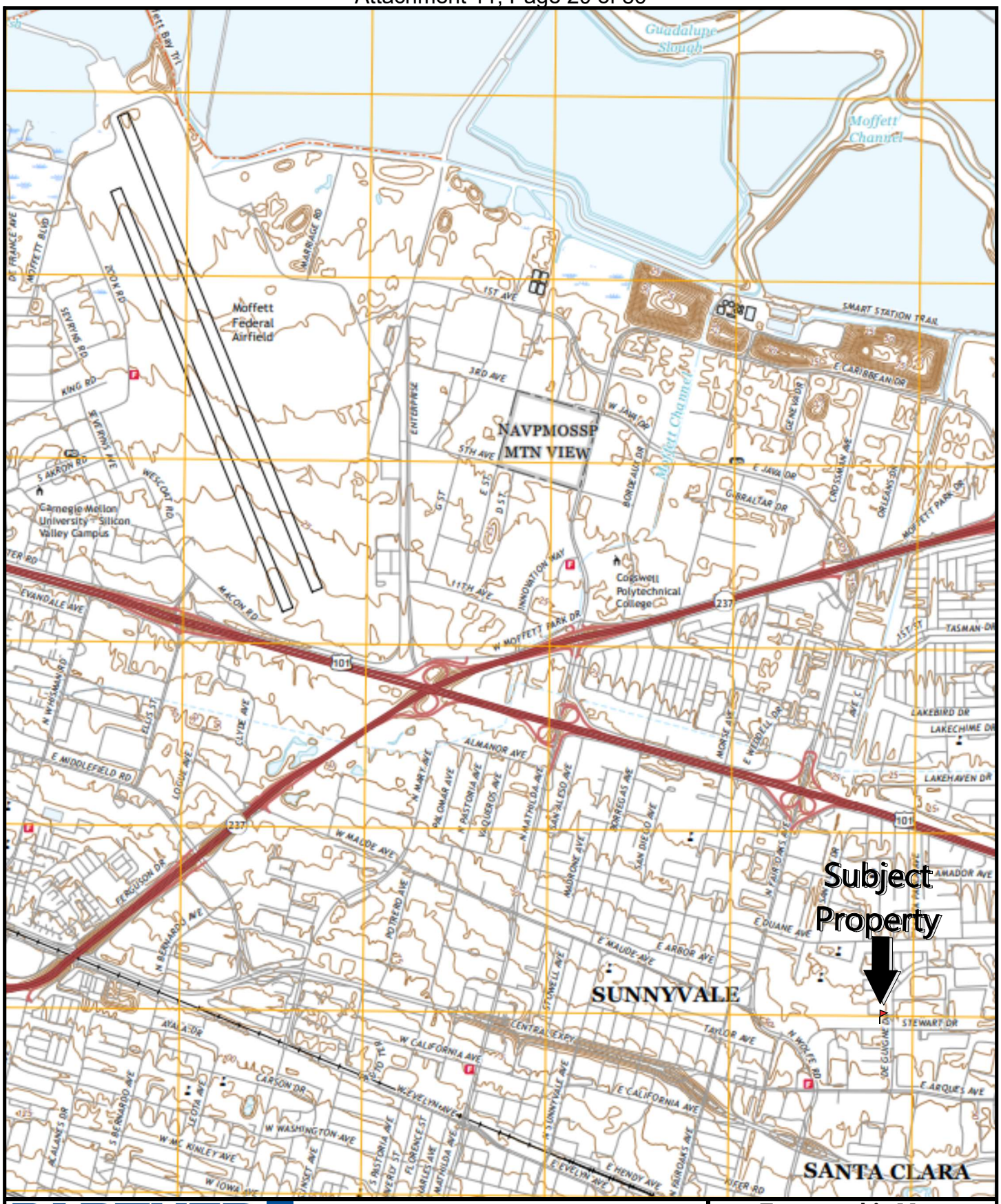
Legend

Subject Property

Site Vicinity Map

Figure	Prepared By	Date
1	M. Helou	October 2024

845 Stewart Drive
Sunnyvale, California 94085



PARTNER

2154 Torrance Boulevard
Torrance, California 90501

Project Number: 24-466341.2

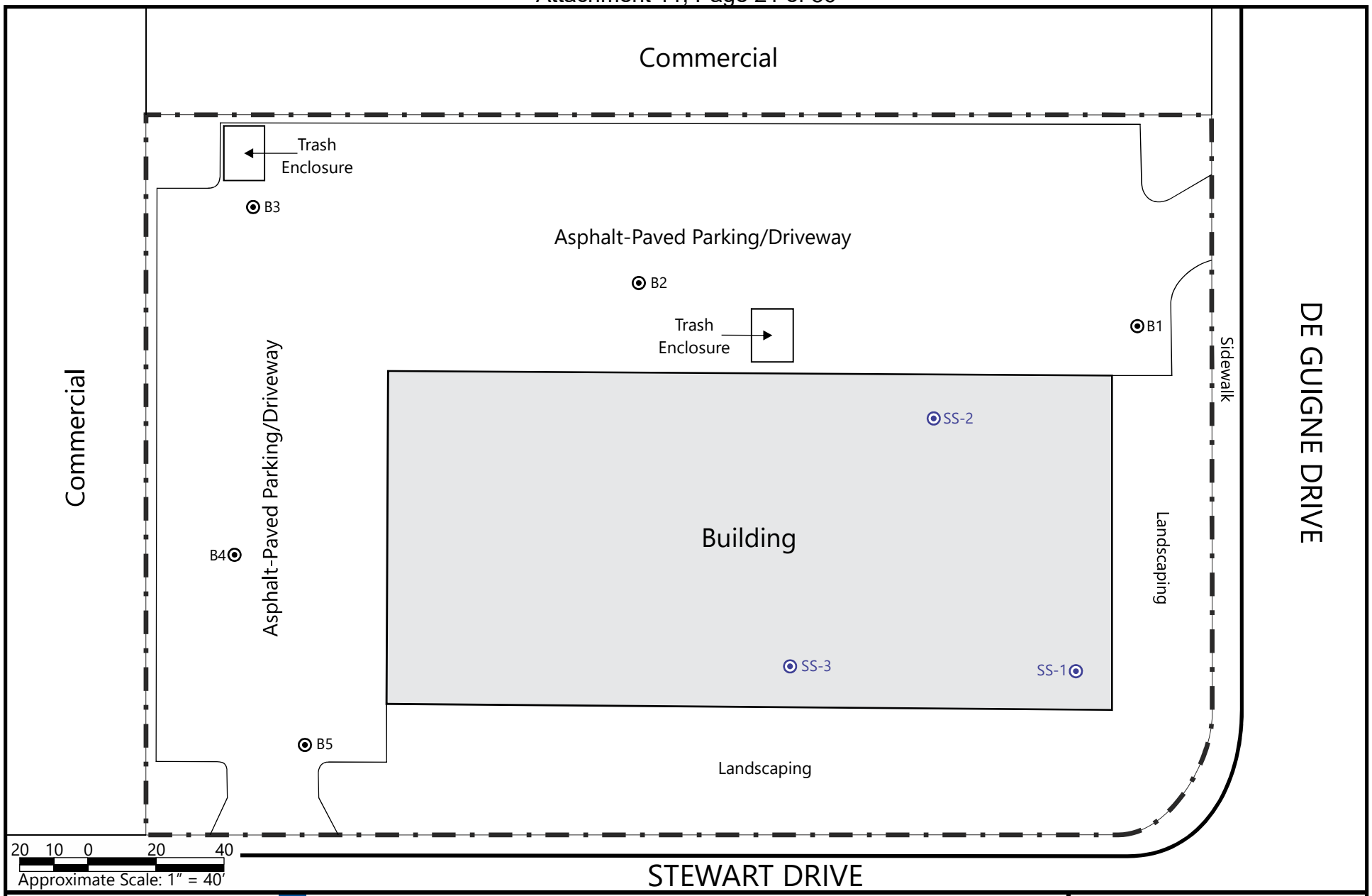
N

USGS Mountain View, California Quadrangle
Version: 2021

Topographic Map

Figure	Prepared By	Date
2	M. Helou	October 2024

845 Stewart Drive
Sunnyvale, California 94085



PARTNER
2154 Torrance Boulevard
Torrance, California 90501
Project Number: 24-466341.2

Legend

N

- Subject Property
- Boring Location
- Sub-Slab Probe Location

Sample Location Map

Figure	Prepared By	Date
3	M. Helou	October 2024

845 Stewart Drive
Sunnyvale, California 94085

TABLES

Table 1: Summary of Investigation Scope

845 Stewart Drive

Sunnyvale California 94085

Partner Project Number 24-466341.2

Date of Sample Collection: October 22, 2024

Sample Identification	REC/Issue	Location	Terminal Depth (feet bgs)	Matrix Sampled	Sampling Depths* (feet bgs)	Target Analytes
B1	Off-Site Superfund Site	Northeast Portion of Subject Property	16	Soil Gas	5	CVOCs
				Soil	5, 11	
				Groundwater	16	
B2		North Portion of Subject Property	16	Soil Gas	5	CVOCs
				Soil	5, 11	
				Groundwater	16	
B3		Northwest Portion of Subject Property	16	Soil Gas	5	CVOCs
				Soil	5, 11, 15	
				Groundwater	16	
B4		West Portion of Subject Property	16	Soil Gas	5	CVOCs
				Soil	5, 11	
				Groundwater	16	
B5		Southwest Portion of Subject Property	16	Soil Gas	5	CVOCs
				Soil	5, 7	
				Groundwater	16	
SS-1		Southeast Interior of Subject Property Building (Suite D)	0.5	Sub-Slab Soil Gas	0.5	CVOCs
SS-2		Northeast Interior of Subject Property Building (Suite D)	0.5	Sub-Slab Soil Gas	0.5	CVOCs
SS-3		South Interior of Subject Property Building (Suite C)	0.5	Sub-Slab Soil Gas	0.5	CVOCs

Notes:

*Depths in bold analyzed for chlorinated volatile organic compounds (CVOCs) [specifically 1,1-dichloroethene (DCE); cis-1,2-DCE; trans-1,2-DCE; tetrachloroethene (PCE); trichloroethene (TCE); and vinyl chloride] via EPA Method 8260B. Underlined depths analyzed for CVOCs via EPA Method TO-15.

REC = recognized environmental condition

bgs = below ground surface

PARTNER

Table 2: Soil Sample CVOC Laboratory Results
845 Stewart Drive
Sunnyvale California 94085
Partner Project Number 24-466341.2
Date of Sample Collection: October 22, 2024

EPA Method	CVOCs via 8260B							
Units	(mg/kg)							
Analyte	Residential ESL	Commercial/ Industrial ESL	Construction Worker ESL	B1-11	B2-5	B3-15	B4-11	B5-7
cis-1,2-Dichloroethene (DCE)	19	85	78	<0.0025	<0.0018	0.0036	<0.0021	<0.0017
Tetrachloroethene (PCE)	0.59	2.7	33	0.0031	<0.0018	<0.0025	<0.0021	<0.0017
Trichloroethene (TCE)	0.95	6.1	18	0.0097	<0.0018	<0.0025	0.011	0.0055
Other CVOCs	Varies	Varies	Varies	ND	ND	ND	ND	ND

Notes:

CVOCs = chlorinated volatile organic compounds

EPA = United States Environmental Protection Agency

mg/kg = miligrams per kilogram

ESL = Environmental Screening Level (San Francisco Bay Regional Water Quality Control Board - 2019) for evaluation of direct exposure human health risk (Table S-1)

< = not detected above indicated laboratory Reporting Limit (RL)

ND = not detected above laboratory RLs

Values in bold detected above laboratory RLs

PARTNER

Table 3: Groundwater Sample Analytical Laboratory Results
845 Stewart Drive
Sunnyvale California 94085
Partner Project Number 24-466341.2
Date of Sample Collection: October 22, 2024

EPA Method	CVOCs via 8260B						
Units	(µg/L)						
Analyte	Direct Exposure ESL	Vapor Intrusion ESL	B1-GW	B2-GW	B3-GW	B4-GW	B5-GW
cis-1,2-Dichloroethene (DCE)	6.0	210	3.7	4.6	7.9	7.2	6.5
Tetrachloroethene (PCE)	5.0	2.8	1.6	<1.0	<1.0	1.0	<1.0
Trichloroethene (TCE)	5.0	7.5	15	22	24	39	25
Other CVOCs	Varies	Varies	ND	ND	ND	ND	ND

Notes:

CVOCs = chlorinated volatile organic compounds

EPA = United States Environmental Protection Agency

µg/L = micrograms per liter

ESL = Environmental Screening Level (San Francisco Bay Regional Water Quality Control Board - 2019) for evaluation of direct exposure human health risk (MCL Priority), Table GW-1, and vapor intrusion human health risk (commercial/industrial), Table GW-3

< = not detected above indicated laboratory Reporting Limit (RL)

ND = not detected above laboratory RLs

Values in bold detected above laboratory RLs

Highlighted values exceed one or more regulatory guideline

PARTNER

Table 4: Soil Gas Sample CVOCs Laboratory Results
845 Stewart Drive
Sunnyvale California 94085
Partner Project Number 24-466341.2
Date of Sample Collection: October 22, 2024

EPA Method	CVOCs via TO-15									
Units	($\mu g/m^3$)									
Analyte	Residential ESL	Commercial/ Industrial ESL	B1-SG	B2-SG	B3-SG	B4-SG	B5-SG	SS-1	SS-2	SS-3
cis-1,2-Dichloroethene (DCE)	280	1,200	9.9	<4.0	31	37	27	<4.0	<4.0	<4.0
Tetrachloroethene (PCE)	15	67	19	7.4	26	14	31	6.9	<6.9	<6.9
Trichloroethene (TCE)	16	100	84	61	570	270	690	<5.5	<5.5	<5.5
1,1-Difluoroethane (tracer)	NE	NE	<27	440	160	250	100	<27	<27	<27
Other CVOCs	Varies	Varies	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

CVOCs = chlorinated volatile organic compounds

EPA = United States Environmental Protection Agency

$\mu g/m^3$ = micrograms per cubic meter

ESL = Environmental Screening Level (San Francisco Bay Regional Water Quality Control Board - 2019) for evaluation of vapor intrusion human health risk (Table SG-1)

NE = not established

< = not detected above indicated laboratory Reporting Limit (RL)

ND = not detected above laboratory RLs

Values in bold detected above laboratory RLs

Highlighted values exceed one or more regulatory guideline

PARTNER

APPENDIX A: BORING LOGS

Boring Identification:	B1		Page 1 of 1
Boring Location:	Northeast Portion of Subject Property	PARTNER	
Site Address:	845 Stewart Drive	2154 Torrance Boulevard	
	Sunnyvale, California 94085	Torrance, California 90504	
Project Number:	24-466341.2	Date Started:	10/22/2024
Drill Rig Type:	Truck-mounted Geoprobe 5410 Direct-Push	Date Completed:	10/22/2024
Sampling Equipment:	MacroCore, Acetate Liners, VOAs, SUMMA	Depth to Groundwater (feet bgs):	12
Borehole Diameter:	2.25"	Field Technician:	M. Helou

Depth	Sample	PID	USCS	Description	Notes
1					Asphalt at surface followed by 6" of baserock
2			CL	Silty CLAY: dark brown, damp, stiff, low plasticity, no odors	
3					
4					
5	B1-5 B1-SG	0.0		Clayey SILT: light tan, damp, medium stiff, slight plasticity, no odors	Temporary soil gas probe installed at 5 feet bgs
6					
7					Static groundwater measured at 7.3 feet bgs
8			ML		
9				Clayey SILT: mottled brown/gray, damp, medium stiff, trace sand and gravel, slight plasticity, no odors	
10					
11	B1-11	0.0			
12			SM	Silty SAND: mottled brown/gray, saturated, loose, trace gravel, no odors	Groundwater first observed at 12 feet bgs
13					
14					
15			ML	Clayey SILT: mottled brown/gray, moist, medium stiff, trace sand and gravel, slight plasticity, no odors	
16	B1-GW				
17					Boring terminated at 16 feet bgs. Temporary monitoring well and soil gas probe removed. Backfilled with hydrated bentonite chips and capped with concrete patch after sampling.
18					
19					
20					
21					
22					
23					
24					
25					

Boring Identification:	B2		Page 1 of 1
Boring Location:	North Portion of Subject Property	PARTNER	
Site Address:	845 Stewart Drive	2154 Torrance Boulevard	
	Sunnyvale, California 94085	Torrance, California 90504	
Project Number:	24-466341.2	Date Started:	10/22/2024
Drill Rig Type:	Truck-mounted Geoprobe 5410 Direct-Push	Date Completed:	10/22/2024
Sampling Equipment:	MacroCore, Acetate Liners, VOAs, SUMMA	Depth to Groundwater (feet bgs):	12
Borehole Diameter:	2.25"	Field Technician:	M. Helou

Depth	Sample	PID	USCS	Description	Notes
1					Asphalt at surface followed by 6" of baserock
2			CL	Silty CLAY: dark brown, damp, stiff, low plasticity, no odors	
3					
4					
5	B2-5 B2-SG	0.0		Clayey SILT: light tan, damp, medium stiff, slight plasticity, no odors	Temporary soil gas probe installed at 5 feet bgs
6					
7					Static groundwater measured at 7.4 feet bgs
8			ML		
9				Clayey SILT: mottled brown/gray, damp, medium stiff, trace sand and gravel, slight plasticity, no odors	
10					
11	B2-11	0.0			
12			SM	Silty SAND: mottled brown/gray, saturated, loose, trace gravel, no odors	Groundwater first observed at 12 feet bgs
13					
14					
15			ML	Clayey SILT: mottled brown/gray, moist, medium stiff, trace sand and gravel, slight plasticity, no odors	
16	B2-GW				
17					Boring terminated at 16 feet bgs. Temporary monitoring well and soil gas probe removed. Backfilled with hydrated bentonite chips and capped with concrete patch after sampling.
18					
19					
20					
21					
22					
23					
24					
25					

Boring Identification:	B3		
Boring Location:	Northwest Portion of Subject Property	PARTNER	
Site Address:	845 Stewart Drive Sunnyvale, California 94085	2154 Torrance Boulevard Torrance, California 90504	
Project Number:	24-466341.2	Date Started:	10/22/2024
Drill Rig Type:	Truck-mounted Geoprobe 5410 Direct-Push	Date Completed:	10/22/2024
Sampling Equipment:	MacroCore, Acetate Liners, VOAs, SUMMA	Depth to Groundwater (feet bgs):	12
Borehole Diameter:	2.25"	Field Technician:	M. Helou

Depth	Sample	PID	USCS	Description	Notes
1					Asphalt at surface followed by 6" of baserock
2			CL	Silty CLAY: dark brown, damp, stiff, low plasticity, no odors	
3					
4					
5	B3-5 B3-SG	0.0		Clayey SILT: light tan, damp, medium stiff, slight plasticity, no odors	Temporary soil gas probe installed at 5 feet bgs
6					Static groundwater measured at 6.5 feet bgs
7					
8			ML		
9				Clayey SILT: mottled brown/gray, damp, medium stiff, trace sand and gravel, slight plasticity, no odors	
10					
11	B3-11	0.0			
12					Groundwater first observed at 12 feet bgs
13				Silty SAND: mottled brown/gray, saturated, loose, trace gravel, no odors	
14			SM		
15	B3-15			Silty SAND: dark gray, moist, medium dense, trace gravel, no odors	
16	B3-GW				
17					Boring terminated at 16 feet bgs. Temporary monitoring well and soil gas probe removed. Backfilled with hydrated bentonite chips and capped with concrete patch after sampling.
18					
19					
20					
21					
22					
23					
24					
25					

Boring Identification:	B4		Page 1 of 1
Boring Location:	West Portion of Subject Property	PARTNER	
Site Address:	845 Stewart Drive	2154 Torrance Boulevard	
	Sunnyvale, California 94085	Torrance, California 90504	
Project Number:	24-466341.2	Date Started:	10/22/2024
Drill Rig Type:	Truck-mounted Geoprobe 5410 Direct-Push	Date Completed:	10/22/2024
Sampling Equipment:	MacroCore, Acetate Liners, VOAs, SUMMA	Depth to Groundwater (feet bgs):	12
Borehole Diameter:	2.25"	Field Technician:	M. Helou

Depth	Sample	PID	USCS	Description	Notes
1					Asphalt at surface followed by 6" of baserock
2			CL	Silty CLAY: dark brown, damp, stiff, low plasticity, no odors	
3					
4					
5	B4-5 B4-SG	0.0		Clayey SILT: light tan, damp, medium stiff, slight plasticity, no odors	Temporary soil gas probe installed at 5 feet bgs
6					Static groundwater measured at 6.5 feet bgs
7					
8			ML		
9				Clayey SILT: mottled brown/gray, damp, medium stiff, trace sand and gravel, slight plasticity, no odors	
10					
11	B4-11	0.0			
12			SM	Silty SAND: mottled brown/gray, saturated, loose, trace gravel, no odors	Groundwater first observed at 12 feet bgs
13					
14					
15			ML	Clayey SILT: mottled brown/gray, moist, medium stiff, trace sand and gravel, slight plasticity, no odors	
16	B4-GW				
17					Boring terminated at 16 feet bgs. Temporary monitoring well and soil gas probe removed. Backfilled with hydrated bentonite chips and capped with concrete patch after sampling.
18					
19					
20					
21					
22					
23					
24					
25					

Boring Identification:	B5		Page 1 of 1
Boring Location:	Southwest Portion of Subject Property	PARTNER	
Site Address:	845 Stewart Drive Sunnyvale, California 94085	2154 Torrance Boulevard Torrance, California 90504	
Project Number:	24-466341.2	Date Started:	10/22/2024
Drill Rig Type:	Truck-mounted Geoprobe 5410 Direct-Push	Date Completed:	10/22/2024
Sampling Equipment:	MacroCore, Acetate Liners, VOAs, SUMMA	Depth to Groundwater (feet bgs):	8
Borehole Diameter:	2.25"	Field Technician:	M. Helou

Depth	Sample	PID	USCS	Description	Notes
1			CL	Silty CLAY: dark brown, damp, stiff, low plasticity, no odors	Asphalt at surface followed by 6" of baserock
2					
3					
4			ML	Clayey SILT: light tan, damp, medium stiff, slight plasticity, no odors	
5	B5-5 B5-SG	0.0			Temporary soil gas probe installed at 5 feet bgs
6					Static groundwater measured at 6.1 feet bgs
7	B5-7	0.0			
8			SM	Silty SAND: mottled brown/gray, saturated, loose, trace gravel, no odors	Groundwater first observed at 8 feet bgs
9					
10			ML	Clayey SILT: mottled brown/gray, moist, medium stiff, trace sand and gravel, slight plasticity, no odors	
11					
12					
13					
14					
15					
16	B5-GW				
17					Boring terminated at 16 feet bgs. Temporary monitoring well and soil gas probe removed. Backfilled with hydrated bentonite chips and capped with concrete patch after sampling.
18					
19					
20					
21					
22					
23					
24					
25					

APPENDIX B: 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

28 October 2024

Joe Mangine
Partner Engineering & Science, Inc.--Oakland
1017 22nd Ave. Suite 107
Oakland, CA 94606

RE: 845 Stewart Drive

Enclosed are the results of analyses for samples received by the laboratory on 10/24/24 17:32. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeff Lee For Joann Marroquin
Director of Operations

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1-11	T244264-02	Soil	10/22/24 09:20	10/24/24 17:32
B2-5	T244264-03	Soil	10/22/24 09:30	10/24/24 17:32
B3-15	T244264-07	Soil	10/22/24 11:20	10/24/24 17:32
B4-11	T244264-09	Soil	10/22/24 10:55	10/24/24 17:32
B5-7	T244264-11	Soil	10/22/24 10:15	10/24/24 17:32
B1-GW	T244264-12	Water	10/22/24 11:30	10/24/24 17:32
B2-GW	T244264-13	Water	10/22/24 11:45	10/24/24 17:32
B3-GW	T244264-14	Water	10/22/24 12:10	10/24/24 17:32
B4-GW	T244264-15	Water	10/22/24 12:40	10/24/24 17:32
B5-GW	T244264-16	Water	10/22/24 13:10	10/24/24 17:32

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

DETECTIONS SUMMARY

Sample ID: B1-11 **Laboratory ID:** T244264-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	**0.0031**	0.0025	mg/kg	EPA 8260B/5035	
Trichloroethene	**0.0097**	0.0025	mg/kg	EPA 8260B/5035	

Sample ID: B2-5 **Laboratory ID:** T244264-03

No Results Detected

Sample ID: B3-15 **Laboratory ID:** T244264-07

Analyte	Result	Reporting Limit	Units	Method	Notes
cis-1,2-Dichloroethene	**0.0036**	0.0025	mg/kg	EPA 8260B/5035	

Sample ID: B4-11 **Laboratory ID:** T244264-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**0.011**	0.0021	mg/kg	EPA 8260B/5035	

Sample ID: B5-7 **Laboratory ID:** T244264-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**0.0055**	0.0017	mg/kg	EPA 8260B/5035	

Sample ID: B1-GW **Laboratory ID:** T244264-12

Analyte	Result	Reporting Limit	Units	Method	Notes
cis-1,2-Dichloroethene	**3.7**	1.0	ug/l	EPA 8260B	
Tetrachloroethene	**1.6**	1.0	ug/l	EPA 8260B	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

Sample ID: B1-GW **Laboratory ID:** T244264-12

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**15**	1.0	ug/l	EPA 8260B	

Sample ID: B2-GW **Laboratory ID:** T244264-13

Analyte	Result	Reporting Limit	Units	Method	Notes
cis-1,2-Dichloroethene	**4.6**	1.0	ug/l	EPA 8260B	HDSP
Trichloroethene	**22**	1.0	ug/l	EPA 8260B	HDSP

Sample ID: B3-GW **Laboratory ID:** T244264-14

Analyte	Result	Reporting Limit	Units	Method	Notes
cis-1,2-Dichloroethene	**7.9**	1.0	ug/l	EPA 8260B	
Trichloroethene	**24**	1.0	ug/l	EPA 8260B	

Sample ID: B4-GW **Laboratory ID:** T244264-15

Analyte	Result	Reporting Limit	Units	Method	Notes
cis-1,2-Dichloroethene	**7.2**	1.0	ug/l	EPA 8260B	
Tetrachloroethene	**1.0**	1.0	ug/l	EPA 8260B	
Trichloroethene	**39**	1.0	ug/l	EPA 8260B	

Sample ID: B5-GW **Laboratory ID:** T244264-16

Analyte	Result	Reporting Limit	Units	Method	Notes
cis-1,2-Dichloroethene	**6.5**	1.0	ug/l	EPA 8260B	
Trichloroethene	**25**	1.0	ug/l	EPA 8260B	

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

B1-11

T244264-02 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1-Dichloroethene	ND	0.0025	mg/kg	1	24J0426	10/25/24	10/25/24	EPA 8260B/5035	
cis-1,2-Dichloroethene	ND	0.0025	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.0025	"	"	"	"	"	"	
Tetrachloroethene	**0.0031**	0.0025	"	"	"	"	"	"	
Trichloroethene	**0.0097**	0.0025	"	"	"	"	"	"	
Vinyl chloride	ND	0.0025	"	"	"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*109 %*	*77.8-142*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

B2-5

T244264-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,1-Dichloroethene	ND	0.0018	mg/kg	1	24J0426	10/25/24	10/25/24	EPA 8260B/5035	
cis-1,2-Dichloroethene	ND	0.0018	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.0018	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0018	"	"	"	"	"	"	
Trichloroethene	ND	0.0018	"	"	"	"	"	"	
Vinyl chloride	ND	0.0018	"	"	"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.7 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*107 %*	*77.8-142*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

B3-15

T244264-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,1-Dichloroethene	ND	0.0025	mg/kg	1	24J0426	10/25/24	10/25/24	EPA 8260B/5035	
cis-1,2-Dichloroethene	**0.0036**	0.0025	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.0025	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0025	"	"	"	"	"	"	
Trichloroethene	ND	0.0025	"	"	"	"	"	"	
Vinyl chloride	ND	0.0025	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.6 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*	*77.8-142*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

B4-11

T244264-09 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1-Dichloroethene	ND	0.0021	mg/kg	1	24J0426	10/25/24	10/25/24	EPA 8260B/5035	
cis-1,2-Dichloroethene	ND	0.0021	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.0021	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0021	"	"	"	"	"	"	
Trichloroethene	**0.011**	0.0021	"	"	"	"	"	"	
Vinyl chloride	ND	0.0021	"	"	"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.5 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*	*77.8-142*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

B5-7

T244264-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,1-Dichloroethene	ND	0.0017	mg/kg	1	24J0426	10/25/24	10/25/24	EPA 8260B/5035	
cis-1,2-Dichloroethene	ND	0.0017	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.0017	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0017	"	"	"	"	"	"	
Trichloroethene	**0.0055**	0.0017	"	"	"	"	"	"	
Vinyl chloride	ND	0.0017	"	"	"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.7 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*	*77.8-142*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

B1-GW

T244264-12 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1-Dichloroethene	ND	1.0	ug/l	1	24J0405	10/24/24	10/28/24	EPA 8260B	
cis-1,2-Dichloroethene	**3.7**	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	**1.6**	1.0	"	"	"	"	"	"	
Trichloroethene	**15**	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.0 %*	*76.7-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*101 %*	*78.7-127*		"	"	"	"	
Surrogate: Toluene-d8		*97.4 %*	*84.7-108*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

B2-GW

T244264-13 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,1-Dichloroethene	ND	1.0	ug/l	1	24J0405	10/24/24	10/28/24	EPA 8260B	HDSP
cis-1,2-Dichloroethene	**4.6**	1.0	"	"	"	"	"	"	HDSP
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	HDSP
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	HDSP
Trichloroethene	**22**	1.0	"	"	"	"	"	"	HDSP
Vinyl chloride	ND	0.50	"	"	"	"	"	"	HDSP
Surrogate: 4-Bromofluorobenzene		*99.4 %*	*76.7-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*	*78.7-127*		"	"	"	"	
Surrogate: Toluene-d8		*100 %*	*84.7-108*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

B3-GW

T244264-14 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1-Dichloroethene	ND	1.0	ug/l	1	24J0405	10/24/24	10/28/24	EPA 8260B	
cis-1,2-Dichloroethene	**7.9**	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
Trichloroethene	**24**	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*		*76.7-116*	"	"	"	"	
Surrogate: Dibromofluoromethane		*107 %*		*78.7-127*	"	"	"	"	
Surrogate: Toluene-d8		*99.7 %*		*84.7-108*	"	"	"	"	

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

B4-GW

T244264-15 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
1,1-Dichloroethene	ND	1.0	ug/l	1	24J0405	10/24/24	10/28/24	EPA 8260B	
cis-1,2-Dichloroethene	**7.2**	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	**1.0**	1.0	"	"	"	"	"	"	
Trichloroethene	**39**	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.0 %*	*76.7-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*	*78.7-127*		"	"	"	"	
Surrogate: Toluene-d8		*98.4 %*	*84.7-108*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

B5-GW

T244264-16 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
1,1-Dichloroethene	ND	1.0	ug/l	1	24J0405	10/24/24	10/28/24	EPA 8260B	
cis-1,2-Dichloroethene	**6.5**	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
Trichloroethene	**25**	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.2 %*		*76.7-116*	"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*		*78.7-127*	"	"	"	"	
Surrogate: Toluene-d8		*98.8 %*		*84.7-108*	"	"	"	"	

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 24J0405 - EPA 5030 GCMS										
Blank (24J0405-BLK1)				Prepared: 10/24/24 Analyzed: 10/25/24						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	2.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 24J0405 - EPA 5030 GCMS										
Blank (24J0405-BLK1)				Prepared: 10/24/24 Analyzed: 10/25/24						
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	5.0	"							
aphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	2.0	"							
o-Xylene	ND	0.50	"							
Methyl tert-butyl ether	ND	1.0	"							
Acetone	ND	5.0	"							
Methyl ethyl ketone	ND	5.0	"							
Methyl isobutyl ketone	ND	5.0	"							
2-Hexanone (MBK)	ND	5.0	"							
Surrogate: 4-Bromofluorobenzene	*19.9*		"	*20.0*		*99.6*	*76.7-116*			
Surrogate: Dibromofluoromethane	*20.0*		"	*20.0*		*100*	*78.7-127*			
Surrogate: Toluene-d8	*20.2*		"	*20.0*		*101*	*84.7-108*			

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 24J0405 - EPA 5030 GCMS										
LCS (24J0405-BS1)				Prepared: 10/24/24 Analyzed: 10/25/24						
Chlorobenzene	19.4	1.0	ug/l	20.0		96.9	81.1-121			
1,1-Dichloroethene	19.4	1.0	"	20.0		97.0	69.9-130			
Trichloroethene	18.5	1.0	"	20.0		92.7	74.9-133			
Benzene	18.4	0.50	"	20.0		92.1	78.1-123			
Toluene	18.7	0.50	"	20.0		93.4	79.6-123			
Surrogate: 4-Bromofluorobenzene	*20.7*		*"*	*20.0*		*103*	*76.7-116*			
Surrogate: Dibromofluoromethane	*19.4*		*"*	*20.0*		*96.9*	*78.7-127*			
Surrogate: Toluene-d8	*19.7*		*"*	*20.0*		*98.4*	*84.7-108*			
LCS Dup (24J0405-BSD1)				Prepared: 10/24/24 Analyzed: 10/25/24						
Chlorobenzene	19.6	1.0	ug/l	20.0		97.9	81.1-121	1.03	20	
1,1-Dichloroethene	21.0	1.0	"	20.0		105	69.9-130	7.83	20	
Trichloroethene	19.7	1.0	"	20.0		98.4	74.9-133	5.97	20	
Benzene	20.1	0.50	"	20.0		100	78.1-123	8.62	20	
Toluene	19.9	0.50	"	20.0		99.4	79.6-123	6.33	20	
Surrogate: 4-Bromofluorobenzene	*20.1*		*"*	*20.0*		*101*	*76.7-116*			
Surrogate: Dibromofluoromethane	*19.8*		*"*	*20.0*		*98.8*	*78.7-127*			
Surrogate: Toluene-d8	*20.2*		*"*	*20.0*		*101*	*84.7-108*			
Batch 24J0426 - EPA 5035 GCMS										
Blank (24J0426-BLK1)				Prepared & Analyzed: 10/25/24						
Bromobenzene	ND	0.0025	mg/kg							
Bromochloromethane	ND	0.0025	"							
Bromodichloromethane	ND	0.0025	"							
Bromoform	ND	0.0025	"							
Bromomethane	ND	0.0025	"							
n-Butylbenzene	ND	0.0025	"							
sec-Butylbenzene	ND	0.0025	"							
tert-Butylbenzene	ND	0.0025	"							
Carbon tetrachloride	ND	0.0025	"							
Chlorobenzene	ND	0.0025	"							
Chloroethane	ND	0.0025	"							
Chloroform	ND	0.0025	"							
Chloromethane	ND	0.0025	"							
2-Chlorotoluene	ND	0.0025	"							

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 24J0426 - EPA 5035 GCMS										
Blank (24J0426-BLK1)				Prepared & Analyzed: 10/25/24						
4-Chlorotoluene	ND	0.0025	mg/kg							
Dibromochloromethane	ND	0.0025	"							
1,2-Dibromo-3-chloropropane	ND	0.0050	"							
1,2-Dibromoethane (EDB)	ND	0.0025	"							
Dibromomethane	ND	0.0025	"							
1,2-Dichlorobenzene	ND	0.0025	"							
1,3-Dichlorobenzene	ND	0.0025	"							
1,4-Dichlorobenzene	ND	0.0025	"							
Dichlorodifluoromethane	ND	0.0025	"							
1,1-Dichloroethane	ND	0.0025	"							
1,2-Dichloroethane	ND	0.0025	"							
1,1-Dichloroethene	ND	0.0025	"							
cis-1,2-Dichloroethene	ND	0.0025	"							
trans-1,2-Dichloroethene	ND	0.0025	"							
1,2-Dichloropropane	ND	0.0025	"							
1,3-Dichloropropane	ND	0.0025	"							
2,2-Dichloropropane	ND	0.0025	"							
1,1-Dichloropropene	ND	0.0025	"							
cis-1,3-Dichloropropene	ND	0.0025	"							
trans-1,3-Dichloropropene	ND	0.0025	"							
Hexachlorobutadiene	ND	0.0025	"							
Isopropylbenzene	ND	0.0025	"							
p-Isopropyltoluene	ND	0.0025	"							
Methylene chloride	ND	0.010	"							
aphthalene	ND	0.0025	"							
n-Propylbenzene	ND	0.0025	"							
Styrene	ND	0.0025	"							
1,1,2,2-Tetrachloroethane	ND	0.0025	"							
1,1,1,2-Tetrachloroethane	ND	0.0025	"							
Tetrachloroethene	ND	0.0025	"							
1,2,3-Trichlorobenzene	ND	0.0025	"							
1,2,4-Trichlorobenzene	ND	0.0025	"							
1,1,2-Trichloroethane	ND	0.0025	"							
1,1,1-Trichloroethane	ND	0.0025	"							
Trichloroethene	ND	0.0025	"							
Trichlorofluoromethane	ND	0.0025	"							

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 24J0426 - EPA 5035 GCMS										
Blank (24J0426-BLK1)				Prepared & Analyzed: 10/25/24						
1,2,3-Trichloropropane	ND	0.0025	mg/kg							
1,3,5-Trimethylbenzene	ND	0.0025	"							
1,2,4-Trimethylbenzene	ND	0.0025	"							
Vinyl chloride	ND	0.0025	"							
Benzene	ND	0.0025	"							
Toluene	ND	0.0025	"							
Ethylbenzene	ND	0.0025	"							
m,p-Xylene	ND	0.0050	"							
o-Xylene	ND	0.0025	"							
Acetone	ND	0.0025	"							
Methyl ethyl ketone	ND	0.0050	"							
Methyl isobutyl ketone	ND	0.0050	"							
2-Hexanone (MBK)	ND	0.0025	"							
Surrogate: Toluene-d8	*0.0507*		"	*0.0500*		*101*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*0.0476*		"	*0.0500*		*95.2*	*85.9-114*			
Surrogate: Dibromofluoromethane	*0.0488*		"	*0.0500*		*97.6*	*77.8-142*			
LCS (24J0426-BS1)				Prepared & Analyzed: 10/25/24						
Chlorobenzene	0.0524	0.0025	mg/kg	0.0500		105	79.1-117			
1,1-Dichloroethene	0.0566	0.0025	"	0.0500		113	68-126			
Trichloroethene	0.0553	0.0025	"	0.0500		111	80.6-119			
Benzene	0.0537	0.0025	"	0.0500		107	79.1-117			
Toluene	0.0539	0.0025	"	0.0500		108	79.5-118			
Surrogate: Toluene-d8	*0.0502*		"	*0.0500*		*100*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*0.0511*		"	*0.0500*		*102*	*85.9-114*			
Surrogate: Dibromofluoromethane	*0.0501*		"	*0.0500*		*100*	*77.8-142*			
LCS Dup (24J0426-BSD1)				Prepared & Analyzed: 10/25/24						
Chlorobenzene	0.0521	0.0025	mg/kg	0.0500		104	79.1-117	0.536	20	
1,1-Dichloroethene	0.0587	0.0025	"	0.0500		117	68-126	3.49	20	
Trichloroethene	0.0547	0.0025	"	0.0500		109	80.6-119	1.05	20	
Benzene	0.0533	0.0025	"	0.0500		107	79.1-117	0.673	20	
Toluene	0.0526	0.0025	"	0.0500		105	79.5-118	2.33	20	
Surrogate: Toluene-d8	*0.0502*		"	*0.0500*		*100*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*0.0510*		"	*0.0500*		*102*	*85.9-114*			
Surrogate: Dibromofluoromethane	*0.0506*		"	*0.0500*		*101*	*77.8-142*			

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 24J0426 - EPA 5035 GCMS

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 21-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:02

Notes and Definitions

HDSP	Sample aliquot taken from VOA vial with headspace (air bubble >6 mm diameter). Results should be considered minimum estimates.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

Chain of Custody Record

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE
25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Client: Partner BSI
Address: 490 43rd Street Oakland, CA
Phone: 774-414-3666 / Fax:
Project Manager: H. White, J. Morgan

Date: 10/22/24 Page: 1 Of 2
Project Name: 845 Stewart Drive
Collector: M. Hollow Client Project #: 24-466341.2
Batch #: T244264 EDF #:

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260 (chlorinated solvents)	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					Comments/Preservative	Total # of containers
1	B1-5	10/22/24	915	Soil	VOAs																
2	B1-11		920			X															
3	B2-5		930			X															
4	B2-11		935																		
5	B3-5		1110																		
6	B3-11		1115																		
7	B3-15		1120			X															
8	B4-5		1050																		
9	B4-11		1055			X															
10	B5-5		1010																		
11	B5-7		1015			X															
12	B1-GW		1120	Water		X															
13	B2-GW		1145			X															
14	B3-GW		1210			X															
15	B4-GW		1240			X															

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	10/22/24 1700	Ed Stevens	10/23/24 1037
Ed Stevens	10/23/2024, 1545	GLS/Joe	
GLS	10-24-24 07:32		10-24-24 07:32

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 4.6°C

Notes
PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; 1,1-DCE; Vinyl chloride

Turn around time: 24

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE
25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: 4
Address: 4
Phone: 11 Fax:
Project Manager: 11

Date: 11 Page: 2 Of 2
Project Name: 11
Collector: 11 Client Project #: 11
Batch #: EDF #:

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260 (chlorinated solvents)	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					Comments/Preservative	Total # of containers
6	BS-GW	10/22/24	1310	Water	VOAs	X															

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	10/22/24 1700	Ed Stevens	10/23/24 1037
Ed Stevens	10/23/2024 1545	GLS/Joe	
GLS	10.24.24 17:32		10-24-24 17:32

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 4.6 °C

Notes
1/

Turn around time: 24

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

Rev. 02C Date 11/23
Receiving Form 001A

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T244264

Client Name: Partner Project: 895 Stuart Drive

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

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

Lab Received by: Dave Date/Time Lab Received: 10.24.24 17:32

Total number of coolers received: 1 Thermometer ID: SC-1 Calibration due: 11/17/2024

Temperature: Cooler #1	4.5 °C +/- the CF (+ 0.1°C) = 4.6	°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 DS
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: DS 10.24.24

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 10/24/2024 5:48:22PM

WORK ORDER

T244264

Client:	**Partner Engineering & Science, Inc.--Oakland**	**Project Manager:**	**Joann Marroquin**
Project:	**845 Stewart Drive**	**Project Number:**	**21-466341.2**

Report To:

Partner Engineering & Science, Inc.--Oakland
Joe Mangine
1017 22nd Ave. Suite 107
Oakland, CA 94606

Date Due:	10/28/24 17:00 (1 day TAT)		
Received By:	Dave Berner	Date Received:	10/24/24 17:32
Logged In By:	Angel Aguirre	Date Logged In:	10/24/24 17:39

Samples Received at:	**4.6°C**		
Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
T244264-01 B1-5 [Soil] Sampled 10/22/24 09:15 (GMT-08:00) Pacific Time (US				**HOLD**
&				
[NO ANALYSES]				
T244264-02 B1-11 [Soil] Sampled 10/22/24 09:20 (GMT-08:00) Pacific Time (US				
&				
8260 5035	10/28/24 15:00	1	11/05/24 23:59	Chlorinated Solvents
T244264-03 B2-5 [Soil] Sampled 10/22/24 09:30 (GMT-08:00) Pacific Time (US				
&				
8260 5035	10/28/24 15:00	1	11/05/24 23:59	Chlorinated Solvents
T244264-04 B2-11 [Soil] Sampled 10/22/24 09:35 (GMT-08:00) Pacific Time (US				**HOLD**
&				
[NO ANALYSES]				
T244264-05 B3-5 [Soil] Sampled 10/22/24 11:10 (GMT-08:00) Pacific Time (US				**HOLD**
&				
[NO ANALYSES]				
T244264-06 B3-11 [Soil] Sampled 10/22/24 11:15 (GMT-08:00) Pacific Time (US				**HOLD**
&				
[NO ANALYSES]				
T244264-07 B3-15 [Soil] Sampled 10/22/24 11:20 (GMT-08:00) Pacific Time (US				
&				
8260 5035	10/28/24 15:00	1	11/05/24 23:59	Chlorinated Solvents

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 10/24/2024 5:48:22PM

WORK ORDER

T244264

Client:	**Partner Engineering & Science, Inc.--Oakland**	**Project Manager:**	**Joann Marroquin**
Project:	**845 Stewart Drive**	**Project Number:**	**21-466341.2**

Analysis	Due	TAT	Expires	Comments
T244264-08 B4-5 [Soil] Sampled 10/22/24 10:50 (GMT-08:00) Pacific Time (US &				**HOLD**
[NO ANALYSES]				
T244264-09 B4-11 [Soil] Sampled 10/22/24 10:55 (GMT-08:00) Pacific Time (US &				
8260 5035	10/28/24 15:00	1	11/05/24 23:59	Chlorinated Solvents
T244264-10 B5-5 [Soil] Sampled 10/22/24 10:10 (GMT-08:00) Pacific Time (US &				**HOLD**
[NO ANALYSES]				
T244264-11 B5-7 [Soil] Sampled 10/22/24 10:15 (GMT-08:00) Pacific Time (US &				
8260 5035	10/28/24 15:00	1	11/05/24 23:59	Chlorinated Solvents
T244264-12 B1-GW [Water] Sampled 10/22/24 11:30 (GMT-08:00) Pacific Time (US &				
8260	10/28/24 15:00	1	11/05/24 11:30	Chlorinated Solvents
T244264-13 B2-GW [Water] Sampled 10/22/24 11:45 (GMT-08:00) Pacific Time (US &				
8260	10/28/24 15:00	1	11/05/24 11:45	Chlorinated Solvents
T244264-14 B3-GW [Water] Sampled 10/22/24 12:10 (GMT-08:00) Pacific Time (US &				
8260	10/28/24 15:00	1	11/05/24 12:10	Chlorinated Solvents
T244264-15 B4-GW [Water] Sampled 10/22/24 12:40 (GMT-08:00) Pacific Time (US &				
8260	10/28/24 15:00	1	11/05/24 12:40	Chlorinated Solvents
T244264-16 B5-GW [Water] Sampled 10/22/24 13:10 (GMT-08:00) Pacific Time (US &				
8260	10/28/24 15:00	1	11/05/24 13:10	Chlorinated Solvents

Reviewed By

Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

28 October 2024

Joe Mangine
Partner Engineering & Science, Inc.--Oakland
1017 22nd Ave. Suite 107
Oakland, CA 94606

RE: 845 Stewart Drive

Enclosed are the results of analyses for samples received by the laboratory on 10/24/24 17:31. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeff Lee For Joann Marroquin
Director of Operations

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1-SG	T244265-01	Air	10/22/24 13:21	10/24/24 17:31
B2-SG	T244265-02	Air	10/22/24 13:30	10/24/24 17:31
B3-SG	T244265-03	Air	10/22/24 13:39	10/24/24 17:31
B4-SG	T244265-04	Air	10/22/24 13:48	10/24/24 17:31
B5-SG	T244265-05	Air	10/22/24 13:57	10/24/24 17:31
SS-1	T244265-06	Air	10/22/24 14:05	10/24/24 17:31
SS-2	T244265-07	Air	10/22/24 14:14	10/24/24 17:31
SS-3	T244265-08	Air	10/22/24 14:23	10/24/24 17:31

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

DETECTIONS SUMMARY

Sample ID: B1-SG **Laboratory ID:** T244265-01

Analyte	Result	Reporting Limit	Units	Method	Notes
cis-1,2-Dichloroethene	**9.9**	4.0	ug/m³ Air	TO-15	
Tetrachloroethene	**19**	6.9	ug/m³ Air	TO-15	
Trichloroethene	**84**	5.5	ug/m³ Air	TO-15	

Sample ID: B2-SG **Laboratory ID:** T244265-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	**7.4**	6.9	ug/m³ Air	TO-15	
Trichloroethene	**61**	5.5	ug/m³ Air	TO-15	
1,1-Difluoroethane (1,1-DFA)	**440**	27	ug/m³ Air	TO-15	

Sample ID: B3-SG **Laboratory ID:** T244265-03

Analyte	Result	Reporting Limit	Units	Method	Notes
cis-1,2-Dichloroethene	**31**	4.0	ug/m³ Air	TO-15	
Tetrachloroethene	**26**	6.9	ug/m³ Air	TO-15	
Trichloroethene	**570**	5.5	ug/m³ Air	TO-15	
1,1-Difluoroethane (1,1-DFA)	**160**	27	ug/m³ Air	TO-15	

Sample ID: B4-SG **Laboratory ID:** T244265-04

Analyte	Result	Reporting Limit	Units	Method	Notes
cis-1,2-Dichloroethene	**37**	4.0	ug/m³ Air	TO-15	
Tetrachloroethene	**14**	6.9	ug/m³ Air	TO-15	
Trichloroethene	**270**	5.5	ug/m³ Air	TO-15	
1,1-Difluoroethane (1,1-DFA)	**250**	27	ug/m³ Air	TO-15	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

Sample ID: B5-SG **Laboratory ID:** T244265-05

Analyte	Result	Reporting Limit	Units	Method	Notes
cis-1,2-Dichloroethene	**27**	4.0	g/m³ Air	TO-15	
Tetrachloroethene	**31**	6.9	g/m³ Air	TO-15	
Trichloroethene	**690**	5.5	g/m³ Air	TO-15	
1,1-Difluoroethane (1,1-DFA)	**100**	27	g/m³ Air	TO-15	

Sample ID: SS-1 **Laboratory ID:** T244265-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	**6.9**	6.9	g/m³ Air	TO-15	

Sample ID: SS-2 **Laboratory ID:** T244265-07

No Results Detected

Sample ID: SS-3 **Laboratory ID:** T244265-08

No Results Detected

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

B1-SG

T244265-01 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
TO-15									
1,1-Dichloroethene	ND	4.0	ug/m³ Air	1.79	24J0419	10/25/24	10/25/24	TO-15	
cis-1,2-Dichloroethene	**9.9**	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	**19**	6.9	"	"	"	"	"	"	
Trichloroethene	**84**	5.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
1,1-Difluoroethane (1,1-DFA)	ND	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.3 %*	*59.2-130*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

B2-SG

T244265-02 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
TO-15									
1,1-Dichloroethene	ND	4.0	ug/m³ Air	1.84	24J0419	10/25/24	10/25/24	TO-15	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	**7.4**	6.9	"	"	"	"	"	"	
Trichloroethene	**61**	5.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
1,1-Difluoroethane (1,1-DFA)	**440**	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.8 %*	*59.2-130*		*"*	*"*	*"*	*"*	

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

B3-SG

T244265-03 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
TO-15									
1,1-Dichloroethene	ND	4.0	ug/m³ Air	1.81	24J0419	10/25/24	10/25/24	TO-15	
cis-1,2-Dichloroethene	**31**	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	**26**	6.9	"	"	"	"	"	"	
Trichloroethene	**570**	5.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
1,1-Difluoroethane (1,1-DFA)	**160**	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*	*59.2-130*		*"*	*"*	*"*	*"*	

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

B4-SG

T244265-04 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
TO-15									
1,1-Dichloroethene	ND	4.0	ug/m³ Air	1.86	24J0419	10/25/24	10/25/24	TO-15	
cis-1,2-Dichloroethene	**37**	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	**14**	6.9	"	"	"	"	"	"	
Trichloroethene	**270**	5.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
1,1-Difluoroethane (1,1-DFA)	**250**	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*	*59.2-130*		*"*	*"*	*"*	*"*	

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

B5-SG

T244265-05 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
TO-15									
1,1-Dichloroethene	ND	4.0	ug/m³ Air	1.65	24J0419	10/25/24	10/25/24	TO-15	
cis-1,2-Dichloroethene	**27**	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	**31**	6.9	"	"	"	"	"	"	
Trichloroethene	**690**	5.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
1,1-Difluoroethane (1,1-DFA)	**100**	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.3 %*	*59.2-130*		*"*	*"*	*"*	*"*	

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

SS-1

T244265-06 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
TO-15									
1,1-Dichloroethene	ND	4.0	ug/m³ Air	1.67	24J0419	10/25/24	10/25/24	TO-15	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	**6.9**	6.9	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
1,1-Difluoroethane (1,1-DFA)	ND	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.2 %*	*59.2-130*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

SS-2

T244265-07 (Air)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
TO-15									
1,1-Dichloroethene	ND	4.0	ug/m³ Air	1.72	24J0419	10/25/24	10/25/24	TO-15	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
1,1-Difluoroethane (1,1-DFA)	ND	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.6 %*	*59.2-130*		"	"	"	"	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

SS-3

T244265-08 (Air)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TO-15									
1,1-Dichloroethene	ND	4.0	ug/m³ Air	1.73	24J0419	10/25/24	10/25/24	TO-15	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
1,1-Difluoroethane (1,1-DFA)	ND	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.4 %*	*59.2-130*		*"*	*"*	*"*	*"*	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

TO-15 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 24J0419 - Canister Analysis										
Blank (24J0419-BLK1)				Prepared & Analyzed: 10/25/24						
Acetone	ND	12	ug/m³ Air							
1,3-Butadiene	ND	4.5	"							
Carbon Disulfide	ND	3.2	"							
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	7.7	"							
Isopropyl alcohol	ND	13	"							
Bromodichloromethane	ND	6.8	"							
Bromoform	ND	11	"							
Bromomethane	ND	20	"							
Carbon tetrachloride	ND	6.4	"							
Chlorobenzene	ND	4.7	"							
Chloroethane	ND	2.7	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	11	"							
Cyclohexane	ND	3.5	"							
Heptane	ND	4.2	"							
Hexane	ND	3.6	"							
Dibromochloromethane	ND	8.7	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,2-Dichlorobenzene	ND	31	"							
1,3-Dichlorobenzene	ND	31	"							
1,4-Dichlorobenzene	ND	31	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	4.1	"							
1,2-Dichloroethane	ND	4.1	"							
1,1-Dichloroethene	ND	4.0	"							
cis-1,2-Dichloroethene	ND	4.0	"							
trans-1,2-Dichloroethene	ND	4.0	"							
1,2-Dichloropropane	ND	4.7	"							
cis-1,3-Dichloropropene	ND	4.6	"							
trans-1,3-Dichloropropene	ND	4.6	"							
4-Ethyltoluene	ND	5.0	"							
Methylene chloride	ND	27	"							B-03
Styrene	ND	4.3	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
Tetrahydrofuran	ND	3.0	"							

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

TO-15 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 24J0419 - Canister Analysis										
Blank (24J0419-BLK1)				Prepared & Analyzed: 10/25/24						
Tetrachloroethene	ND	6.9	ug/m³ Air							
1,1,2-Trichloroethane	ND	5.6	"							
1,1,1-Trichloroethane	ND	5.6	"							
Trichloroethene	ND	5.5	"							
Trichlorofluoromethane	ND	5.7	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl acetate	ND	3.6	"							
Vinyl chloride	ND	2.6	"							
1,4-Dioxane	ND	18	"							
2-Butanone (MEK)	ND	15	"							
Methyl isobutyl ketone	ND	42	"							
Benzene	ND	3.3	"							
Toluene	ND	3.8	"							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
o-Xylene	ND	4.4	"							
1,1-Difluoroethane (1,1-DFA)	ND	27	"							
Surrogate: 4-Bromofluorobenzene	*323*		*"*	*362*		*89.3*	*59.2-130*			
Duplicate (24J0419-DUP1)	**Source: T244265-01**			Prepared & Analyzed: 10/25/24						
Acetone	280	12	ug/m³ Air		272			2.76	30	
1,3-Butadiene	ND	4.5	"		ND				30	
Carbon Disulfide	51.3	3.2	"		52.3			1.97	30	
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	5.26	7.7	"		6.09			14.6	30	
Isopropyl alcohol	ND	13	"		ND				30	
Bromodichloromethane	ND	6.8	"		ND				30	
Bromoform	ND	11	"		ND				30	
Bromomethane	ND	20	"		ND				30	
Carbon tetrachloride	ND	6.4	"		ND				30	
Chlorobenzene	ND	4.7	"		ND				30	
Chloroethane	ND	2.7	"		ND				30	
Chloroform	ND	5.0	"		ND				30	
Chloromethane	ND	11	"		ND				30	
Cyclohexane	ND	3.5	"		ND				30	

SunStar Laboratories, Inc.

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

Jeff Lee For Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

TO-15 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 24J0419 - Canister Analysis										
Duplicate (24J0419-DUP1)	**Source: T244265-01**		Prepared & Analyzed: 10/25/24							
Heptane	289	4.2	ug/m³ Air		283			1.85	30	
Hexane	25.8	3.6	"		26.9			3.89	30	
Dibromochloromethane	ND	8.7	"		ND				30	
1,2-Dibromoethane (EDB)	ND	7.8	"		ND				30	
1,2-Dichlorobenzene	ND	31	"		ND				30	
1,3-Dichlorobenzene	ND	31	"		ND				30	
1,4-Dichlorobenzene	ND	31	"		ND				30	
Dichlorodifluoromethane	ND	5.0	"		ND				30	
1,1-Dichloroethane	ND	4.1	"		ND				30	
1,2-Dichloroethane	ND	4.1	"		ND				30	
1,1-Dichloroethene	ND	4.0	"		ND				30	
cis-1,2-Dichloroethene	9.75	4.0	"		9.89			1.47	30	
trans-1,2-Dichloroethene	ND	4.0	"		ND				30	
1,2-Dichloropropane	ND	4.7	"		ND				30	
cis-1,3-Dichloropropene	ND	4.6	"		ND				30	
trans-1,3-Dichloropropene	ND	4.6	"		ND				30	
4-Ethyltoluene	ND	5.0	"		ND				30	
Methylene chloride	ND	27	"		ND				30	C-06
Styrene	4.11	4.3	"		4.03			1.90	30	
1,1,2,2-Tetrachloroethane	ND	7.0	"		ND				30	
Tetrahydrofuran	5.52	3.0	"		4.67			16.8	30	
Tetrachloroethene	19.0	6.9	"		19.1			0.647	30	
1,1,2-Trichloroethane	ND	5.6	"		ND				30	
1,1,1-Trichloroethane	ND	5.6	"		ND				30	
Trichloroethene	86.3	5.5	"		83.9			2.88	30	
Trichlorofluoromethane	ND	5.7	"		ND				30	
1,3,5-Trimethylbenzene	13.2	5.0	"		12.5			4.88	30	
1,2,4-Trimethylbenzene	50.4	5.0	"		50.3			0.178	30	
Vinyl acetate	ND	3.6	"		ND				30	
Vinyl chloride	ND	2.6	"		ND				30	
1,4-Dioxane	ND	18	"		ND				30	
2-Butanone (MEK)	ND	15	"		ND				30	
Methyl isobutyl ketone	1110	42	"		1090			1.74	30	
Benzene	6.75	3.3	"		6.69			0.866	30	
Toluene	40.8	3.8	"		38.8			5.00	30	
Ethylbenzene	12.7	4.4	"		12.3			2.53	30	

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, Inc.- Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

TO-15 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 24J0419 - Canister Analysis										
Duplicate (24J0419-DUP1)	**Source: T244265-01**		Prepared & Analyzed: 10/25/24							
m,p-Xylene	46.4	8.8	ug/m³ Air		46.7			0.510	30	
o-Xylene	15.2	4.4	"		15.4			1.55	30	
1,1-Difluoroethane (1,1-DFA)	18.4	27	"		14.5			23.7	30	
Surrogate: 4-Bromofluorobenzene	*334*		*"*	*362*		*92.2*	*59.2-130*			

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Partner Engineering & Science, Inc.--Oakland	Project: 845 Stewart Drive	
1017 22nd Ave. Suite 107	Project Number: 24-466341.2	**Reported:**
Oakland CA, 94606	Project Manager: Joe Mangine	10/28/24 16:15

Notes and Definitions

C-06	Presence of analyte in sample suspected as common laboratory contaminant, which was also found in the method blank.
B-03	Analyte present in blank due to being a common laboratory contaminant.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

Jeff Lee For Joann Marroquin, Director of Operations

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

AIR LABORATORY

Chain of Custody Record

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide
25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Client: Partner ESI
Address: 490 43rd Street, Oakland, CA
Phone: 774-414-3666 Email: mhelwe@partneresi.com
Project Manager: H. White + J. Mazzone

Date: 10/22/24 Page: 1 Of 1
Project Name: 845 Stewart Drive
Collector: M. Helwe Client Project #: 24-46634.2
Batch #: T244265 EDF #:

Sample ID	Date Sampled	Start Time	Finish Time	Sample Type : Soil Gas / Indoor Air	Container Type: Summa Canister / Tedlar	Initial Pressure	Final Pressure	Received Pressure	TO-3	TO-15 (chlorinated solvents)	TO-15 SIM	Fixed Gases	Methane by GC-FID	RSK-175	Summa Can, Manifold # / Comments	Laboratory ID #
B1-SG	10/22/24	1312	1321	SG	Summa	-30	-5	-5		X					Summa Can # 485	01
B2-SG		1322	1330			-29	-4	-4		X					706	02
B3-SG		1331	1339			-27	-4	-4		X					851	03
B4-SG		1340	1348			-27	-4	-4		X					738	04
B5-SG		1349	1357			-29	-4	-4		X					281	05
SS-1		1358	1405			-28	-4	-4		X					261	06
SS-2		1407	1414			-28	-4	-4		X					643	07
SS-3		1416	1423			-27	-4	-4		X					405	08

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	10/22/24 1700	Ed Stevens	10/23/2024 1035
Ed Stevens	10/23/2024 1545	GLS/Joe	
GLS		Paul Dunn	10/24/24 17:31

Total # of containers
Chain of Custody seals Y/N/NA PB NA
Seals intact? Y/N/NA PB NA
Received good condition/cold ✓
Turn around time: 24

Notes
PCE; TCE; cis1,2-DCE; trans-1,2 DCE; 1,1-DCE; vinyl chloride
Tracer gas = 1,1-DFA

* TO-15 SIM analysis available upon prior notification. **(Precertified Summa cans needed)**

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

Rev. 02C Date 11/23
Receiving Form 001A

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T244265

Client Name: Partner Project: 845 Stewart Drive

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

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

Lab Received by: Paul Date/Time Lab Received: 10/24/24 17:31

Total number of coolers received: 0 Thermometer ID: SC-1 Calibration due: 11/17/2024

Temperature: Cooler #1	°C +/- the CF (+ 0.1°C) =	°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: PB 10/24/24

Comments:

(949) 297-5020 ■ www.sunstarlabs.com ■ 25712 Commercentre Drive ■ Lake Forest, CA 92630

SunStar Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Project Name: 24-466341.2					Irma
Company: PARTNER					PB
Name: MICHEL HELOU					
Item		Quantity		Unit	
2 oz Jars 24/CS					
4 oz Jars 24/CS					
8 oz Jars 12/CS					
40 ml unpreserved VOAs 100/box					
40 ml HCL-preserved VOAs 72/box					
250 ml Poly 24/CS					
500 ml Poly 16/CS					
1 Liter Poly 12/CS					
500 ml Amber Bottle Wide 12/CS					
1 Liter Amber Bottle 12/CS					
1 Gallon Poly 4/box					
5035 kits:(2)Sodium Bisulfate VOAs 72/box					
	(1) Methanol VOA 72/box				
	(1) TERRACORE				
Lock-N-Load Handle 1/ea					
Tedlar Bags 10/pack					
Sub Slab Insert w/ washer & N/F					
Soil Gas SS 16" Drop Tubes					
Gas Extraction Fittings					
Soil Gas Filters					

	Volume of Summa	# Sent	Used	Unused	Unreturned
Batch Certified Summa Canisters	400cc				
	1L	8+1	CHARGE 8	1	0
	3L				
	6L				
Purge cans					
Nitrogen cans	400cc				
Ind. Cerified Summa Cannisters	1L				
	3L				
	6L				

63/153 Manifolds, Var. Sampler, etc. Calibrated Correctly - Gauge Reads at 0			PB
Manifolds: Inst. Sampler, Variable Sampler, Shut In Set Ups, 150ml/mn, 63ml/mn	8 SV	CHARGE 7	0
Swagelok Fittings: Nuts/Ferrules, Ts	8 NF	CHARGE 8	
Cooler (Sm, Med, Lrg) Number & Quantity	1 LARGE		
Other: Poly Tube, Valves,Silicon Tape, etc.			

Prepared By:	PB	Date:	10/18/24
Reviewed By:		Date:	

Comments:

Cooler Policy: Failure to return cooler(s) within 30 days of receipt or if the returned cooler(s) are in unusable condition, will result in a $50 per cooler fee for replacement costs.

Check In Report

gigatrak.

Barcode	Description	Due Date	In Date	Condition	From Emp/Loc	To Storage Location	Bin Qty	Status
9002	Orange Box	10/28/2024	10/24/2024 05:33 PM		Michel Helou	SunStar Labs South		
8699	150 cc	10/28/2024	10/24/2024 05:33 PM		Michel Helou	SunStar Labs South		
8535	150 cc	10/28/2024	10/24/2024 05:33 PM		Michel Helou	SunStar Labs South		
8518	150 cc	10/28/2024	10/24/2024 05:34 PM		Michel Helou	SunStar Labs South		
8742	150 cc	10/28/2024	10/24/2024 05:34 PM		Michel Helou	SunStar Labs South		
8525	150 cc	10/28/2024	10/24/2024 05:34 PM		Michel Helou	SunStar Labs South		
8728	150 cc	10/28/2024	10/24/2024 05:34 PM		Michel Helou	SunStar Labs South		
8665	150 cc	10/28/2024	10/24/2024 05:34 PM		Michel Helou	SunStar Labs South		
8716	150 cc	10/28/2024	10/24/2024 05:34 PM		Michel Helou	SunStar Labs South		
0281	1000 cc	10/28/2024	10/24/2024 05:35 PM		Michel Helou	SunStar Labs South		
0643	1000 cc	10/28/2024	10/24/2024 05:35 PM		Michel Helou	SunStar Labs South		
0405	1000 cc	10/28/2024	10/24/2024 05:35 PM		Michel Helou	SunStar Labs South		
0261	1000 cc	10/28/2024	10/24/2024 05:35 PM		Michel Helou	SunStar Labs South		
0761	1000 cc	10/28/2024	10/24/2024 05:35 PM		Michel Helou	SunStar Labs South		
0485	1000 cc	10/28/2024	10/24/2024 05:35 PM		Michel Helou	SunStar Labs South		

Check In Report

gigatrak.

Barcode	Description	Due Date	In Date	Condition	From Emp/Loc	To Storage Location	Bin Qty	Status
0766	1000 cc	10/28/2024	10/24/2024 05:35 PM		Michel Helou	SunStar Labs South		
0738	1000 cc	10/28/2024	10/24/2024 05:36 PM		Michel Helou	SunStar Labs South		
0861	1000 cc	10/28/2024	10/24/2024 05:36 PM		Michel Helou	SunStar Labs South		

GLS.

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

Ship From
SUN STAR LABS
WEST SACRAMENTO OFFICE
3140 BEACON BLVD
SUITE A
WEST SACRAMENTO, CA 95691

Ship To
SUNSTAR LABORATORIES-SOUTH
SAMPLE RECEIVING
25712 COMMERCENTRE DR.
LAKE FOREST, CA 92630

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

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 562062703

PDS

LAKE FOREST

S10333A

16882705

ORC CA927-BA0

Print Date: 10/1/2024 2:15 PM

Package 16 of 25

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.
Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.
Step 2: Fold this page in half.
Step 3: Securely attach this label to your package and do not cover the barcode.

TERMS AND CONDITIONS:

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

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 10/24/2024 5:57:54PM

WORK ORDER

T244265

Client:	**Partner Engineering & Science, Inc.--Oakland**	**Project Manager:**	**Joann Marroquin**
Project:	**845 Stewart Drive**	**Project Number:**	**21-466341.2**

Report To:

Partner Engineering & Science, Inc.--Oakland
Joe Mangine
1017 22nd Ave. Suite 107
Oakland, CA 94606

Date Due:	10/28/24 17:00 (1 day TAT)		
Received By:	Paul Berner	Date Received:	10/24/24 17:31
Logged In By:	Angel Aguirre	Date Logged In:	10/24/24 17:51

Samples Received at:

Custody Seals	Yes	Received On Ice	No
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Analysis	Due	TAT	Expires	Comments
T244265-01 B1-SG [Air] Sampled 10/22/24 13:21 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 13:21	Chlorinated Solvents. +1,1-DFA
T244265-02 B2-SG [Air] Sampled 10/22/24 13:30 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 13:30	Chlorinated Solvents. +1,1-DFA
T244265-03 B3-SG [Air] Sampled 10/22/24 13:39 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 13:39	Chlorinated Solvents. +1,1-DFA
T244265-04 B4-SG [Air] Sampled 10/22/24 13:48 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 13:48	Chlorinated Solvents. +1,1-DFA
T244265-05 B5-SG [Air] Sampled 10/22/24 13:57 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 13:57	Chlorinated Solvents. +1,1-DFA
T244265-06 SS-1 [Air] Sampled 10/22/24 14:05 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 14:05	Chlorinated Solvents. +1,1-DFA
T244265-07 SS-2 [Air] Sampled 10/22/24 14:14 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 14:14	Chlorinated Solvents. +1,1-DFA

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 10/24/2024 5:57:54PM

WORK ORDER

T244265

Client:	**Partner Engineering & Science, Inc.--Oakland**	**Project Manager:**	**Joann Marroquin**
Project:	**845 Stewart Drive**	**Project Number:**	**21-466341.2**

Analysis	Due	TAT	Expires	Comments
T244265-08 SS-3 [Air] Sampled 10/22/24 14:23 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 14:23	Chlorinated Solvents. +1,1-DFA

Reviewed By

Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 10/25/2024 11:16:05AM

WORK ORDER

T244265

Client:	**Partner Engineering & Science, Inc.--Oakland**	**Project Manager:**	**Joann Marroquin**
Project:	**845 Stewart Drive**	**Project Number:**	**24-466341.2**

Report To:
Partner Engineering & Science, Inc.--Oakland
Joe Mangine
1017 22nd Ave. Suite 107
Oakland, CA 94606

Date Due:	10/28/24 17:00 (1 day TAT)		
Received By:	Paul Berner	Date Received:	10/24/24 17:31
Logged In By:	Angel Aguirre	Date Logged In:	10/24/24 17:51

Samples Received at:

Custody Seals	Yes	Received On Ice	No
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirı	No		

Analysis	Due	TAT	Expires	Comments
T244265-01 B1-SG [Air] Sampled 10/22/24 13:21 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 13:21	Chlorinated Solvents. +1,1-DFA
T244265-02 B2-SG [Air] Sampled 10/22/24 13:30 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 13:30	Chlorinated Solvents. +1,1-DFA
T244265-03 B3-SG [Air] Sampled 10/22/24 13:39 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 13:39	Chlorinated Solvents. +1,1-DFA
T244265-04 B4-SG [Air] Sampled 10/22/24 13:48 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 13:48	Chlorinated Solvents. +1,1-DFA
T244265-05 B5-SG [Air] Sampled 10/22/24 13:57 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 13:57	Chlorinated Solvents. +1,1-DFA
T244265-06 SS-1 [Air] Sampled 10/22/24 14:05 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 14:05	Chlorinated Solvents. +1,1-DFA
T244265-07 SS-2 [Air] Sampled 10/22/24 14:14 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 14:14	Chlorinated Solvents. +1,1-DFA

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Printed: 10/25/2024 11:16:05AM

WORK ORDER

T244265

Client:	**Partner Engineering & Science, Inc.--Oakland**	**Project Manager:**	**Joann Marroquin**
Project:	**845 Stewart Drive**	**Project Number:**	**24-466341.2**

Analysis	Due	TAT	Expires	Comments
T244265-08 SS-3 [Air] Sampled 10/22/24 14:23 (GMT-08:00) Pacific Time (US &				
TO-15	10/28/24 15:00	1	11/21/24 14:23	Chlorinated Solvents. +1,1-DFA

Reviewed By

Date