Appendix E:
Environmental Site Assessments

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E-1: Phase I ESA

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

676 - 680 MOSS STREET
CHULA VISTA, CA 91911

PROJECT NUMBER EMS571
PREPARED FOR:
SHOPOFF LAND FUND V, LP
2 PARK PLAZA, SUITE 700
IRVINE, CA 92614

JULY 2018

EMS
ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.

TECHNICAL REPORT

PHASE I ENVIRONMENTAL SITE ASSESSMENT

676 - 680 MOSS STREET CHULA VISTA, CA

PREPARED BY: ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.

JULY 2018

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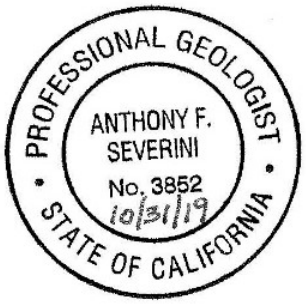
CERTIFICATION

All engineering and geologic information, conclusions, and recommendations in this document were prepared under the supervision of and reviewed by an Environmental Management Strategies, Inc. Professional Geologist in the State of California. Further and to the best of our professional knowledge and belief, the work was performed by professionals who meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312 and these professionals have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property. Our investigation conforms to the U.S. Environmental Protection Agency's (EPA) Standards and Practices for All Appropriate Inquiries (AAI, 40 CFR Part 312) as well as ASTM International's (ASTM) Standard E 1527-13 titled "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process".



July 2018

Anthony F. Severini
President
Professional Geologist
No. 3852

Date

1 Executive Summary

Environmental Management Strategies, Inc. (EMS) is pleased to present this Phase I Environmental Site Assessment (Phase I ESA) for the properties located at 676 – 680 Moss Street, in the City of Chula Vista, San Diego County, California 91911 (the "Site", see Figures 1 and 2). Shopoff Land Fund V, LP (Shopoff) retained EMS on May 23, 2018 to perform the Phase I ESA in support of Shopoff's development of the Site. Our investigation conforms to the U.S. Environmental Protection Agency's (EPA) Standards and Practices for All Appropriate Inquiries (AAI, 40 CFR Part 312) as well as ASTM International's (ASTM) Standard E 1527-13 titled "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process".

1.1 Background

The site is currently occupied by a number of tenants, including Hawthorne Cat, Southwest Mobile Storage, Boat Yard S.D., Rapid Prep and Kleen Blast. Hawthorne Cat is a heavy machinery rental and sales yard occupying all of parcels 618-010-26-01 and 618-010-32-00 and the northwest and western portions of parcel 618-010-31-00 with an address of 680 Moss Street. Southwest Mobile Storage has their offices near the entrance of the Hawthorne Cat offices and stores and maintains their storage containers on the northeastern portion of parcel 618-010-31-00 also at the address of 680 Moss Street. Boat Yard S.D. is located along the western side of the 676 Moss Street address on the 618-010-31-00 parcel and appears to do boat repairs. Rapid Prep is located in the middle southern half of the 618-010-31-00 parcel and appears to be a rental location for steel surface preparation equipment. Kleen Blast is located at the southeastern portion of the 618-010-31-00 parcel and sells specialty abrasives and sand blast media.

1.2 Scope of Work

EMS performed the following scope of work in support of developing this Phase I ESA:

- EMS performed a detailed investigation into the historical use of the site. Our historical investigation entailed the review of reasonably ascertainable documents from standard sources from the early 1900's to the present.

- EMS conducted a review of reasonably ascertainable regulatory agency information regarding hazardous material use, disposal, and contaminated property information for the site and surrounding area. This review included a search for environmental liens as well as activity and use limitations (AULs) on the site.

- EMS contacted the following public agencies and utilities for additional information for the site: the United States Environmental Protection Agency (EPA); the State of California Department of Toxic Substances Control (DTSC); the California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR); the State of California Water Resources Control Board (SWRCB); the San Diego Regional Water Quality Control Board (RWQCB); and, the San Diego Department of Environmental Health.

- EMS was supplied with an ASTM E 1527-13 User Questionnaire completed by Mr. Scott Pressley, the property owner.

- EMS performed an inspection of the site on June 15, 2018. During the site inspection, EMS interviewed Mr. Peter Quinn, Senior Vice President, Partner with commercial real estate firm Kidder Mathews who represents the owner of the property.

1.3 Results of Investigation

EMS performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 for the properties located at 676 – 680 Moss Street, in the City of Chula Vista, San Diego County, California 91911. Any exception to, or deletions from, this practice are described in Section 3 of this report. EMS' Phase I ESA revealed no evidence of *Recognized Environmental Conditions, Historical Recognized Environmental Conditions, Controlled Recognized Environmental Conditions* or *De Minimis Conditions* in connection with the site, except for the following:

Recognized Environmental Conditions:

- The Environmental Protection Agency (EPA) RCRA-SQG lists sites that generate, transport, store, treat and/or dispose of hazardous waste. The RCRA-SQG listing for DRESSER-RAND REPAIR CENTER at 670 L Street, listed spent halogenated solvents as part of their waste stream. This property lies adjacent and potentially upgradient of the Site. EMS believes the proximity of 670 L Street to the Site and the reported waste generated represents a *Recognized Environmental Condition*.

- San Diego County, Department of Environmental Health (DEH) supplied EMS with their records for the Site. Records included UST removal documents for American Mill & Manufacturing previously located at 676 Moss Street. According to the documents provided a 4,000-gallon UST was removed from the Site on 10/19/1987 by American Mill & Manufacturing, Inc. The tank appeared to have been installed in 1970 and stored unleaded gasoline. A map included in the documents appears to show that the tank was previously located in the northeast corner of the property, north of the former drainage wash. Comments from the Hazardous Materials Management Unit, Abandoned Underground Tank Report state that the "tank was a modified propane tank" and had "no apparent leaks". The historical existence of a UST on the Site and the lack of a closure letter represents a *Recognized Environmental Condition*.

- The following are EMS observations during the Site investigation. Three diesel ASTs were observed on the 680 Moss Street property and are a concern for subsurface contamination. The Hawthorne Cat equipment wash area at 680 Moss Street is a concern for subsurface contamination. The motor oil, transmission oil, and drive train oil and used oil storage area at 680 Moss Street is a concern for subsurface contamination. Soil staining was observed at the 676 Moss Street, Boat Yard S.D. property and is a concern for subsurface contamination. Housekeeping on the Boat Yard S.D. property was very poor with equipment and chemicals stored haphazardly throughout the yard including 55-gallon drums of epoxy vinyl ester resin creating a concern for subsurface contamination. The equipment wash area and clarifier located at the 676 Moss Street, Rapid Prep property are a concern for subsurface contamination. The clarifier at the 676B Moss Street, Kleen Blast property is a concern for subsurface contamination. EMS believes these observed

conditions at the Site represent a *Recognized Environmental Condition.*

Historical Environmental Conditions:

- The LUST database contains an inventory of reported leaking underground storage tank incidents. Four LUST cases listed in the EDR report were for facilities located within 0.25 mile and potentially up-gradient of the Site. The four facilities listed were RATNER CORPORATION at 642 Arizona Street, CIMMARON TRUCK LINES INC AND CIMMARON TRUCKING at 621 L Street and TEXACO #121647 at 902 Broadway. According to the EDR report the status for these four facilities was listed as "Completed – Case Closed". Based on the status and location of these four facilities, EMS believes they represent an *Historical Recognized Environmental Condition* to the Site.

- The SAM database contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program. Five of the SAM database listings in the EDR report were for facilities located within ¼ mile and potentially up-gradient of the Site. The facilities listed were AMERICAN FASHION, INC at 642 Arizona s, CIMMARON TRUCK LINES INC at 621 L Street, TEXACO REFINING & MARKETING at 902 Broadway, UNOCAL SERV STATION #522130823 at 898 Broadway and FORMILLER AUTO SALES at 1001 Broadway. According to the EDR report the sites had received closure from SAM or other agency programs. Based on the status and location of these five facilities, EMS believes they represent an *Historical Recognized Environmental Condition* to the Site.

- Cleanup Program Sites (CPS-SLIC; also known as Site Cleanups and formerly known as Spills, Leaks, Investigations and Cleanups) program is designed to protect and restore water quality from spills, leaks and similar discharges. Three cases on the CPS-SLIC database were within ¼ mile and potentially upgradient of the Site. All the cases had a status of "Completed – Case Closed". The three cases were AMERICAN FASHION, INC at 642 Arizona Street, CAPE COD BLUES PROPERTY at 979-985 Broadway and UNOCAL SERV STATION #522130823. Based on the status and location of these three facilities, EMS believes they represent an *Historical Recognized Environmental Condition* to the Site.

- The Geotracker website had two listings for the adjacent property at 642 Arizona Street as Cleanup Program Sites. Both listings were identified under the site name of AMERICAN FASHION, INC. The first listing did not identify the contaminant of concern but did list cleanup status as "Completed – Case Closed As Of 2/4/1987". The second listing identified the contaminant of concern as diesel and a cleanup status of "Completed – Case Closed As Of 12/15/2004". A Petroleum Determination Letter for Properties Located at 654-690 L Street and 642 Arizona Street, Chula Vista, Ca was available on the Geotracker website. This letter states that the 642 Arizona Street property meets the requirements for a "low-risk" site according to USEPA Guidance on Contamination by Petroleum or Petroleum Products for Brownfields grant applications. This letter also states that the property was investigated in 1992 and received a "Completed – Case Closed" status by the County of San Diego of Environmental Health on December 14, 2004. The San Diego Regional Water

Quality Control Board (RWQCB) letter is provided in Appendix J. Based on the status and proximity of this property to the Site, EMS believes the 642 Arizona Street property represents an *Historical Recognized Environmental Condition*.

Although indoor air quality is specifically listed as a non-scope consideration under Section 13.1.5.7 of ASTM E 1527-13, Environmental Professionals cannot eliminate migration of vapors from the ASTM E 1527-13 Phase I ESA scope of work as this would result in the Phase I ESA being non-AAI compliant. ASTM has released ASTM E 2600-15 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions. The Guidance is directed at identifying the likelihood for migrating vapors to encroach onto a target property creating a Vapor Encroachment Condition (VEC). The potential findings of the ASTM E 2600-15 screening are the following:

- A VEC exists; or,
- A VEC does not exist.

ASTM E 2600-15 is a two Tier process. Tier 1 focuses on known or suspected contaminated properties identified during the Phase I ESA within an Area of Concern (AOC) about the target property. For volatile and semi-volatile organic compounds (VOCs and SVOCs), such as dry-cleaning chemicals and industrial solvents, the AOC is defined as 1/3 mile. For petroleum hydrocarbon chemicals such as gasoline the AOC is defined as 1/10 mile. The AOC can be shortened in the down- and cross-gradient directions if the groundwater flow direction is known. One RCRA-SQG site with spent halogenated solvents as part of their waste stream was discovered in close proximity to the Site. A review of agency documents also revealed the existence of a UST removal on the Site in 1987.

Tier 2 focuses on the contaminated plumes from the contaminated properties identified within the AOC and their proximity (critical distance) to the target property. The critical distance is 100 feet for VOCs and 30 feet for petroleum hydrocarbons. A VEC is likely to exist due to the presence of USTs, oil and waste oil ASTs and 55-gallon drums present on the Site. Based on the Site previously containing a UST and the spent halogenated solvent wastes stream on the adjacent property, EMS believes a VEC exists.

Although not considered Recognized Environmental Conditions as defined by the EPA AAI rule and ASTM E 1527-13, EMS also noted the following potential environmental concerns and issues:

- The site buildings were constructed prior to 1980; therefore, asbestos-containing building materials and lead based paint are still likely to be present on-site.

- The potential presence of VOCs in soil underlying the site and the adjacent property represents a potential vapor intrusion issue in connection with the site.

EMS recommends a Phase II Environmental Site Assessment (ESA) be performed at the individual properties of the Site due to the presence of *Recognized Environmental Conditions*, *Historical Environmental Conditions* and Vapor Encroachment Conditions. A Phase II ESA would require soil testing and soil vapor testing at a minimum in order to evaluate any impacts to the property that could jeopardize human health and/or increase development costs through environmental

remediation efforts.

2 Introduction

Environmental Management Strategies, Inc. (EMS) is pleased to present this Phase I Environmental Site Assessment (Phase I ESA) for the properties located at 676 – 680 Moss Street, in the City of Chula Vista, San Diego County, California 91911 (the "Site", see Figures 1 and 2). Shopoff Land Fund V, LP (Shopoff) retained EMS on May 23, 2018 to perform the Phase I ESA in support of Shopoff's development of the Site.

2.1 Purpose

The purpose of this Phase I ESA is to identify *Recognized Environmental Conditions* as defined by the U.S. Environmental Protection Agency's (EPA) Standards and Practices for All Appropriate Inquiries (AAI, 40 CFR Part 312) as well as the American Society for Testing and Materials (ASTM) Standard E 1527-13 titled "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process". The ASTM standard defines *Recognized Environmental Condition* as follows: "The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De Minimis* conditions are not *recognized environmental conditions*."

The EPA's AAI and ASTM E 1527-13 practices are intended to permit the *User*, Shopoff, to satisfy one of the requirements to qualify for the *Innocent Landowner, Contiguous Property Owner, or Bona Fide Prospective Purchaser* limitations on Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability (also known as *"Landowner Liability Protections"*). Additional requirements include, but are not limited to, complying with activity and use limitations (AULs), taking reasonable steps to prevent releases, complying with legally required release reporting obligations, etc.

In addition to *Recognized Environmental Conditions*, this Phase I ESA also reports on *Historical Recognized Environmental Conditions*, *Controlled Recognized Environmental Conditions, De Minimis* conditions and other potential environmental concerns and issues (also known as *Business Environmental Risks*) such as Vapor Encroachment Conditions (VECs), asbestos-containing materials (ACM), polychlorinated biphenyl (PCB) containing electrical equipment, lead-based paint, radon, etc.

2.1.1 Special Terms and Conditions

Our investigation conforms to the EPA's AAI rule and ASTM E 1527-13. This report was prepared by EMS solely for the use and benefit of Shopoff, together with its affiliates, participants, successors and assigns. No other parties shall have any right to rely on this document. The use of this report is expressly controlled by the terms and conditions in the contract between Shopoff and EMS.

2.1.2 Methodology

Mr. Anthony F. Severini and Mr. Ashley Flores of EMS performed the Phase I ESA. Mr. Severini is a State of California registered Professional Geologists with over thirty years of relevant, full-time experience performing Phase I ESAs within several states throughout the United States. Mr. Flores holds a Bachelor of Science degree in Environmental Science and has over five years of

relevant, full-time experience performing Phase I ESAs.

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the Site. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Mr. Severini's and Mr. Flores' detailed qualifications are presented in Appendix A. EMS performed the following scope of work in support of developing this Phase I ESA:

- EMS performed a detailed investigation into the historical use of the site. Our historical investigation entailed the review of reasonably ascertainable documents from standard sources from the early 1900's to the present.

- EMS conducted a review of reasonably ascertainable regulatory agency information regarding hazardous material use, disposal, and contaminated property information for the site and surrounding area. This review included a search for environmental liens as well as activity and use limitations (AULs) on the site.

- EMS contacted the following public agencies and utilities for additional information for the site: the United States Protection Agency (EPA); the State of California Department of Toxic Substances Control (DTSC); the California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR); the State of California Water Resources Control Board (SWRCB); the San Diego Regional Water Quality Control Board (RWQCB); and, the San Diego Department of Environmental Health.

- EMS was supplied with an ASTM E 1527-13 User Questionnaire completed by Mr. Scott Pressley, the property owner.

- EMS performed an inspection of the site on June 15, 2018. During the site inspection, EMS interviewed Mr. Peter Quinn, Senior Vice President, Partner with commercial real estate firm Kidder Mathews who represents the owner of the property.

2.2 Site Description

The site currently consists of three parcels of land totaling approximately 6.92 acres. The site is currently occupied by Hawthorne Cat, Southwest Mobile Storage, Boat Yard S.D., Rapid Prep and Kleen Blast. Hawthorne Cat is a heavy machinery rental and sales yard, Southwest Mobile Storage rents storage containers, Boat Yard S.D. appears to do boat repair, Rapid Prep is a rental location for steel surface preparation equipment and Kleen Blast sells specialty abrasives and sand blast media.

2.2.1 Site Location

The site is located at 676 – 680 Moss Street in the City of Chula Vista, San Diego County, California 91911. The site is comprised of land identified by parcel numbers 618-010-26-01, 618-010-32-00 and 618-010-31-00. Current tenants at the Site are Hawthorne Cat, Southwest Mobile

Storage, Boat Yard S.D., Rapid Prep and Kleen Blast.

2.2.2 Site and Vicinity Characteristics

The site is located in a mixed commercial/industrial and residential area within the City of Chula Vista. The site is bordered to the north by a storage facility used by the Sweetwater School District, to the west by a rail right of way, Industrial Boulevard and a parking lot and to the south and east by residences.

2.2.3 Description of Structures, Roads and other Improvements

The Site currently consists of three parcels of land occupied by five tenants. There are currently three buildings on the property. Two clarifiers and five aboveground storage tanks were noted on the property during the property inspection as described in Section 2.4.

2.2.4 Information Reported by Property Engineers

During EMS' site visit, information regarding site operations was provided by Mr. Peter Quinn, Senior Vice President, Partner with commercial real estate firm Kidder Mathews who represents the owner of the property. Pertinent information provided by Mr. Quinn is included in Section 2.4.

2.2.5 Current Uses of the Property

The site is currently occupied by five tenants and operations include a heavy machinery rental and sales yard, storage containers rental, boat repair, steel surface preparation equipment rental and sales of specialty abrasives and sand blast media.

2.2.6 Past Uses of the Property

According to information reviewed by EMS the Site was previously vacant undeveloped land prior to construction of the buildings on the property.

2.2.7 Past and Current Uses of Adjoining Properties

Based on information reviewed by EMS, the Site vicinity was previously vacant undeveloped land possibly utilized for agricultural purposes prior to the construction of residential neighborhoods and commercial structures.

2.3 Records Review

EMS conducted a review of reasonably ascertainable and practically reviewable public information for the site and surrounding area. The information was supplied to EMS both by an outside contractor specializing in compiling such information and by direct contacts made by EMS.

2.3.1 Standard Environmental Records Sources: Federal, State, Tribal and Local

EMS retained Environmental Data Resources, Inc. (EDR) to perform a search of reasonably ascertainable information from databases for facilities with environmental records within the Site vicinity. The information sources utilized by EDR included publicly available databases compiled by federal, state, tribal and local governmental agencies and proprietary databases available through EDR. The EDR report was designed to assist parties seeking to meet the search requirements of the EPA's AAI rule and ASTM E 1527-13. The databases searched provide information on facilities with records including, but not limited to, the following potential

environmental concerns: Resource Conservation and Recovery Act Small and Large Quantity Hazardous Waste Generators (RCRA-SQGs and RCRA-LQGs); the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS); registered above-ground storage tanks (ASTs); registered underground storage tanks (USTs); historical USTs (HIST USTs); leaking USTs (LUSTs); non-tank spills of hazardous materials; active and inactive landfills; and facilities engaged in the investigation and cleanup of known releases of hazardous materials. In general, the EPA's AAI rule and ASTM E 1527-13 require a larger search radius for databases with information of greater environmental concern (such as LUSTs, landfills and hazardous substance release facilities) than databases with information of lesser environmental concern (such as registered ASTs, USTs, RCRA-SQGs and RCRA-LQGs).

The EPA's AAI rule and ASTM E 1527-13 require the Phase I ESA to include searches for environmental cleanup liens as well as AULs including institutional and engineering controls, recorded under federal, state, tribal, or local laws. The AAI rule and ASTM E 1527-13 allows that either the prospective property owner or the environmental professional may conduct these searches.

EDR's regulatory agency database search included searches for liens and AULs from the following four EPA databases: Federal Superfund Liens (NPL LIENS); CERCLA Lien Information (LIEN2); Engineering Controls Sites (US ENG CONTROLS); and Sites with Institutional Controls (US INST CONTROLS). EDR's regulatory agency database search also included a search of the DTSC's Deed Restriction Listing (DEED) and Lien Holder (LIENS) databases. Specific information regarding the databases searched, corresponding search radii, and search results are presented in EDR's report entitled, *EDR Radius Map™ with GeoCheck®*, included in Appendix B.

EMS also retained EDR to perform an environmental lien search for the site. The search was conducted for the Site parcel numbers of 618-010-32-00, 618-010-31-00 and 618-010-26-01 and included a search for environmental liens and other AULs. The results of this lien search are presented in EDR's report entitled, *EDR Environmental LienSearch™ Report,* included in Appendix C. The *EDR Property Tax Map Report* is included in Appendix D.

The Site was not identified on NPL LIENS, LIEN2, US ENG CONTROLS, US INST CONTROLS, LIENS or DEED databases. EDR's environmental lien search found no environmental liens or AULs for the Site parcel numbers of 618-010-32-00, 618-010-31-00 and 618-010-26-01. The EDR report indicates that the current owner of the Site is NORM PRESSLEY'S TRUCK CENTER; NORMAN PRESSLEY AND BARBARA PRESSLEY, TRUSTEES OF THE PRESSLEY FAMILY TRUST and the title was received from MOSS CENTER PARTNERSHIP.

The EDR report listed the Site on a number of databases including HAZNET, San Diego Co. HMMD, FINDS, ECHO, SWEEPS UST, NPDES, CIWQS, EDR Hist Auto and AST. A detailed review and summary of all the records identified by EDR for the site is not within the scope of this investigation. Below is a summary of environmental records pertaining to releases to the environment, not including air emissions.

The Facility and Manifest Data (HAZNET) database is information extracted from copies of hazardous waste manifests received by DTSC each year. The following businesses on the HAZNET database were listed at the Site: KLEEN BLAST INC, INTERNATIONAL MARINE, HAWTHORNE RENT IT SE, ARISE WACO SCAFFOLDI and SAN DIEGO PALLETS IN at the address of 676 Moss Street. Waste descriptions included other organic solids, unspecified sludge waste, unspecified aqueous waste, waste oil and mixed oil and not reported. The listed wastes do not appear to pose an environmental concern to the Site.

The Hazardous Materials Management Division Database for Sand Diego County (San Diego Co. HMMD) provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. The following businesses were listed on the San Diego Co. HMMD database for the Site: KLEEN INDUSTRIAL SER, ARISE WACO SCAFFOLDI and HAWTHORNE RENT-IT SE. None of the inspection violations for the Site appears to pose an environmental concern to the Site.

The KLEEN INDUSTRIAL SER business was listed on the Underground Storage Tank (UST) and Statewide Environmental Evaluation and Planning System Underground Storage Tank (SWEEPS UST) databases. Both of these databases list one 4,000-gallon single walled UST that contained regular unleaded gasoline. The UST appears to have been installed in 1970 and removed on October 19, 1987. Additional information regarding this UST and its removal is provided in section 2.3.5.

One Aboveground Storage Tank (AST) record was identified for the Site under the business name HAWTHORNE RENT-IT SE. The contents or size were not reported but the owner of this AST was listed as Hawthorne Machinery Co. Additional information for this AST is provided in section 2.4.

Numerous additional environmental records were identified for facilities in the surrounding area. Due to the distance and direction from the Site, and the nature of the information present in the EDR report, most of these records do not appear to represent a potential environmental concern to the Site. The following nearby facilities discussed below may represent a potential environmental concern to the Site.

The Environmental Protection Agency (EPA) RCRA-LQG and RCRA-SQG lists sites that generate, transport, store, treat and/or dispose of hazardous waste. The EDR report identified two RCRA-LQG sites within ¼ mile of the site. Based on the location of the listings for PHD CORP located at 910 Industrial Blvd and DYNEGY SOUTH BAY, LLC located at 990 Bay Blvd it does not appear they pose an environmental concern to the Site. Five RCRA_SQG sites were listed within ¼ mile of the Site in the EDR report. Four of the listings were potentially upgradient of the Site and based on information in the EDR report of the four, three do not appear to pose an environmental concern to the Site. The listing for DRESSER-RAND REPAIR CENTER at 670 L Street listed spent halogenated solvents as part of their waste stream. This property lies adjacent and potentially upgradient of the Site. EMS believes the proximity 670 L Street to the Site and waste generated represents a *Recognized Environmental Condition.*

The Department of Toxic Substances Control's (DTSC's) maintains the EnviroStor database

which identifies sites that have known contamination or sites for which there may be reason to investigate further. The EDR report identified 8 ENVIROSTOR facilities within approximately 1-mile of the Site. One facility was identified within 0.5 mile and possibly up-gradient of the Site on the EDR report. This facility was listed as AMERICAN FASHION, INC located at 642 Arizona Street and has a listed status of "Refer: 1248 Local Agency" according to the EDR report. Additional information regarding this listing is included in section 2.3.5.

The EDR report identified 20 Leaking Underground Storage Tank (LUST) cases within 0.5 mile of the Site. The LUST database contains an inventory of reported leaking underground storage tank incidents. According to the EDR report all the listed LUST cases attained closure with the exception of UNOCAL located at 898 Broadway and ECONO LUBE AND TUNE located at 903 Broadway. These two listing appear to be for the preliminary site assessment of the properties as two new listings with the same addresses and similar names with a date of 3/12/2018 appear to show the status as "Completed – Case Closed". Four of the LUST cases listed in the EDR report were for facilities located within 0.25 mile and potentially up-gradient of the Site. The four facilities listed were RATNER CORPORATION at 642 Arizona Street, CIMMARON TRUCK LINES INC AND CIMMARON TRUCKING at 621 L Street and TEXACO #121647 at 902 Broadway. According to the EDR report the status for these four facilities was listed as "Completed – Case Closed". Based on the status and location of these four facilities, EMS believes they represent an *Historical Recognized Environmental Condition* to the Site.

A review of the SAN DIEGO CO. SAM (SAM) database was provided by EDR and listed approximately 15 cases within 0.5 miles of the Site. The SAM database contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program. According to the EDR report all the listed SAM cases attained closure with the exception of FORMILLER AUTO SALES at 1001 Broadway, TOYS"R" US #5625 at 1008 Industrial Boulevard and BAY VEIW RV & BOATS at 995 Bay Boulevard. Out of the three listings only FORMILLER AUTO SALES was upgradient of the Site and according to the LUST database as of 4/13/2016 the status was listed as "Completed – Case Closed". Five of the SAM database listings in the EDR report were for facilities located within ¼ mile and potentially up-gradient of the Site. The facilities listed were AMERICAN FASHION, INC at 642 Arizona Street, CIMMARON TRUCK LINES INC at 621 L Street, TEXACO REFINING & MARKETING at 902 Broadway, UNOCAL SERV STATION #522130823 at 898 Broadway and FORMILLER AUTO SALES at 1001 Broadway. Based on the status and location of these five facilities, EMS believes they represent an *Historical Recognized Environmental Condition* to the Site.

According to the EDR report 10 Cleanup Program Sites (CPS-SLIC; also known as Site Cleanups and formerly known as Spills, Leaks, Investigations and Cleanups) were identified within 0.5 mile of the Site. The CPS-SLIC program is designed to protect and restore water quality from spills, leaks and similar discharges. All the cases had a status of "Completed – Case Closed" with the exception of SOUTH BAY POWERPLANT at 990 Bay Boulevard. SOUTH BAY POWERPLANT has current status of "Open – Inactive" and "Open – Assessment & Interim Remedial Action" but is down gradient of the Site and does not appear to pose an environmental concern. Three facilities on the CPS-SLIC database were within ¼ mile and potentially upgradient of the Site. The three facilities were AMERICAN FASHION, INC at 642 Arizona Street, CAPE COD BLUES PROPERTY at 979-985 Broadway and UNOCAL SERV STATION #522130823.

Based on the status and location of these three facilities, EMS believes they represent an *Historical Recognized Environmental Condition* to the Site.

EDR also provides a review of the aboveground storage tank petroleum storage tank locations (AST) listings. This list revealed 2 AST sites within approximately ¼ mile of the Site. One of the records was for an AST on the Site at 680 Moss Street and the other record was AST located at DYNEGY SOUTH BAY LLC at 990 Bay Boulevard which is across the 5-freeway and downgradient of the Site. Based on the distance and location of the DYNEGY SOUTH BAY LLC record it does not appear to pose an environmental concern to the Site

The SOUTH BAY POWER PLAN at 990 Bay Boulevard was identified on the Waste Management Unit Database (CA WMUD/SWAT) and Toxic Pits databases. Based on information contained in the EDR report, these records appear to pertain to the property to the west and separated from the Site by the 5-freeway. Based on the location of this property, these records do not appear to pose an environmental concern to the site.

The EDR report also supplied information from databases that list underground storage tanks in the area of the Site. The databases included were Statewide Environmental Evaluation and Planning System (SWEEPS UST) and Historical UST Registered Database (HIST UST). The EDR report has two listings with the name of CALIFORNIA CLOTHES at 660 L Street which appear to be adjacent and upgradient of the Site. The listings appear to be for a sump and UST installed in 1967 for the storage of waste and diesel, respectively. Based on the location and distance to the Site it does not appear these listings pose an environmental concern to the Site.

EDR US Hist Auto Stat is a database of potential gas station/filling station/service station sites that EDR has put together from searching selected national collections of business directories. This database listed two EDR US Hist Auto Stat sites within 1/8-mile of the site. Both sites are listed at 910 Industrial Blvd/Ave with names of BEACH RED SHELL SERVICE and MERRIL JAMES A. The listings are located downgradient of the Site and do not appear to pose an environmental concern.

The EDR report also identifies "orphan" facilities that, due to poor or inadequate address information, could not be accurately mapped. Two facilities were identified on this database as BAY BLVD PROJECTS and CAPE COD BLUES PROPERTY. These two listings are discussed in the SAM database discussion above.

The results of EMS' review of Standard Environmental Records Sources revealed evidence of *Recognized Environmental Conditions* and *Historical Recognized Environmental Conditions* in connection with the site.

2.3.2 Physical Setting Sources

The EDR Radius Map™ Report provides a physical setting source addendum (Geocheck®). The Site is located at an elevation of approximately 38-feet above mean sea level (msl). Local topography decreases in elevation to the west. The site is located in a 500-year Federal Emergency Management Agency (FEMA) flood zone. The EDR report searched for site-specific hydrogeologic data within a 1.25-mile radius from the site. One site-specific hydrogeologic data point was found for the site located 1 – 2 miles north-northwest with a measured depth to water of

5 feet. EDR has also developed a groundwater information system, known as Aquiflow, which maintains groundwater depth and flow direction data from reports submitted by environmental professionals to regulatory agencies. A total of 12 reports were reviewed by EDR and the nearest report located approximately 1/8 – ¼ mile northwest of the Site reported the general direction of groundwater flow to the west. The EDR report also searched for public water systems and water wells known to the United States Geological Survey (USGS) and water wells known to the State of California. Three Federal USGS water wells were listed within one mile of the site. No public water supply system was identified within one-mile of the Site. The State Database Well Information did not list any wells within one-mile of the Site. No State Oil/Gas Wells were identified within one-mile of the Site. The EDR report did not identify any earthquake fault lines within one mile of the site.

2.3.3 Historical Use Information

EMS conducted a review of reasonably ascertainable historical information from standard sources to determine the past land use of the Site and surrounding area including the following: Sanborn® fire insurance maps; historical topographic maps; historical aerial photographs; historical city directories; and, historical building permits. The following paragraphs summarize our findings.

2.3.3.1 Sanborn® Fire Insurance Map Review

EMS retained EDR to perform a search for historical Sanborn® fire insurance maps for the site vicinity. Sanborn® maps were not available for the site vicinity. EDR's *Certified Sanborn® Map Report* is included in Appendix E.

2.3.3.2 Historical USGS Topographic Map Review

EMS retained EDR to provide historical topographic maps prepared by the USGS for the site vicinity. Historical topographic maps were available for the years 1904, 1930, 1943/1944, 1953, 1975, 1991, 1996 and 2012. The *EDR Historical Topographic Map Report* is included in Appendix F.

No specific land use is identified on the site or adjacent properties in the 1904 topographic map. The San Diego and Arizona Eastern rail line is first visible adjacent and to the west of the Site in the 1930 topographic map. A structure also appears to be present in the south-central portion of the Site and streets to the south appear to be subdivided in preparation for the construction of residential structures. The 1943/1944 topographic map does not appear to contain a structure in the south-central portion of the Site and the property to the north appears to be subdivided into two lots. A number of what appear to be residential structures are adjacent and to the south of the Site and some additional structures are visible to the east in the 1953 topographic map. Three structures are first visible on the Site in the 1975 topographic map and development in the area has also increased significantly and includes the construction of the Interstate 5 Freeway. One additional structure is visible on the Site in the 1991 topographic map and a large building is first visible on the adjacent property to the north. The 1996 and 2012 topographic map do not show any structures on the Site but do show an increase in development of the area.

2.3.3.3 Aerial Photograph Review

EMS reviewed historical aerial photographs obtained from EDR for the years, 1949, 1953, 1964, 1966, 1970, 1979, 1985, 1989, 1994, 2005, 2009, 2012 and 2016. The *EDR Aerial Photo Decade*

Package report is included in Appendix G.

The 1949 to 1953 aerial photographs indicate the Site is primarily vacant undeveloped land with the exception of a narrow wash that runs through the middle of the Site. The adjacent properties appear to be land used for agricultural purposes and residential construction. The 1953 aerial photograph is also the first time the 5 freeway is visible to the west of the Site. There are no significant changes to the Site or surrounding properties in the 1964 and 1966 aerial photographs, with the exception of some grading on the Site and continued residential and commercial development in the surrounding properties. The two buildings on the southeastern portion of the Site where Rapid Prep and Kleen Blast are currently tenants are first visible in the 1970 aerial photograph. A large industrial/commercial building is also first visible on the adjacent property to the northeast of the Site in the 1970 aerial photograph. The 1979 aerial photograph is the first time the building in the northwestern portion of the property whose current tenant is Hawthorne Cat is visible and an additional industrial/commercial building has been constructed on the adjacent property to the north. There are no significant changes to the Site in the 1985 aerial photograph but development on the surrounding properties continues to increase. The narrow wash is no longer visible on the Site in the 1989 aerial photograph and an apartment structure and parking appear to have been constructed on the adjacent property to the east. The 1994 aerial photograph appears to show the storage of equipment in the northeastern portion of the property. The aerial photographs for 2005, 2009 and 2012 do not show any significant changes to the Site with the exception of the removal of equipment in the northeastern portion of the Site. The 2016 aerial photograph is the first time storage containers are visible in the northeast portion of the Site.

2.3.3.4 City Directory Abstract

EMS retained EDR to provide a historical city directory search for the site and nearby properties. The city directories identify individuals and businesses by street address. EDR obtained information from sources including city and telephone directories dating from 1956 to 2014. The *EDR City Directory Abstract* is included in Appendix H.

The property address of 676 and 680 Moss Street were listed on the EDR Digital Archive in 1977, 1982, 1987 and 1992 as AMERICAN MILL & MANUFACTURING; in 1995 as MENDELSOHN ED, MENDELSOHN, ED and SAN DIEGO PALLETS INC; in 2000 as D M METALS and SAN DIEGO PALLETS INC; in 2005 and 2010 as ARISE SCAFFOLDING & EQP INC, CANAM MINERALS INC and WACO SCAFFOLDNG/EQPMNT 76; and, 2014 as CANAM MINERALS INC, INTERNATIONAL MARINE & INDUS, RAPID PREP LLC, SOUTHWEST MOBILE STORAGE and SOUTHWEST MOBILE STORAGE INC.

2.3.3.5 Building Permit Report

EMS retained EDR to provide a building permit report for the Site and adjacent properties. The EDR Building Permit Report provides municipal building permit records from local municipal governments. The *EDR Building Permit Report* is included in Appendix I.

Building permits were available for the address of 676 Moss Street and included building, electrical and communication permits. One permit was listed at 676 Moss Street for the installation of a spray booth with a date of June 3, 1998 and is an environmental concern. The permit number is listed as B98-1951 and the contractor name as M-H Industrial. None of the permits listed in the Building Permit Report for surrounding properties appeared to pose an environmental concern to

the Site. Permits listed in the EDR report included building, roofing, electrical, utility and HVAC.

2.3.4 Previous Environmental Reports

EMS did not receive any previous environmental reports for the Site from the property owner. EMS also did not discover any environmental reports for the properties adjacent to the Site. Documents received from regulatory agencies are discussed in the section 2.3.5.

2.3.5 Additional Record Sources

EMS searched the following regulatory agency websites for any additional information for the Site and addresses adjacent to the Site: EPA's Envirofacts; DTSC's EnviroStor; SWRCB's GeoTracker; and the AQMD's FIND websites. No additional information was available for the Site on the EnviroStor, Geotracker and FIND websites.

The Envirofacts website listed one property on the Site under the The Permit Compliance System (PCS) and Integrated Compliance Information System (ICIS) database. The address of 676 Moss Street was listed as Kleen Blast Chula Vista. The information provided included the NPDES number for the Site and that the Clean Water Act (CWA) compliance status was listed as "No Violation".

The Geotracker website had two listings for the adjacent property at 642 Arizona Street as Cleanup Program Sites. Both listings were identified under the site name of AMERICAN FASHION, INC. The first listing did not identify the contaminant of concern but did list cleanup status as "Completed – Case Closed As Of 2/4/1987". The second listing identified the contaminant of concern as diesel and a cleanup status of "Completed – Case Closed As Of 12/15/2004". A *Petroleum Determination Letter for Properties Located at 654-690 L Street and 642 Arizona Street, Chula Vista, CA* was available on the Geotracker website. This letter states that the 642 Arizona Street property meets the requirements for a "low-risk" site according to USEPA Guidance on Contamination by Petroleum or Petroleum Products for Brownfields grant applications. This letter also states that the property was investigated in 1992 and received a "Completed – Case Closed" status by the County of San Diego of Environmental Health on December 14, 2004. The San Diego Regional Water Quality Control Board (RWQCB) letter is provided in Appendix J. Based on the status and proximity of this property to the Site, EMS believes the 642 Arizona Street property represents an *Historical Recognized Environmental Condition*.

The Envirostor website had one listing for an adjacent property. The listing was for the property at 642 Arizona Street, identified under the name COMMERCIAL PROPERTY. The site type was listed as "Evaluation" and the cleanup status was listed as "Refer: 1248 Local Agency as of 9/29/2004". Additional information for the property was provided on the Geotracker website and is discussed further in the previous paragraph.

Information for adjacent facilities on the Envirofacts website has been discussed in previous sections. No facilities were listed adjacent to the Site on the FIND website.

The RWQCB also supplied EMS with all the records they had on file for the Site. The only records available were for Rapid Prep who is located at 676 Moss Street. The records included an email about a site inspection where auto batteries, 55-gallon drum containing diesel fuel and a 5-gallon

bucket containing paint thinner were improperly stored and steel shards/fines were observed on the ground. The email also stated that they were not subject to the Statewide Industrial General Storm Water Permit requirements. A follow-up email by Rapid Prep stating they had corrected the violations was also included.

San Diego County, Department of Environmental Health (DEH) also supplied EMS with their records for the Site. Records included routine inspections and UST removal documents for American Mill & Manufacturing, San Diego Pallet, Arise Waco Scaffolding and Equipment and Kleen Industrial Services, all located at 676 Moss Street. According to the documents provided a 4,000-gallon UST was removed from the Site on 10/19/1987 by American Mill & Manufacturing, Inc. The tank appeared to have been installed in 1970 and stored unleaded gasoline. A map included in the documents appears to show that the tank was previously located in the northeast corner of the property to the north of the former drainage wash. Comments from the Hazardous Materials Management Unit, Abandoned Underground Tank Report state that the "tank was a modified propane tank" and had "no apparent leaks". The historical existence of a UST on the Site and the lack of a closure letter represents a *Recognized Environmental Condition*. UST removal documents are provided in Appendix J.

According to the DOGGR Online Mapping System (DOMS) there are no wells located on the Site or adjacent properties.

2.3.6 ASTM E 1527-13 User Questionnaire

Mr. Scott Pressley, the 676 – 680 Moss Street property owner provided EMS with an ASTM E 1527-13 User Questionnaire for the site on June 12, 2018. Mr. Pressley answered in the negative to all questions regarding knowledge of present or past activities, uses, or any obvious indicators that point to the presence or likely presence of contamination at the Site. A copy of the completed ASTM E 1527-13 User Questionnaire is included in Appendix K.

2.4 Information from Site Reconnaissance and Interviews

Mr. Flores of EMS visited the Site on June 15, 2018 to conduct the site inspection. Mr. Quinn the Senior Vice President, Partner with Kidder Mathews escorted EMS throughout the Site during the inspection.

EMS first accessed the 680 Moss Street portion of the Site; whose current tenant is Hawthorne Cat. Hawthorne Cat is a heavy machinery rental and sales yard (see Photograph 1). The building on this portion of the Site is occupied by the offices and equipment repair bays for the Hawthorne Cat operations. On the eastern portion of the Hawthorne Cat property is a covered area that also appears to be used for repairs. This area also contained three aboveground storage tanks (ASTs) that appeared to contain diesel (see Photograph 2). Four spill kits inside 55-gallon drums were observed in this area on a secondary containment pallet. Additional pieces of heavy equipment were parked along the eastern fence of the Hawthorne Cat portion of the property. In the northeast corner of the Hawthorne Cat property was a roll-off bin labeled Patriot Environmental Services along with an area surrounded by concrete road barriers (see Photographs 3 and 4). Pieces of broken concrete were also near the roll-off bin possibly from the area that had been cordoned off with road barriers. Mr. Quinn had no information regarding the roll-off bin, concrete road barriers or broken concrete observed in this portion of the property. Equipment parts appeared to be stored on the northern portion of the property along the fence line. An equipment wash area was also

observed on the northern portion of the property (see Photograph 5). According to an employee of Hawthorne Cat the equipment wash water is recycled in a separate room in the rear of the building (see Photograph 6). EMS also observed two electrical transformers along the northern portion of the building. This area also appeared to be where Hawthorne Cat stored their propane, oxygen and acetylene gases. Along the western portion of the property is where Hawthorne Cat stored some parts and additional pieces of equipment for rental and sales. Inside the northern portion of the building was the equipment repair bays. Along the northern wall of the building was where the motor oil, transmission oil, batteries and a spill kit were stored. Transmission oil and drive train oil was stored in ASTs placed on top of secondary containment pallets (see Photograph 7). Used oil was also stored in this area in an AST and oily debris and used oil filters were stored in 55-gallon drums on secondary containment (see Photographs 8 and 9). Housekeeping was good in the equipment repair bays with glass cleaning, metal polishing and antifreeze stored on shelves. The equipment repair bays also contained five gallon drums of transmission oil, lubricating oil and differential fluid, along with two 55-gallon drums of transmission oil and differential fluid on a cart (see Photograph 10). A fuel tank sitting on a pallet was also observed in this area, but no staining was observed on the ground beneath it. A caged area containing 5-gallon drums of coolant, cleaning supplies and equipment parts was also observed in the equipment area. Just outside the offices were flammables storage containers. The rest of the building was occupied by the Hawthorne Cat offices.

The southwestern portion of the building on the 680 Moss Street property is the offices for Southwest Mobile Storage. EMS with Mr. Quinn requested access to the area where the storage containers are maintained and stored in the northeastern portion of the Site. The storage area is an open vacant portion of the Site where a number of storage containers are repaired and stored in stacks of two on top of each other (see Photograph 11). Along the western portion of the storage and maintenance area are two storage containers used for the storage of repair and maintenance supplies (see Photograph 12). The primary material stored in the containers was 5-gallon buckets of paint used for repair and maintenance (see Photograph 13). Other maintenance chemicals included WD-40, enamel spray and a couple gallons of the Zep Industrial Purple Cleaner & Degreaser. A small gravel pile was also noted on the property along with some office furniture, equipment for container repair and a large forklift for moving storage containers.

Continuing the Site investigation, EMS accessed the Boat Yard S.D. located at 676 Moss Street. This property currently occupies the western half of 676 Moss Street and appears to repair boats. A large crane was noted upon entering the property near the southern end (see Photograph 14). Along the eastern fence line EMS noted two small blue 30-gallon drums that were labeled BL-7835 lights out. The area appeared to be used for the storage of equipment such as a personal watercraft a boat and two small lifts. A large gray container was also noted in the area with some staining on the soil near one of its corners (see Photograph 15). A large cardboard container was also noted in this area containing trash. A rolling cart was also noted stacked with Awl Grip fast evaporative reducer for spray applied urethane topcoats (see Photograph 16). This area also contained a large AST with Solomon Colors concreting coloring (see Photograph 17). Containers for flammables and used batteries were also noted in this area. Six 55-gallon drums were also noted outside in the southeastern corner of the property on top of two pallets without secondary containment (see Photograph 18). These drums appeared to contain epoxy vinyl ester resin and appear to have been exposed to the elements as they appear to be rusted. EMS also noted pieces of equipment, pallets and wood stored on the southern portion of the property. Upon closer

inspection of the crane in this area it was noted that one of the stabilizer legs was leaking hydraulic oil (see Photograph 19). Additional chemicals, equipment and parts were stored in this area exposed to the elements. Two large transport trailers were along the eastern portion of the property and appeared to be used for storage and parts repair. Housekeeping on the property was very poor with equipment and chemicals stored haphazardly throughout the yard (see Photograph 20).

The next portion of the Site EMS accessed, was the eastern portion of the 676 Moss Street property which was currently occupied by Rapid Prep. Rapid Prep is a rental location for steel surface preparation equipment. Maintenance for the equipment is performed inside the large building on the property. The interior of the building consists of a large warehouse and small office space. A work bench with tools and lubricants, two forklifts and a flammables cabinet were noted in the southern portion of the warehouse. Three batteries were also stacked near the work bench. To the east of the bench was a small shelf storing enamel, antifreeze and Zep Commercial Industrial Purple Cleaner & Degreaser (see Photograph 21). Three 5-gallon buckets of hydraulic oil and two 5-gallon and 1-gallon diesel and gas containers were also noted on the ground near the southern corner of the warehouse. Along the northeastern corner of the warehouse is the waste oil storage area which consists of three 55-gallon drums on secondary containment pallets (see Photograph 22). Another work bench is located along the northern side of the warehouse. Tools and a refrigerator and microwave was also noted in the northern portion of the warehouse. A secondary warehouse is also located on the northern portion of the building where parts and equipment are stored. EMS also noted a forklift and 55-gallon drums of deliquescent tablets in this warehouse. A small office area with a desk was also noted on the western side of the building. Equipment and a trash bin was stored outside along the eastern side of the property. The northern portion of the property was used for equipment storage and an equipment wash area (see Photograph 23). The drain in the wash area led to a clarifier located on the property (see Photograph 24).

The last property on the Site was the 676B Moss Street property whose current tenant is Kleen Blast. Kleen Blast sells specialty abrasives and sand blast media. The parking area of this property had some staining visible on the asphalt possibly from vehicles (see Photograph 25). Near the southwestern corner of the property is a clarifier (see Photograph 26). EMS was not able to ascertain why the clarifier was installed on the property. The warehouse on the property was primarily used to store abrasives and sand blast products. The southwestern portion of the warehouse did have a maintenance are where engine oil, paint, paint thinner and other maintenance chemicals were stored in cabinets. In the corner of this area EMS also noted some 5-gallon buckets with used oil and some 55-gallon drums filled with trash and parts (see Photograph 27). 5-gallon buckets of Hi-Temp Red Lithium Grease were also noted in this maintenance area. Most things in this warehouse appeared to be covered in a thick layer of abrasive or sand blast media dust. Abrasive and sand blast media was stored in large piles separated by walls in the warehouse area (see Photograph 28). Two 55-gallon drums containing spent abrasives were noted in the northern portion of the warehouse (see Photograph 29). Four drums were also noted outside of the warehouse in the northern portion of the property that were not labeled (see Photograph 30). Along the northern and western portions of the exterior of the building were raw product storage areas. The front of the building faced the street and contained a small office area.

EMS did not observe any use of large quantities of solvents or automotive cleaning products; only small amounts of solvents were observed in 1-gallon containers. In summary, the Site inspection did not reveal the presence of *Recognized Environmental Conditions* except for the following:

- Three diesel ASTs were observed on the 680 Moss Street property and are a concern for subsurface contamination.

- The Hawthorne Cat equipment wash area at 680 Moss Street is a concern for subsurface contamination.

- The motor oil, transmission oil, and drive train oil and used oil storage area at 680 Moss Street is a concern for subsurface contamination.

- Soil staining was observed at the 676 Moss Street, Boat Yard S.D. property and is a concern for subsurface contamination.

- Housekeeping on the Boat Yard S.D. property was very poor with equipment and chemicals stored haphazardly throughout the yard including 55-gallon drums of epoxy vinyl ester resin and is a concern for subsurface contamination.

- The equipment wash area and clarifier located at the 676 Moss Street, Rapid Prep property are a concern for subsurface contamination.

- The clarifier at the 676B Moss Street, Kleen Blast property is a concern for subsurface contamination.

2.4.1 Hazardous Substances in Connection with Identified Uses

Chemicals including petroleum-based lube oils, diesel, paints, thinners and other maintenance chemicals were noted throughout the Site. EMS observe instances of misuse or improper storage of chemicals or poor housekeeping; therefore, the current use of non-hazardous and hazardous substances is an environmental concern.

2.4.2 Other Hazardous Substances and Unidentified Substance Containers

There were some instances of (not in connection with identified uses) unidentified substance containers observed on-site during the site inspection. Please see section 2.4 for additional information.

2.4.3 Storage Tanks

Numerous storage tanks were noted at the site including three diesel ASTs and two clarifiers. EMS also found evidence of the removal of a UST in the northeastern portion of the Site in 1987.

2.4.4 Indications of Polychlorinated Biphenyls (PCBs)

Two pad-mounted electrical transformers were noted on the Site; however, due to their age it is not likely they contain any PCBs.

2.4.5 Indications of Solid Waste Disposal

There were no noted concerns regarding on-site solid waste disposal during the site inspection.

2.4.6 Physical Setting Analysis, if Migrating Substances are an Issue

There were no instances of off-site sources of groundwater contamination that are currently likely to have impacted the site based on available regulatory information and recent groundwater flow; however, the property at 670 L Street which lies adjacent and to the north of the Site, listed spent halogenated solvents as part of their waste stream.

2.4.7 Indications of Asbestos Containing Material (ACM)

Site buildings were originally constructed prior to 1980; therefore, ACM may be present in building materials such as floor tile, ceiling tile, wall-board, grout, pipe and equipment insulation, etc.

2.4.8 Radon Accumulation Potential

The National Radon Database has been developed by the EPA and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The EPA has established the following three zone classifications for radon:

Zone 1 indoor average level > 4 picocuries per liter (pCi/L),
Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L,
Zone 3 indoor average level < 2 pCi/L,

The EDR *Geocheck*® report contains radon information for San Diego County (Appendix B). The EPA Radon Zone for San Diego County is Zone 3 (indoor average level < 2 pCi/L). The EPA recommended guideline for radon is 4.0 pCi/L. Federal radon information also indicates 100% of first floor living areas and 100 % of second floor living areas tested in the San Diego County area were below 4 pCi/L. Basement living areas were not reported.

The EDR report also contains data from a California State database for radon. This database indicates that of the 4 sites tested for radon within the 91911 Zip Code, no sites had radon levels greater than 4.0 pCi/L.

EMS noted no potential concerns with respect to radon at the site.

2.4.9 Indications of Lead Based Paint

The site buildings were constructed prior to 1980; therefore, lead based paint may be present in painted surfaces on the site.

3 Data Gaps

EMS did not interview the previous owner of the Site. The lack of interviews during the completion of this Phase I ESA may be considered significant data gaps; however, the historical use of the Site is well documented. EMS feels the lack of an interview does not significantly impact EMS' ability to identify *Recognized Environmental Conditions* at the Site

4 Findings and Conclusions

EMS performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 for the properties located at 676 – 680 Moss Street, in the City of Chula Vista, San Diego County, California 91911. Any exception to, or deletions from, this practice are described in Section 3 of this report. EMS' Phase I ESA revealed no evidence of *Recognized Environmental Conditions, Historical Recognized Environmental Conditions, Controlled Recognized Environmental Conditions* or *De Minimis Conditions* in connection with the site, except for the following:

Recognized Environmental Conditions:

- The Environmental Protection Agency (EPA) RCRA-SQG lists sites that generate, transport, store, treat and/or dispose of hazardous waste. The RCRA-SQG listing for DRESSER-RAND REPAIR CENTER at 670 L Street, listed spent halogenated solvents as part of their waste stream. This property lies adjacent and potentially upgradient of the Site. EMS believes the proximity of 670 L Street to the Site and the reported waste generated represents a *Recognized Environmental Condition*.

- San Diego County, Department of Environmental Health (DEH) supplied EMS with their records for the Site. Records included UST removal documents for American Mill & Manufacturing previously located at 676 Moss Street. According to the documents provided a 4,000-gallon UST was removed from the Site on 10/19/1987 by American Mill & Manufacturing, Inc. The tank appeared to have been installed in 1970 and stored unleaded gasoline. A map included in the documents appears to show that the tank was previously located in the northeast corner of the property, north of the former drainage wash. Comments from the Hazardous Materials Management Unit, Abandoned Underground Tank Report state that the "tank was a modified propane tank" and had "no apparent leaks". The historical existence of a UST on the Site and the lack of a closure letter represents a *Recognized Environmental Condition*.

- The following are EMS observations during the Site investigation. Three diesel ASTs were observed on the 680 Moss Street property and are a concern for subsurface contamination. The Hawthorne Cat equipment wash area at 680 Moss Street is a concern for subsurface contamination. The motor oil, transmission oil, and drive train oil and used oil storage area at 680 Moss Street is a concern for subsurface contamination. Soil staining was observed at the 676 Moss Street, Boat Yard S.D. property and is a concern for subsurface contamination. Housekeeping on the Boat Yard S.D. property was very poor with equipment and chemicals stored haphazardly throughout the yard including 55-gallon drums of epoxy vinyl ester resin creating a concern for subsurface contamination. The equipment wash area and clarifier located at the 676 Moss Street, Rapid Prep property are a concern for subsurface contamination. The clarifier at the 676B Moss Street, Kleen Blast property is a concern for subsurface contamination. EMS believes these observed conditions at the Site represent a *Recognized Environmental Condition.*

Historical Environmental Conditions:

- The LUST database contains an inventory of reported leaking underground storage tank incidents. Four LUST cases listed in the EDR report were for facilities located within 0.25 mile and potentially up-gradient of the Site. The four facilities listed were RATNER CORPORATION at 642 Arizona Street, CIMMARON TRUCK LINES INC AND CIMMARON TRUCKING at 621 L Street and TEXACO #121647 at 902 Broadway. According to the EDR report the status for these four facilities was listed as "Completed – Case Closed". Based on the status and location of these four facilities, EMS believes they represent an *Historical Recognized Environmental Condition* to the Site.

- The SAM database contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program. Five of the SAM database listings in the EDR report were for facilities located within ¼ mile and potentially up-gradient of the Site. The facilities listed were AMERICAN FASHION, INC at 642 Arizona s, CIMMARON TRUCK LINES INC at 621 L Street, TEXACO REFINING & MARKETING at 902 Broadway, UNOCAL SERV STATION #522130823 at 898 Broadway and FORMILLER AUTO SALES at 1001 Broadway. According to the EDR report the sites had received closure from SAM or other agency programs. Based on the status and location of these five facilities, EMS believes they represent an *Historical Recognized Environmental Condition* to the Site.

- Cleanup Program Sites (CPS-SLIC; also known as Site Cleanups and formerly known as Spills, Leaks, Investigations and Cleanups) program is designed to protect and restore water quality from spills, leaks and similar discharges. Three cases on the CPS-SLIC database were within ¼ mile and potentially upgradient of the Site. All the cases had a status of "Completed – Case Closed". The three cases were AMERICAN FASHION, INC at 642 Arizona Street, CAPE COD BLUES PROPERTY at 979-985 Broadway and UNOCAL SERV STATION #522130823. Based on the status and location of these three facilities, EMS believes they represent an *Historical Recognized Environmental Condition* to the Site.

- The Geotracker website had two listings for the adjacent property at 642 Arizona Street as Cleanup Program Sites. Both listings were identified under the site name of AMERICAN FASHION, INC. The first listing did not identify the contaminant of concern but did list cleanup status as "Completed – Case Closed As Of 2/4/1987". The second listing identified the contaminant of concern as diesel and a cleanup status of "Completed – Case Closed As Of 12/15/2004". A Petroleum Determination Letter for Properties Located at 654-690 L Street and 642 Arizona Street, Chula Vista, Ca was available on the Geotracker website. This letter states that the 642 Arizona Street property meets the requirements for a "low-risk" site according to USEPA Guidance on Contamination by Petroleum or Petroleum Products for Brownfields grant applications. This letter also states that the property was investigated in 1992 and received a "Completed – Case Closed" status by the County of San Diego of Environmental Health on December 14, 2004. The San Diego Regional Water Quality Control Board (RWQCB) letter is provided in Appendix J. Based on the status and proximity of this property to the Site, EMS believes the 642 Arizona Street property represents an *Historical Recognized Environmental Condition*.

Although indoor air quality is specifically listed as a non-scope consideration under Section 13.1.5.7 of ASTM E 1527-13, Environmental Professionals cannot eliminate migration of vapors from the ASTM E 1527-13 Phase I ESA scope of work as this would result in the Phase I ESA being non-AAI compliant. ASTM has released ASTM E 2600-15 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions. The Guidance is directed at identifying the likelihood for migrating vapors to encroach onto a target property creating a Vapor Encroachment Condition (VEC). The potential findings of the ASTM E 2600-15 screening are the following:

- A VEC exists; or,
- A VEC does not exist.

ASTM E 2600-15 is a two Tier process. Tier 1 focuses on known or suspected contaminated properties identified during the Phase I ESA within an Area of Concern (AOC) about the target property. For volatile and semi-volatile organic compounds (VOCs and SVOCs), such as dry-cleaning chemicals and industrial solvents, the AOC is defined as 1/3 mile. For petroleum hydrocarbon chemicals such as gasoline the AOC is defined as 1/10 mile. The AOC can be shortened in the down- and cross-gradient directions if the groundwater flow direction is known. One RCRA-SQG site with spent halogenated solvents as part of their waste stream was discovered in close proximity to the Site. A review of agency documents also revealed the existence of a UST removal on the Site in 1987.

Tier 2 focuses on the contaminated plumes from the contaminated properties identified within the AOC and their proximity (critical distance) to the target property. The critical distance is 100 feet for VOCs and 30 feet for petroleum hydrocarbons. A VEC is likely to exist due to the presence of USTs, oil and waste oil ASTs and 55-gallon drums present on the Site. Based on the Site previously containing a UST and the spent halogenated solvent wastes stream on the adjacent property, EMS believes a VEC exists.

Although not considered Recognized Environmental Conditions as defined by the EPA AAI rule and ASTM E 1527-13, EMS also noted the following potential environmental concerns and issues:

- The site buildings were constructed prior to 1980; therefore, asbestos-containing building materials and lead based paint are still likely to be present on-site.

- The potential presence of VOCs in soil underlying the site and the adjacent property represents a potential vapor intrusion issue in connection with the site.

EMS recommends a Phase II Environmental Site Assessment (ESA) be performed at the individual properties of the Site due to the presence of *Recognized Environmental Conditions*, *Historical Environmental Conditions* and Vapor Encroachment Conditions. A Phase II ESA would require soil testing and soil vapor testing at a minimum in order to evaluate any impacts to the property that could jeopardize human health and/or increase development costs through environmental remediation efforts.

5 Bibliography

Petroleum Determination Letter for Properties Located at 654-690 L Street and 642 Arizona Street, Chula Vista, RWQCB, March 6, 2013

E-2: Phase II ESA

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PHASE II ENVIRONMENTAL SITE ASSESSMENT

676, 676B AND 680 MOSS STREET
CHULA VISTA, CALIFORNIA 91911

SHOPOFF LAND FUND V, LP
2 PARK PLAZA, SUITE 700
IRVINE, CA 92614

PROJECT NO. EMS571

AUGUST 14, 2018

EMS
ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.

TECHNICAL REPORT

PHASE II ENVIRONMENTAL SITE ASSESSMENT

676, 676B AND 680 MOSS STREET CHULA VISTA, CALIFORNIA 91911

PREPARED FOR:

SHOPOFF LAND FUND V, LP
2 PARK PLAZA, SUITE 700
IRVINE, CA 92614

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PROJECT NO. EMS571

AUGUST 14, 2018

Limitations and Certifications

Environmental Management Strategies, Inc. (EMS) has prepared this Report for **Shopoff Land Fund V, LP** assigned parties only. EMS' services in preparation of this document have been performed and rendered in accordance with procedures, practices and standards generally accepted and customary in the consultant's profession for use in similar assignments. No other warranty, expressed or implied, is made.

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Appendix A: Soil Vapor Sampling Field Logs

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Appendix C: Laboratory Reports for Soil Vapor

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List of Acronyms

AST	Above Ground Storage Tank
ASTM	American Society of Testing Methods
bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
Cal-EPA	California Environmental Protection Agency
CAM	California Administrative Code
C.Hg.	California Certified Hydrogeologist
DTSC	California Department of Toxic Substances Control
ELAP	Environmental Laboratory Accreditation Program
EMS	Environmental Management Strategies, Inc.
ESL	Environmental Screening Level
ft.	Feet
HERO	DTSC Human and Ecological Risk Office
mg/kg	Milligrams per Kilogram
NELAP	National Environmental Laboratory Accreditation Program
PCE	Tetrachloroethene
P.G.	California Professional Geologist
PID	Photoionization Detector
QA/QC	Quality Assurance and Quality Control
RL	Laboratory Reporting Limit
RSL	USEPA Region 9 Regional Screening Level
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SSL	Human Health Soil Screening Level
SWRCB	California State Water Resources Control Board
SVSL	Human Health Soil Vapor Screening Level
TCE	Trichloroethene
TPH	Total Petroleum Hydrocarbons
USCS	Uniform Soil Classification System
VOC	Volatile Organic Compound
µg/kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
$\mu g/m^3$	Micrograms per Cubic Meter
USEPA	United States Environmental Protection Agency

1 Introduction

Environmental Management Strategies, Inc. (EMS) has completed a Phase II Environmental Site Assessment (Phase II ESA) for the properties located at 676, 676B and 680 Moss Street, in the City of Chula Vista, San Diego County, California (the "Site", **Figure 1**). Shopoff Land Fund V, LP (Shopoff) retained EMS to perform the Phase II ESA in support of Shopoff's planned purchase and redevelopment of the Site. This Phase II ESA was performed by EMS to further investigate Recognized Environmental Conditions (RECs) at the Site identified in a Phase I ESA dated July 2018 prepared by EMS.

2 Project Background

The Site is located at 676, 676B and 680 Moss Street in in a mixed commercial/industrial and residential area within the City of Chula Vista, San Diego County, California. The site is bordered to the north by a storage facility used by the Sweetwater School District, to the west by a rail right of way, Industrial Boulevard and a parking lot and to the south and east by residences.

The site is comprised of three parcels of land identified as parcel numbers 618-010-26-01, 618-010-31-00 and 618-010-32-00. Current tenants at the Site are Hawthorne Cat at 680 Moss Street, Southwest Mobile Storage at 680 Moss Street, Boat Yard S.D. at 676 Moss Street, Rapid Prep at 676 Moss Street and Kleen Blast at 676B Moss Street. Hawthorne Cat is a heavy machinery rental and sales yard, Southwest Mobile Storage rents storage containers, Boat Yard S.D. appears to do boat repair, Rapid Prep is a rental location for steel surface preparation equipment and Kleen Blast sells specialty abrasives and sand blast media.

A Phase I ESA prepared by EMS dated July 2018 identified several RECs for the Site including the following items listed below. EMS recommended a Phase II ESA be performed to evaluate the potential impact to soil and soil vapor at the Site from these RECs (EMS, July 2018).

- Three diesel above ground storage tanks (ASTs) were observed on the 680 Moss Street property and are a concern for subsurface contamination.
- The Hawthorne Cat equipment wash area at 680 Moss Street is a concern for subsurface contamination.
- The motor oil, transmission oil, and drive train oil and used oil storage area at 680 Moss Street is a concern for subsurface contamination.
- Soil staining was observed at the 676 Moss Street, Boat Yard S.D. property and is a concern for subsurface contamination.
- Housekeeping on the Boat Yard S.D. property was very poor with equipment and chemicals stored haphazardly throughout the yard and is a concern for subsurface contamination.
- The equipment wash area and clarifier located at the 676 Moss Street, Rapid Prep property are a concern for subsurface contamination.

- The clarifier at the 676B Moss Street, Kleen Blast property is a concern for subsurface contamination.
- A 4,000-gallon underground fuel storage tank (UST) was removed from the northeast corner of Site during 1987 by American Mill & Manufacturing, Inc. The tank appeared to have been installed in 1970 and stored unleaded gasoline. Comments from the County of San Diego Hazardous Materials Management Unit, Abandoned Underground Tank Report state that the tank had no apparent leaks. However, UST case records do not include a closure or "no further action" letter.

3 Geology and Hydrogeology

Shallow soil types encountered by EMS beneath the Site to a depth of 15-feet bgs primarily consisted of silt with some fine sand and clay. Groundwater was not encountered to a depth of 15 feet bgs. A preliminary geotechnical investigation performed at the Site by LGC Valley, Inc., during June 2018 described soil beneath the Site to be primarily composed of massively bedded, reddish-brown, dark brown, and gray-brown, weakly cemented, stiff to hard, silty to sandy clay, clayey silt, and silty to clayey sand. This unit was encountered to the maximum drilling depth of 51 feet bgs. Undocumented fill soils were encountered by LGC on-Site consisting of dark brown silty clay, sandy clay, and clayey sand derived of onsite alluvial flood-plain deposits. Fill below the existing buildings are expected to be relatively shallow, while the fill above old drainage channels are expected to possibly exceed 12 feet in depth. Groundwater was encountered during drilling by LGC at approximately 32 feet below the ground surface (bgs) which is approximately at sea level.

4 Scope of Work

EMS performed the scope of work described below in completion of the Phase II ESA at the Site. All Phase II work was directly supervised by a California Professional Geologist (P.G.) and Certified Hydrogeologist (C.Hg).

- Mark boring locations and Notify Underground Service Alert (Dig Alert) of the proposed work and schedule.
- Prepare a Site Health and Safety Plan for work to be performed.
- Clear proposed boring locations for buried obstacles using a licensed geophysical locating service.
- Advancement of 14 direct-push (GeoProbe™) borings at the locations indicated on **Figure 2**. The borings were advanced to depths of 5-feet and 15-feet bgs.
- Collection of soil samples in each of the 14 borings boring at depths of 2-feet and 5-feet bgs, and at 10-feet and 15-feet in the 15-foot borings. Chemical analysis of soil for volatile organic compounds (VOC) by EPA Method 8260B, total petroleum hydrocarbons (TPH) as gasoline, diesel and motor oil by EPA method 8015B and for California Administrative Code (CAM) 17 Metals by EPA Method 6000/7000 series.

- Installation of soil vapor probes in each of the 14 borings. Single probes were set at 5-feet in the 5-foot borings and nested probes were set at 5-feet and 15-feet in the 15-foot borings.
- Collection of soil vapor samples from each probe according to the DTSC July 2015 Advisory on Active Soil Gas Investigations for chemical analysis of VOCs by EPA Method TO-15.
- Abandonment of the soil vapor monitoring probes after completion of sampling by pulling the tubing and re-paving the boreholes drilled though pavement with rapid-set concrete.
- Preparation of this Phase II ESA Report.

5 Soil Sample Collection Methods

Field work for soil sample collection was performed on August 2 and 3, 2018. Continuous core soil samples were collected from 14 soil borings from the soil surface to 5-feet bgs in the 5-foot borings and to 15-feet bgs in the 15-foot borings using Geoprobe™ direct-push probe equipment and 5-foot length by 2.25-inch diameter Macrocore™ samplers (**Figure 2**). The samplers were loaded with new cellulose-acetate-butyrate (CAB) liners for retention of the cores.

Approximate six-inch sections of the liners were cut from the cores from approximate depths of 2, 5, 10 and 15-feet and sealed using Teflon sheets and plastic end-caps. These sections were labeled and placed in an ice-chest for temporary cold storage. The soil samples were labeled, logged on a chain-of-custody form and submitted to Sunstar Laboratory located in Lake Forest, California (California ELAP No. 2250). Remaining soil from each core was screened for volatile organic carbon content using a MiniRae 2000 Portable Photoionization Detector (PID) calibrated with 100 ppmv isobutylene. Volatile organic carbon was not detected by the PID in any of the soil cores.

6 Soil Vapor Sample Collection Methods

Following completion of soil sampling, soil vapor probes were installed in each boring. Single soil vapor probes were installed to a depth of 5-feet in each of eight 5-foot borings. Nested soil vapor probes were installed at depths of 5-feet and 15-feet in each of six 15-foot borings. A diagram of a 5-foot single and a 15-foot nested soil vapor probe is provided as Figure 3. The soil vapor probes were installed in accordance with the DTSC July 2015 Advisory on Active Soil Gas Investigations (DTSC 2015 Advisory).

Soil vapor samples were collected by EMS following probe installation on August 2 and 3, 2018 after allowing a minimum of two-hours of probe equilibration time before sampling as recommend in the DTSC 2015 Advisory. The soil vapor samples were collected using batch certified clean one-liter passivated stainless-steel canisters (Summa™ Canisters) and 150-200 cc/min flow controllers provided by Eurofins/Calscience Laboratory located in Garden Grove, California (NELAP Number CA300001). The canisters were supplied with minimum internal vacuums of 29.50 inches of mercury. Probe leak testing was performed in accordance with the DTSC 2015 Advisory which included vacuum shut-in tests and use of a liquid leak tracer (isopropanol). during sample collection for each probe. As recommended in the DTSC 2015 Advisory, samples were collected after removing three purge volume of soil vapor from each probe.

Quality assurance and control duplicate soil vapor samples were collected from probe SLF-9-5 ft. on August 2, 2018 and from probe SLF-13-15ft. on August 3, 2018. Field report logs for soil vapor sampling are provided in **Appendix A**. Following completion of soil vapor sampling, each soil vapor probe was removed, and the boreholes drilled in pavement were patched at the surface with rapid-set concrete.

7 Soil Chemical Analysis Methods and Results

The soil samples collected for this project were submitted to Sunstar Laboratories, Inc., located in Lake Forest, California for chemical analysis. A total of 40 soil samples were analyzed by Sunstar for VOCs using EPA method 8260B, TPH as gasoline, diesel and motor oil range organics using EPA method 8015B and for CAM 17 metals using EPA Method 6000/7000 series. These analytical methods were selected based on historical property use and common priority pollutant concern of these contaminants in industrial urban areas. The laboratory report and chain-of-custody document for the soils analyses are provided in **Appendix B**. A summary of the analytical data for TPH and VOCs is provided as **Table 1**. A summary of the analytical data for metals is provided as Table 2.

VOCs were not detected in any of the 40 soil samples collected at the Site. Low concentrations of TPH-diesel and TPH-motor oil were detected in eleven of the 40 soil samples collected at the Site ranging from 12 mg/kg to 110 mg/kg, and 11 mg/kg to 2,100 mg/kg, respectively (**Table 1**). Figure 4 is a Site plan showing the distribution of TPH detected in soil.

Nine metals were detected in soil consisting of arsenic, barium, chromium, cobalt, copper, lead, nickel vanadium and zinc (Table 2). Except for the concentrations of lead, copper and zinc in two soil samples (SLF-8-5 ft. and SLF-9-2 ft.), the concentrations of metals detected in soil were at or below the average background concentrations of metals in southern California soil (Bradford 2002, DTSC undated publication).

8 Soil Vapor Chemical Analysis Methods and Results

The soil vapor samples collected for this project were submitted to Eurofins/Calscience Laboratory located in Garden Grove, California for chemical analysis. The soil vapor samples were analyzed for the full-scan list of VOCs using EPA Method TO-15. The soil vapor samples were also analyzed for the leak tracer compound isopropanol. The laboratory reports and chain-of-custody documents for the soil vapor analyses are provided in **Appendix C**. A summary of the analytical data for soil vapor is provided as **Table 3**.

Low concentrations of twenty-two VOCs were detected in soil vapor samples collected at the Site (**Table 3**). The most prevalent VOCs detected soil vapor were acetone, 2-butanone (methyl ethyl ketone), BTEX compounds (benzene, toluene, ethylbenzene and xylene), and tetrachloroethene (PCE). **Figure 5** is a site plan showing the distribution of PCE and benzene detected in soil vapor.

9 Quality Assurance and Quality Control Review

The laboratory analytical reports were reviewed and evaluated to assess the overall quality and usability of the data. The purpose of this Phase II ESA was to evaluate the potential presence of certain types of common environmental contaminants in soil and soil vapor as part of an environmental due-diligence process for a potential real estate property transaction. No quality assurance and quality control (QA/QC) deficiencies or data qualifiers were noted that would otherwise disqualify use of the data for the project purpose. Supporting QA/QC documentation that was evaluated for the soil and soil vapor analytical reports included the following major items:

- Chain of Custody
- Sample Holding Times
- Surrogate Spike Recoveries
- Method Blanks (MB)
- Laboratory Control Samples (LCS)
- Laboratory Control Sample Duplicates (LCSD)
- Matrix Spike Samples (MD)
- Matrix Spike Duplicate Samples (MSD)
- Field Duplicates
- Equipment Blanks
- Method Detection Level (MDL) and Reporting Limit (RL)
- Data Qualifiers

9.1 Data Qualifiers

Provided below is a summary of data qualifiers contained in laboratory analytical reports prepared for this investigation. These data qualifiers are not expected to negatively impact sample data quality of the laboratory reports.

9.1.1 August 10, 2018 Sunstar Laboratory Report for Soil

- QM-05: The matrix spike recovery was slightly outside (above) acceptance limits for the Matrix Spike (MS) and Matrix Spike Duplicate (MSD) QC sample for barium due to possible matrix interference. The Laboratory Control Sample (LCS) was within acceptance criteria. The data is acceptable as no negative impact on data is expected.

- QM-04: The relative percent difference between the MS and MSD recovery of mercury was slightly outside acceptance criteria for the MSD QC sample. The results are accepted based upon percent recovery results in the duplicate QC sample and the Continuing Calibration Verification (CCV) results.

9.2 Soil Vapor Probe Shut-In and Leak Tracer Testing

The soil vapor sampling apparatus used by EMS for this project is equipped with a vacuum gauge and valves used to perform a shut-in leak test of the sampling train between the top of the probe and the inlet to the vacuum pump. Shut-in tests were performed for each probe at a vacuum of at

least 100 inches of water column for a period of at least one minute. No visible movement of the vacuum gauge needle was observed during the tests. Leak testing was also performed by applying a liquid leak tracer (isopropanol) to cotton swabs placed at the points where the probes daylight from the subsurface, and at the connections to the sampling apparatus. Isopropanol was not detected in any of the soil vapor samples analyzed for this project by EPA Method TO-15. These results demonstrate leakage of ambient air into the soil vapor probes did not occur during sampling.

9.3 Soil Vapor Field Duplicate Samples

Except for PCE, VOCs detected in the primary sample from probe SLF-9-5 ft, were also detected in the duplicate samples at similar concentrations. PCE was not detected in the primary sample from soil vapor probe SLF-9-5 ft. The concentrations of VOCs in the duplicate sample from soil vapor probe SLF-13-15 ft. were lower than the primary sample from this probe. Significant vacuum (low flow condition) was encountered in probe SLF-13-15 ft. which resulted in a longer sample collection time (one hour) compared to all other samples (approximately 10 minutes). Low flow conditions and build-up of vacuum during sampling in this probe may have affected the precision of sample recovery between the primary and duplicate samples resulting in lower concentrations detected in the duplicate.

10 Preliminary Risk Screening Evaluation

Provided below is a preliminary screening evaluation of health risk using site-specific soil and soil vapor analytical data in comparison to "Tier 1" health-based environmental screening levels for soil and soil vapor published by the California DTSC, US EPA Region 9 and the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). These publications are listed below.

- DTSC Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, October 2011
- DTSC Human and Ecological Risk Office (HERO) Note 3, June 2018
- US EPA Region 9 Regional Screening Levels (RSLs), June 2018
- SFBRWQCB Environmental Screening Levels, February 2016

10.1 Total Petroleum Hydrocarbons in Soil

TPH-gasoline was not detected in any of the 40 soil samples collected by EMS at the Site. The concentrations of TPH-diesel and TPH-motor oil detected in soil do not exceed the San Francisco Bay Regional Water Quality Environmental Screening Levels (ESLs) for direct soil exposure to humans at residential sites of (**Table 1**). Based on this screening-level evaluation, the concentrations of TPH detected in soil at the locations and depths sampled by EMS are not expected to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.

10.2 Metals in Soil

Except for copper, lead and zinc in two soil samples (SLF-8-5 ft. and SLF-9-2 ft.) the concentrations of metals detected in soil were near or below the average background concentrations of metals in California soil (Bradford, 1996). However, the maximum concentration of copper, lead and zinc detected in soil do not exceed the DTSC June 2018 HERO Note 3 health-based soil screening level (SSL) for residential properties (**Table 2**).

The reported concentrations of arsenic in soil exceed the SSL for residential sites of 0.11 milligrams per kilogram (mg/kg). However, the maximum detected concentration of 7.3 mg/kg does not exceed the background concentration of arsenic in southern California soil of 12 mg/kg established by the DTSC (DTSC 2008 and undated publication). This background level is used to evaluate the potential for elevated concentrations of arsenic that may require additional evaluation at school sites. Based on this screening-level evaluation, the concentrations of metals detected in soil at the locations and depths sampled do not appear to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.

10.3 Volatile Organic Compounds in Soil

VOCs were not detected in any of the 40 soil samples collected by EMS as the Site. VOCs in soil matrix at the locations and depths samples by EMS are not expected to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.

10.4 Volatile Organic Compounds in Soil Vapor

PCE concentrations in the soil vapor samples from probes SLF-5-15 ft. and SLF-65 ft. marginally exceed a residential soil vapor screening level (SVSL) for potential vapor intrusion of 460 micrograms per cubic meter (µg/m3) using DTSC June 2018 HERO Note 3 indoor air screening levels and the DTSC October 2011 Vapor Intrusion (VI) Guideline attenuation factor (α) for future residential buildings of 0.001 (**Table 3**). Since residential buildings are planned for the Site, the DTSC future residential building α was used for this evaluation. The concentrations of PCE in samples SLF-5-15ft. and SLF-56-5 ft. were reported as 660 $\mu g/m^3$ and 890 $\mu g/m^3$, respectively. These concentrations do not exceed Commercial SVSLs determined using the same references. No other VOCs detected in soil vapor exceed future residential SVSLs calculated using current DTSC June 2018 HERO Note 3 and US EPA May 2018 Region 9 Regional Screening Level (RSL) guidance documents. A comparison of VOC concentrations detected in soil vapor with future residential and commercial SVSLs is provided in **Table 3**.

11 Conclusions

The purpose of this Phase II ESA was to further investigate Recognized Environmental Conditions (RECs) identified in a Phase I ESA prepared for the Site by EMS. EMS concludes the following based on the finding of this Phase II ESA:

- The concentrations of metals detected in soil at the locations and depths sampled do not appear to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.
- Soil at certain areas of the Site contain low concentrations of total petroleum hydrocarbons (TPH) as motor oil-range organics and lesser concentrations of diesel-range organics. The source of TPH may be from limited surface spillage at the Site or from asphalt debris in in shallow fill soil beneath the Site. The concentrations of TPH detected in soil at the locations and depths sampled do not exceed the San Francisco Bay Regional Water Quality Environmental Screening Levels (ESLs) for direct soil exposure to humans at residential sites and are not expected to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.
- VOCs were not detected in any of the soil samples collected by EMS as the Site. VOCs in soil matrix at the locations and depths sampled by EMS are not expected to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.
- Low concentrations of twenty-two VOCs were detected in soil vapor samples collected at the Site. The occurrence of VOCs in soil vapor is wide-spread across the Site. The most prevalent VOCs detected in soil vapor were acetone, 2-butanone (methyl ethyl ketone), BTEX compounds (benzene, toluene, ethylbenzene and xylene), and tetrachloroethene (PCE). PCE detected in the soil vapor samples at probe locations SLF-5 and SLF-6-5 marginally exceed a future residential soil vapor screening level (SVSLs) of 460 micrograms per cubic meter (µg/m3) determined using current DTSC 2011 VI Guidance and DTSC June 2018 HERO Note 3 indoor air screening levels. No other VOCs detected in soil vapor exceed future residential SVSLs based on current DTSC VI guidance.
- The wide-spread occurrence of BTEX compounds in soil vapor suggest releases of gasoline product have occurred in the area of the Site. This may include on-Site and off-Site sources. EMS did not identify a soil source of BTEX, and the distribution of these VOCs in soil vapor did not identify a specific potential release area or "hot-spot" on-Site. A gasoline UST removed from the northeast corner of the Site. However, the concentrations of BTEX detected in soil vapor at this location are similar to, or lower than, other areas of the Site suggesting the removed UST is not a source of VOCs detected in soil vapor.
- According to the State Water Resource Control Board's Geotracker on-line database, multiple sources of gasoline contamination to soil and groundwater are located up-gradient of the Site. Three of these release areas are located approximately 0.25-miles northeast of the Site at the

intersection of Broadway and L Street (76 Station at 898 Broadway, Shell Station at 902 Broadway and Texaco Station at 903 Broadway, **Figure 6**). According to groundwater monitoring reports prepared for these cases, groundwater flows southwest from the stations towards the Site (**Appendix D**). Groundwater beneath and down-grading of these stations has been impacted with free-phase floating gasoline product. Recent groundwater monitoring reports for these cases indicate free-phase floating product is still present on groundwater. The extents of groundwater contamination down-gradient from these sources, and other upgradient sources, do not appear to have been completely defined. Groundwater is located at a depth of approximately 32 feet beneath the Site. Gasoline-impacted groundwater flowing beneath the Site from up-gradient sources could be contributing to BTEX compounds detected in soil vapor.

- The highest concentrations of PCE in soil vapor were detected at probe locations SLF-5 and SLF-6. These probes are located adjacent to an equipment wash area and three-stage clarifier at 676 Moss Street (**Figure 4**). The wash area and clarifier may have been a generally weak source for the relatively higher concentrations of PCE detected in soil vapor near this area. However, PCE, acetone and 2-butanone were detected in soil vapor across the Site suggesting other sources, include off-Site sources, likely exist that may be contributing the detection of this VOC in soil vapor.

12 Recommendations

The findings of this Phase II ESA do not indicate the Site is unsuitable for the intended residential redevelopment, or that soil remediation is likely necessary prior to Site redevelopment. However, the source or sources of the wide-spread occurrence of generally low concentrations of VOCs detected in soil vapor has not be identified. Multiple sources of VOCs exist in the vicinity of the Site. Contaminated groundwater from up-gradient sources may be contributing to VOCs detected in soil vapor at the Site. A contaminated groundwater source could act as a long-term source of VOCs in soil vapor that may fluctuate in strength over time (increase or decrease). Therefore, EMS recommends consideration of performing a limited groundwater assessment at the Site to evaluate this potential condition. If it can be determined that groundwater is a likely source of VOCs in soil vapor, EMS would recommend proposed residential structures be underlain with passively vented vapor intrusion barriers (vapor intrusion mitigation), or not have residential living spaces on ground floor levels that could be subject to potential vapor intrusion conditions.

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Tables

Table 1

Summary of Total Petroleum Hydrocarbon and Volatile Organic Compound Analytical Data for Soil

Shopoff Land Fund V, Moss Street Assemblage, Chula Vista, California

Sample Number/Depth	Date Collected mm/dd/yy	TPH-Gasoline (mg/kg)	TPH-Diesel (mg/kg)	TPH-Motor Oil (mg/kg)	VOCs (All) (µg/kg)
SLF-1-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-1-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-2-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-2-5 ft.	08/02/18	ND<10	ND<10	11	ND
SLF-2-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-2-15 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-3-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-3-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-4-2 ft.	08/02/18	ND<10	16	200	ND
SLF-4-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-5-2 ft.	08/02/18	ND<10	13	110	ND
SLF-5-5 ft.	08/02/18	ND<10	12	39	ND
SLF-5-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-5-15 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-6-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-6-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-7-2 ft.	08/02/18	ND<10	110	2,100	ND
SLF-7-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-7-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-7-15 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-8-2 ft.	08/02/18	ND<10	34	570	ND
SLF-8-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-9-2 ft.	08/02/18	ND<10	14	130	ND
SLF-9-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-9-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-9-15 ft.	08/02/18	ND<10	12	ND<10	ND
SLF-10-2 ft.	08/02/18	ND<10	13	14	ND
SLF-10-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-11-2 ft.	08/02/18	ND<10	17	99	ND
SLF-11-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-12-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-12-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-13-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-13-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-13-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND

Sample Number/Depth	Date Collected mm/dd/yy	TPH-Gasoline (mg/kg)	TPH-Diesel (mg/kg)	TPH-Motor Oil (mg/kg)	VOCs (All) (µg/kg)
SLF-13-15 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-14-2 ft.	08/02/18	ND<10	12	120	ND
SLF-14-5 ft.	08/02/18	ND<10	14	150	ND
SLF-14-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-14-15 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SSL Residential		NA	230[a]	11,000[a]	NA
SSL Commercial		NA	1,100[a]	140,000[a]	NA

TPH = total petroleum hydrocarbons by EPA method 8015B as gasoline (C6-C12), diesel (C13-C28) and motor oil (C29-C40)
VOCs = Voaltile Orgacnic Compounds by EPA Method 8206B
OC Pesticides = organochlorine pesticides by EPA Method 8081A
mg/kg = milligrams per kilogram or parts per million
µg/kg = micrograms per kilogram or parts per billion
ND = not detected at or above laboratory reporting limit (RL)
SSL = soil screening level for residential and commercial use properties
[a] = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (SFBRWQCB 2016)
NA = not applicable, screening level not established or chemical not detected in soil

Table 2
Summary of CAM Title 22 Metals Analytical Data for Soil
Shopoff Land Fund V - Moss Street Assemblage, Chula Vista, California

Sample Number/Depth	Arsenic (mg/kg)	Barium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SLF-1-2 ft.	ND<5.0	42	7.4	7.2	11	8.7	28	28	28
SLF-1-5 ft.	ND<5.0	27	8.4	7.5	5.5	ND<3.0	5.3	30	20
SLF-2-2 ft.	ND<5.0	29	7.3	6.5	5.7	ND<3.0	4.7	26	17
SLF-2-5 ft.	ND<5.0	45	11	7.7	7.7	ND<3.0	6.3	45	25
SLF-2-10 ft.	ND<5.0	82	9.7	8.7	6.8	ND<3.0	6.8	42	23
SLF-2-15 ft.	ND<5.0	48	6.3	6.4	4.8	ND<3.0	4.9	32	16
SLF-3-2 ft.	ND<5.0	88	9.2	8.1	12	11	6.8	34	48
SLF-3-5 ft.	5.2	160	13	9	9.8	7.2	7.9	53	35
SLF-4-2 ft.	5.3	90	9.9	7.2	10	10	5.9	33	36
SLF-4-5 ft.	ND<5.0	85	9.6	7.8	11	7.1	5.9	37	28
SLF-5-2 ft.	ND<5.0	68	13	8.1	10	ND<3.0	5.6	45	44
SLF-5-5 ft.	ND<5.0	110	8.2	6.8	13	11	5.5	29	54
SLF-5-10 ft.	ND<5.0	35	4.7	4.7	4.8	ND<3.0	3.2	19	12
SLF-5-15 ft.	ND<5.0	41	7.9	6.2	6.9	ND<3.0	4.8	32	17
SLF-6-2 ft.	6.7	76	5.6	5.9	8.4	ND<3.0	3.4	42	24
SLF-6-5 ft.	5.2	100	7.9	5.7	12	11	5.3	29	44
SLF-7-2 ft.	8.2	92	17	7.4	25	14	12	47	43
SLF-7-5 ft.	ND<5.0	130	8.4	6.2	14	19	6.5	30	69
SLF-7-10 ft.	ND<5.0	81	6.8	6.2	6.6	ND<3.0	4.6	26	18
SLF-7-15 ft.	ND<5.0	110	6.6	7.4	6.7	ND<3.0	5.5	30	17
SLF-8-2 ft.	5.0	49	8.1	6.5	12	7.5	6.8	46	38
SLF-8-5 ft.	ND<5.0	120	11	7.1	140	29	7.2	34	160
SLF-9-2 ft.	5.3	160	11	7.2	140	79	9.1	36	610
SLF-9-5 ft.	ND<5.0	78	8.8	6.8	8.0	ND<3.0	6.1	30	46
SLF-9-10 ft.	ND<5.0	140	7.4	6.1	6.9	ND<3.0	5.2	27	41
SLF-9-15 ft.	ND<5.0	45	5.8	6.0	6.1	ND<3.0	4.4	25	94
SLF-10-2 ft.	ND<5.0	69	10	7.1	12	11	5.9	50	59
SLF-10-5 ft.	5.2	74	13	9.2	11	8.0	8.1	47	42
SLF-11-2 ft.	6.2	70	11	7.9	8.9	ND<3.0	5.0	60	33
SLF-11-5 ft.	5.4	80	12	7.3	15	9.0	7.4	33	42
SLF-12-2 ft.	ND<5.0	53	9.7	7.1	7.1	ND<3.0	6.6	39	31
SLF-12-5 ft.	7.3	110	12	8.1	15	11	7.8	38	41
SLF-13-2 ft.	ND<5.0	59	9.9	7.3	9.3	ND<3.0	4.8	64	35
SLF-13-5 ft.	ND<5.0	32	7.8	7.0	6.2	ND<3.0	6.0	31	17
SLF-13-10 ft.	ND<5.0	43	7.8	11	7.2	ND<3.0	8.1	36	16
SLF-13-15 ft.	ND<5.0	69	17	11	17	ND<3.0	12	91	46

Sample Number/Depth	Arsenic (mg/kg)	Barium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SLF-14-2 ft.	ND<5.0	75	8.7	6.3	9.0	ND<3.0	5.8	27	30
SLF-14-5 ft.	ND<5.0	53	7.4	6.8	7.7	ND<3.0	6.0	27	26
SLF-14-10 ft.	ND<5.0	57	7.5	6.5	6.0	ND<3.0	5.7	33	17
SLF-14-15 ft.	ND<5.0	62	7.8	6.7	6.1	ND<3.0	5.2	36	19
SSL - Residential	0.11[a,c]	15,000[b]	36,000[a]	23[b]	3,100[b]	80[a]	490[a]	390[a]	23,000[b]
SSL - Commercial	0.36[a,c]	220,000[b]	170,000[a]	350[b]	47,000[b]	320[a]	3,100[a]	1,000[a]	350,000[b]
Calif. Background	12[d]	509	122	14.9	28.7	23.9	57	112	149

mg/kg = Milligrams per kilogram or parts per million
ND = Not detected at or above laboratory reporting limit
RL = Laboratory reporting limit
SSL = Soil screening level for residential and commercial properties. Listed value is the lower of either cancer or non-cancer health effect concentration.
Background = Average background concentrations of metals in California soil (Bradford, 1996)
[a] = DTSC HERO HHRA Screening Level for residential soil (DTSC June 2018). SSL for Cr as CrIII.
[b] = USA EPA Region 9 Regional Screening Level for residential soil (EPA June 2018)
[c] = As noted in DTSC HERO HHRA Note 6, the SSL for arsenic assumes 100% of the metal is bioavailable leading to an over estimation of risk. The DTSC has determined arsenic in southern California soil to be 12 mg/kg. This background level is used as a baseline for determining elevated site-specific sources.
[d] = Determination of a Southern California Regional Background Arsenic Concentration in Soil (DTSC, 2008 and Undated Publication)

Table 3
Summary of Volatile Organic Compound Analytical Data for Soil Vapor Samples
Chemical Analysis by EPA Method TO-15
Shopoff Land Fund V, Moss Street Assemblage, Chula Vista, California

Sample Number/Depth	Collected (mm/dd/yy)	Acetone (µg/m³)	Benzene (µg/m³)	2-Butanone (µg/m³)	Carbon Disulfide (µg/m³)	Chloroethane (µg/m³)	Chloroform (µg/m³)	Chloromethane (µg/m³)	E.Benzene (µg/m³)	4-Ethyltoluene (µg/m³)	MIBK (µg/m³)	PCE (µg/m³)	TCE (µg/m³)	VC (µg/m³)	1,1,1-TCA (µg/m³)	Styrene (µg/m³)	Toluene (µg/m³)	1,2-DCP (µg/m³)	Freon 12 (µg/m³)	1,2,4-TMB (µg/m³)	1,3,5-TMB (µg/m³)	o-Xylene (µg/m³)	p/m-Xylene (µg/m³)	IPA (µg/m³)
SLF-1-5 ft.	08/02/18	320	37	54	87	ND	130	ND	46	6.6	57	70	55	ND	ND	ND	290	ND	4.9	25	7.6	51	130	ND
SLF-2-5 ft.	08/02/18	230	72	36	8.0	ND	6.4	2.2	62	15	ND	4.8	ND	ND	ND	ND	290	ND	4.0	60	17	76	200	ND
SLF-2-15 ft.	08/02/18	62	6.7	25	ND	ND	41	ND	3.5	ND	11	57	37	ND	ND	ND	12	ND	ND	ND	ND	ND	ND	ND
SLF-3-5 ft.	08/02/18	60	5.6	23	ND	ND	ND	ND	4.0	ND	9.8	27	10	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	ND
SLF-4-5 ft.	08/03/18	29	17	6.6	ND	ND	3.7	ND	28	6.5	ND	16	4.8	ND	ND	ND	92	ND	3.1	28	9.9	33	93	ND
SLF-5-5 ft.	08/03/18	83	20	22	ND	ND	2.9	ND	81	7.5	6.4	370	ND	ND	ND	ND	130	ND	ND	32	9.0	130	340	ND
SLF-5-15 ft.	08/03/18	100	5.9	35	7.3	ND	ND	ND	120	ND	8.2	**660**	ND	ND	ND	ND	19	ND	ND	ND	ND	230	560	ND
SLF-6-5 ft.	08/03/18	30	13	10	ND	ND	8.6	24	36	13	ND	**890**	11	ND	3.0	ND	110	ND	ND	58	20	45	130	ND
SLF-7-5 ft.	08/03/18	150	19	35	ND	ND	ND	ND	15	ND	ND	31	ND	ND	ND	ND	54	ND	ND	14	5.1	14	38	ND
SLF-7-15 ft.	08/03/18	190	18	46	ND	ND	ND	ND	23	6.5	ND	34	ND	ND	ND	ND	55	ND	ND	27	9.8	23	65	ND
SLF-8-5 ft.	08/03/18	95	57	18	11	3.7	ND	3.4	62	16	ND	4.7	ND	ND	ND	ND	180	ND	ND	68	24	88	220	ND
SLF-9-5 ft.	08/02/18	130	43	25	17	ND	ND	ND	74	24	ND	ND	ND	ND	ND	36	310	ND	ND	91	25	94	270	ND
SLF-9-5 ft. DUP	08/02/18	120	44	24	15	ND	ND	ND	72	20	ND	27	ND	ND	ND	ND	300	ND	ND	55	20	82	240	ND
SLF-9-15 ft.	08/02/18	66	8.2	25	ND	ND	ND	ND	11	ND	6.8	9.1	ND	ND	ND	ND	51	ND	ND	ND	ND	10	31	ND
SLF-10-5 ft.	08/03/18	300	89	62	110	ND	ND	ND	ND	ND	ND	13	10	ND	ND	ND	290	5.9	ND	ND	ND	12	63	ND
SLF-11-5 ft.	08/03/18	180	63	59	42	5.5	ND	9.8	85	14	8.3	32	3.6	2.0	ND	ND	250	ND	3.3	56	24	ND	ND	ND
SLF-12-5 ft.	08/03/18	60	8.7	25	ND	ND	2.7	ND	17	ND	6.2	18	2.9	ND	ND	ND	49	ND	ND	21	6.2	22	59	ND
SLF-13-5 ft.	08/03/18	90	18	19	9.1	ND	ND	ND	31	8.3	ND	8.4	ND	ND	ND	ND	120	ND	ND	ND	35	12	110	ND
SLF-13-15 ft.	08/03/18	88	23	20	20	ND	ND	7.7	13	ND	ND	57	ND	ND	ND	ND	58	ND	ND	16	ND	16	43	ND
SLF-13-15 ft. DUP	08/03/18	49	13	18	12	ND	ND	3.7	6.5	ND	ND	ND	ND	ND	ND	ND	33	ND	ND	ND	ND	ND	ND	ND
SLF-14-5 ft.	08/02/18	42	8.7	12	ND	ND	ND	ND	13	ND	ND	7.4	ND	ND	ND	ND	49	ND	ND	11	ND	19	51	ND
SLF-14-15 ft.	08/02/18	74	7.6	24	ND	ND	ND	ND	7.7	ND	ND	5.4	ND	ND	ND	ND	25	ND	ND	ND	ND	11	29	ND
Reporting Limit Range		4.8-760	1.6-2.6	4.4-7.1	6.2-10	1.3-2.1	2.4-3.9	2.1-3.3	2.2-3.5	4.9-7.9	6.1-9.8	3.4-8.3	2.7-4.3	1.3-2.0	2.7-4.4	6.4-10	1.9-3.0	2.3-3.7	2.5-4.0	7.4-12	4.9-7.9	8.7-14	17-28	12-20
SVSL - Future Residential		3.2E+07	97	5,200,000	730,000	NE	120	94,000	1,100	NE	3.1E+06	**460**	480	9.5	1.0E+06	940,000	310,000	760	100,000	63,000	63,000	100,000	100,000	NA
SVSL - Future Commercial		2.8E+08	840	44,000,000	6,200,000	NE	1,060	780,000	9,800	NE	2.6E+07	4,000	6,000	320	8.8E+06	7.8E+06	2.6E+06	6,600	880,000	520,000	520,000	880,000	880,000	NA
Health Risk		NC	C	NC	NC	NE	C	NC	C	NE	NC	C	C	C	NC	NC	NC	C	NC	NC	NC	NC	NC	NA

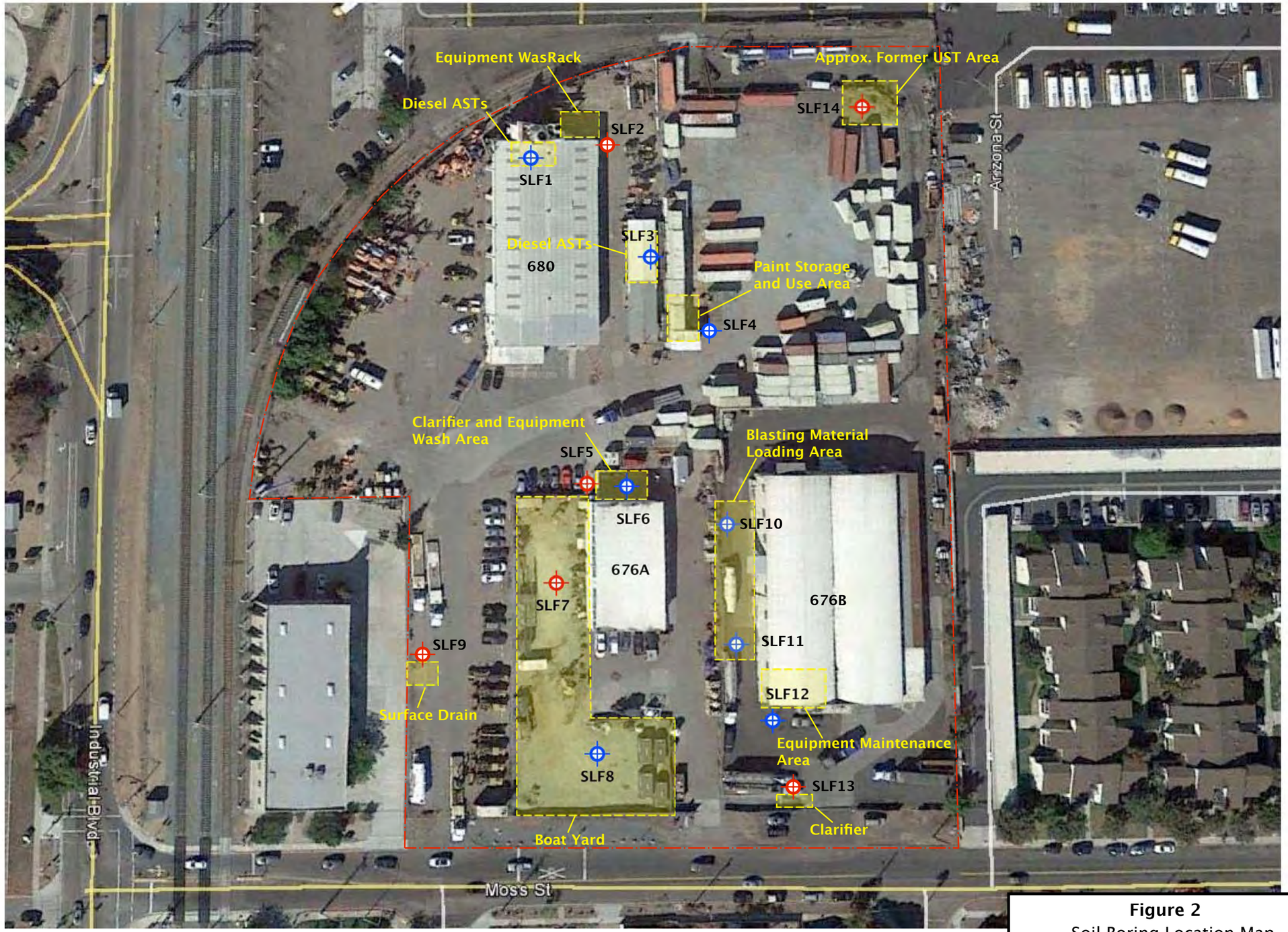
E. Benzene = ethylbenzene
MIBK = methyl isobutyl ketone or 4-methyl-2-pentanone
PCE = tetrachloroethene
TCE = trichloroethene
VC = vinyl chloride
1,2-DCP =1,2-dichloropropane
1,2,4-TMB = 1,2,4-trimethylbenzene
1,3,5-TMB - 1,3,5-trimethylbenzene

IPA = isopropyl alcohol (leak tracer compound)
DUP = Duplicate sample
µg/m^3 = micrograms per cubic meter
C = cancer end-point human health risk
NC = non-cancer end-point human health risk
ND = not detected above laboratory reporting limit (RL)
NE = not established
NA = not applicatble

SVSL = soil vapor screening level for future residential and commercial buildings. Calculated using DTSC HERO Note 3 (June 2018) and US EPA Region 9 RSLs (May 2018) and DTSC VI Guidance (October 2011) attenuation factors.
VOC concentrations in Red exceed future residential building soil vapor screening levels. No VOC concentrations exceed future commercial building soil vapor screening levels.

Figures

Figure 1
Aerial Image Site Location Map
Moss Street Assemblage
676, 676B and 680 Moss Street
Chula Vista, California



Map Key

- 5 ft. Soil and Soil Vapor Sampling Location
- 15 ft. Soil and Soil Vapor Sampling Location

Approximate Scale

0 80 160 ft.

Aerial Image Source: Google Earth Pro, 2018

N

Figure 2
Soil Boring Location Map
Moss Street Assemblage
Chula Vista, California

Drawn By: MM	Date: 8/9/18	EMS Proj. 571

Environmental Management Strategies, Inc.

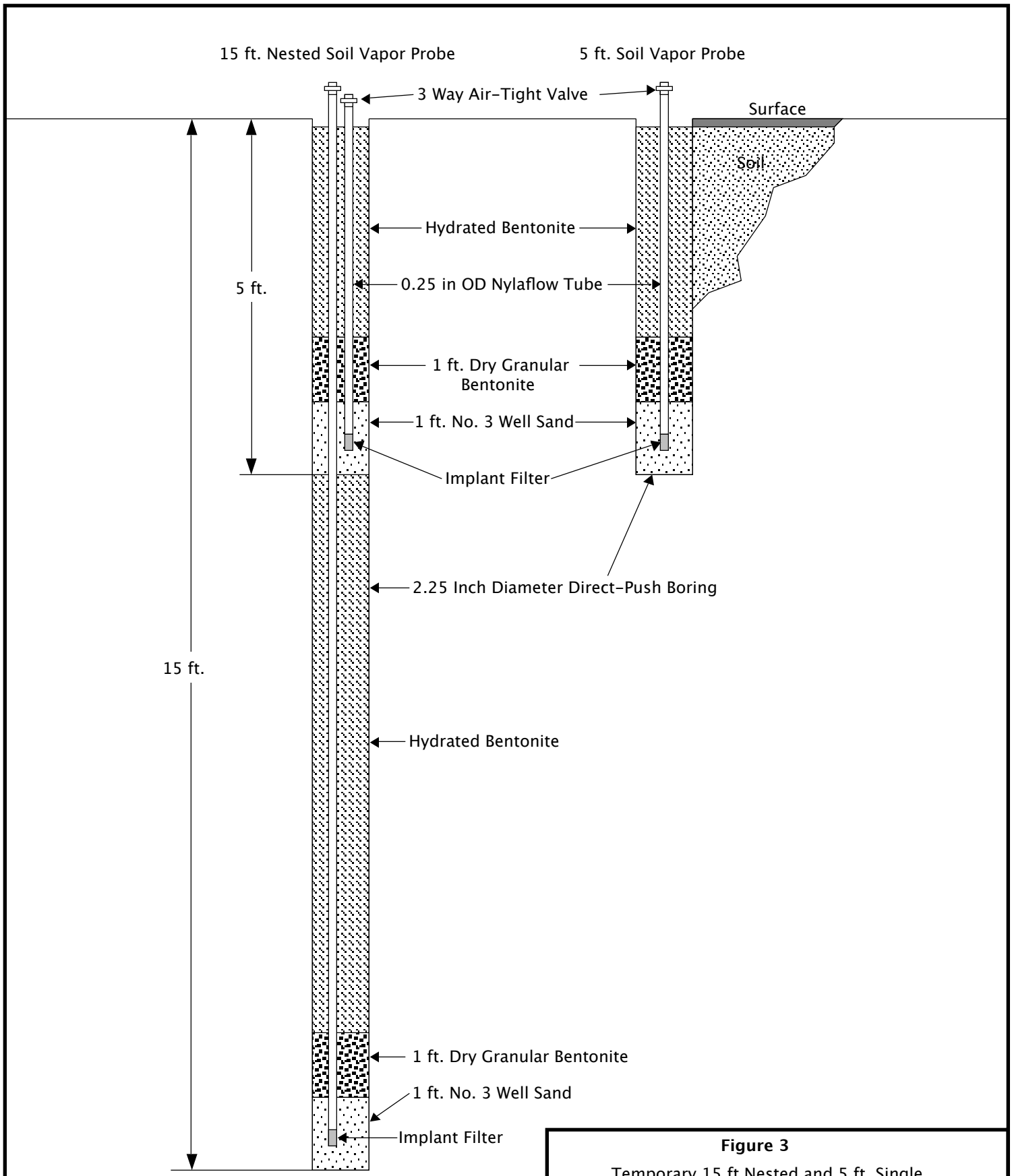


Figure 3

Temporary 15 ft.Nested and 5 ft. Single Soil Vapor Sampling Probe Diagram

SLF V Moss Streeet Assemblage
Chula Vista, California

Environmental Management Strategies, Inc.

Map Key

5 ft. Soil Boring Location

15 ft. Soil Boring Location

TPH-D = TPH as Diesel TPH-O = TPH as Motor Oil
ND = Not Detected
Depth in feet below ground surface.
Concentrations in milligrams per kilogram.

Approximate Scale

0 80 160 ft.

Aerial Image Source: Google Earth Pro, 2018

N

Figure 4
Total Petreolum Hydrocarbons as Diesel and Motor Oil Detected in Soil Samples
Moss Street Assemblage
Chula Vista, California

Drawn By: MM	Date: 8/13/18	EMS Proj. 571

Environmental Management Strategies, Inc.

Map Key

5 ft. Soil Vapor Sampling Location

5 ft. and 15 ft. Soil Vapor Sampling Location.

PCE = Tetrachloroethene Benz. = Benzene
Concentrations in micrograms per cubic meter.
Depth in feet below ground surface.
Concentrations in red exceed future residential soil vapor screening level (DTSC 2011, 2018).

Approximate Scale

0 80 160 ft.

Aerial Image Source: Google Earth Pro, 2018

N

Figure 5
PCE and Benzene Detected in Soil Vapor Samples
Moss Street Assemblage
Chula Vista, California

Drawn By: MM	Date: 8/9/18	EMS Proj. 571

Environmental Management Strategies, Inc.

Figure 6
Gasoline Release Locations Identified in Geotracker Database
Texaco, Shell and 76 Stations
Chula Vista, California

Appendix A

Soil Vapor Sampling Field Logs

Calculation Sheet for Soil Gas Probe Purge Volume

Parameter	Enter Values
Tubing Length (Feet)	15
Tubing Inside Diameter (Inches)	0.1875
Glass Bulb Volume (cc) Enter 0 if Not Used	0
Borehole Diameter (Inches)	2.25
Sand Pack Length (Feet)	1
Dry Bentonite Length (Feet)	0.5
Porosity Dry Sand (%)	0.4
Porosity Dry Bentonite (%)	0.5

	Results
Tubing Volume (In^3) =	5.0
Tubing Volume (cc) =	81.4
Glass Bulb Volume (In^3) =	0.0
Glass Bulb Volume (cc) =	0.0
Sand Pore Volume (In^3) =	19.1
Sand Pore Volume (cc) =	312.7
Bentonite Pore Volume (In^3)	11.9
Bentonote Pore Volume (cc)	195.5

1 Purge Volume (In^3) =	36.0
1 Purge Volumes (cc) =	589.6
3 Purge Volumes (In^3) =	107.9
3 Purge Volumes (cc) =	1768.9

Time for 3 PV 100 cc/min (min) =	17.7
Time for 3 PV 200 cc/min (min) =	8.8
Time for 3 PV 500 cc/min (min) =	3.5
Time for 3 PV 1000 cc/min (min) =	1.8
Time for 3 PV 2000 cc/min (min) =	0.9

Note: Purge volume calculations and times include one glass bulb volume (if used).
Hand auger boring diamter 3.5 inches.
Geoprobe rod boring diamter 1.625 inches.
MacroCore sampler boring diameter 2.25 inches.
Hollow-stem auger boring diemeter, 6, 8 or 10 inches.
Bentonite and sand porosities from DTSC 2012 SG Advisory

Calculation Sheet for Soil Gas Probe Purge Volume

Parameter	Enter Values
Tubing Length (Feet)	5
Tubing Inside Diameter (Inches)	0.1875
Glass Bulb Volume (cc) Enter 0 if Not Used	0
Borehole Diameter (Inches)	2.25
Sand Pack Length (Feet)	1
Dry Bentonite Length (Feet)	0.5
Porosity Dry Sand (%)	0.4
Porosity Dry Bentonite (%)	0.5

	Results
Tubing Volume (In^3) =	1.7
Tubing Volume (cc) =	27.1
Glass Bulb Volume (In^3) =	0.0
Glass Bulb Volume (cc) =	0.0
Sand Pore Volume (In^3) =	19.1
Sand Pore Volume (cc) =	312.7
Bentonite Pore Volume (In^3)	11.9
Bentonote Pore Volume (cc)	195.5

1 Purge Volume (In^3) =	32.7
1 Purge Volumes (cc) =	535.3
3 Purge Volumes (In^3) =	98.0
3 Purge Volumes (cc) =	1606.0

Time for 3 PV 100 cc/min (min) =	16.1
Time for 3 PV 200 cc/min (min) =	8.0
Time for 3 PV 500 cc/min (min) =	3.2
Time for 3 PV 1000 cc/min (min) =	1.6
Time for 3 PV 2000 cc/min (min) =	0.8

Note: Purge volume calculations and times include one glass bulb volume (if used).

Hand auger boring diamter 3.5 inches.

Geoprobe rod boring diamter 1.625 inches.

MacroCore sampler boring diameter 2.25 inches.

Hollow-stem auger boring diemeter, 6, 8 or 10 inches.

Bentonite and sand porosities from DTSC 2012 SG Advisory

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Equipment Rental Form

Requestor: Don Burley **Date:** 7/24/2018 **Prepared By:** 7/24/2018 **Time Req.:** 4:35 PM

(individual QC requires 48 hours advance notice)

Analysis: TO-14A: ☐ TO-15: ☑ BTEX: ☐ TPH: ☐ FG: ☐ Naphathalene: ☐ Other: _____

Canisters:

Canister 6L:	Qty	Canister 1L:	Qty
Batch:		Batch:	22
Individual:		Individual:	
SIM:		SIM:	
Trip Blank:		Trip Blank:	

Duplicate T / T Setup: _____

Soil Gas Manifold: _____

Flow Controllers:	QC Qty	Non QC Qty
Flow Cont - 24 hr.:		
Flow Cont - 12 hr.:		
Flow Cont - 10 hr.:		
Flow Cont - 8hr.:		
Flow Cont - 1hr.:		
Flow Cont - <200cc/min:	22	
Flow Cont - Adj.:		

TO-17 Sorbent Tube	Qty
Batch	
Individual	
Trip Blank	

Notes:

Delivery Method: **Courier by:** 7/31/2018 **Client P/U on:** _____ **Ship to Arrive by:** _____ AM: ☐

(in case of shipment, address must be completed) Any ☑

Project Name: Shopoff Land Fund V, Chula Vista

Client: EMS (Environmental Management Strategies)
Address: 8 Goodyear, Suite 125
Irvine, CA 92618-3745
Contact: Mike Marello
Phone#: 949-679-9500 ext 104

Ship to: EMS (Environmental Management Strategie
Address: 8 Goodyear, Suite 125
Irvine, CA 92618-3745
Contact: Mike Marello
Phone#: 949-679-9500 ext 104

Equipment Information:

ID	EquipmentType	QC Type	VACout
LC715	Summa Canister 1L	Batch	-29.5
LC446	Summa Canister 1L	Batch	-29.5
LC1148	Summa Canister 1L	Batch	-29.5
LC713	Summa Canister 1L	Batch	-29.5
LC1037	Summa Canister 1L	Batch	-29.5
LC866	Summa Canister 1L	Batch	-29.5
LC033	Summa Canister 1L	Batch	-29.5
LC1243	Summa Canister 1L	Batch	-29.5
LC1199	Summa Canister 1L	Batch	-29.5
LC847	Summa Canister 1L	Batch	-29.5

ID	EquipmentType	QC Type	VACout
SLC077	Summa Canister 1L	Batch	-29.5
LC1270	Summa Canister 1L	Batch	-29.5
LC385	Summa Canister 1L	Batch	-29.5
SLC166	Summa Canister 1L	Batch	-29.5
LC278	Summa Canister 1L	Batch	-29.5
LC993	Summa Canister 1L	Batch	-29.5
LC020	Summa Canister 1L	Batch	-29.5
LC1222	Summa Canister 1L	Batch	-29.5
LC1154	Summa Canister 1L	Batch	-29.5
LC861	Summa Canister 1L	Batch	-29.5
LC012	Summa Canister 1L	Batch	-29.5

LC1067	Summa Canister 1L	Batch	-29.5
A214	Flow Cont 200cc/min	QC	N/A
A49	Flow Cont 200cc/min	QC	N/A
A505	Flow Cont 200cc/min	QC	N/A
A396	Flow Cont 200cc/min	QC	N/A
A428	Flow Cont 200cc/min	QC	N/A
A144	Flow Cont 200cc/min	QC	N/A
A173	Flow Cont 200cc/min	QC	N/A
A469	Flow Cont 200cc/min	QC	N/A
A71	Flow Cont 200cc/min	QC	N/A
A33	Flow Cont 200cc/min	QC	N/A
A464	Flow Cont 200cc/min	QC	N/A
A344	Flow Cont 200cc/min	QC	N/A
A107	Flow Cont 200cc/min	QC	N/A
A272	Flow Cont 200cc/min	QC	N/A
A117	Flow Cont 200cc/min	QC	N/A
A176	Flow Cont 200cc/min	QC	N/A
A418	Flow Cont 200cc/min	QC	N/A
A424	Flow Cont 200cc/min	QC	N/A
A224	Flow Cont 200cc/min	QC	N/A
A151	Flow Cont 200cc/min	QC	N/A
A498	Flow Cont 200cc/min	QC	N/A
A445	Flow Cont 200cc/min	QC	N/A

By signing this form, I understand that the equipment listed above will be returned only to Calscience for analysis, and will be in the same condition as received. It is also understood that the rental period is **two weeks** from the date signed above, and must be returned within that two week period or additional rental **fees will be incurred**, as described in our Standard Fee Schedule. If a minor (one or two day) extension in the rental period is needed, you must contact your Calscience project manager before the rental period has ended to receive permission.

Relinquished By: _____ **Affiliation:** **CalScience Environmental Labs.**

Received By: _____ **Date/Time:** _____ **Hours:** _____

Printed Name: _____ **Affiliation:** _____

7440 Lincoln Way, Garden Grove, CA 92841-1427 TEL: (714) 895-5494 FAX: (714) 894-7501

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/2/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-1-5 ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC1057		Flow Reg: A173	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 14:11	Stop: 2	Time: 14:17
Sample Collection Time	PSS Can: 14:17			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe installed 8/2/18 10:20

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/2/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-2-5 ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: SLC077		Flow Reg: A71	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 13:51	Stop: 1	Time: 13:57
Sample Collection Time	PSS Can: 13:57			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	
cc/min = cubic centimeters per minute PPMV = parts per million by volume	IWC = inches of water column PV = probe purge volume		IHg = inches of mercury	

Notes: Probe installed 09:47

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/2/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-2-15 ft.			
Purge Volume of Sample (3PV in cm^3)	1768.9			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.8	
Probe Condition (Good/Poor)				
Sampling Container Size (cm^3 or Liters)	PSS Can:			
PSS Canister and Flow Regulator Numbers	PSS Can: LC1243		Flow Reg: A396	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 13:35	Stop: 2	Time: 13:41
Sample Collection Time	PSS Can: 13:41			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe Installed 09:43

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/2/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-3-5ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC866		Flow Reg: A176	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 13:15	Stop: 2	Time: 13:22
Sample Collection Time	PSS Can:			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe installed 09:00

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/3/18			
Weather Conditions	clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF 4-5 ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC 1154		Flow Reg: A 272	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	60.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 11:20	Stop: 2	Time: 11:26
Sample Collection Time	PSS Can: 11:26			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute IWC = inches of water column IHg = inches of mercury
PPMV = parts per million by volume PV = probe purge volume

Notes: Probe installed 8/2/18 15:20

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/2/18			
Weather Conditions	clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-5-5 ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC012		Flow Reg: A33	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.5
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 12:55	Stop: 2	Time: 13:01
Sample Collection Time	PSS Can: 13:01			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
IHg = inches of mercury
PV = probe purge volume

Notes: probe installed 08:40

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/2/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-5-15 ft.			
Purge Volume of Sample (3PV in cm^3)	1768.9			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.8	
Probe Condition (Good/Poor)				
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC715		Flow Reg: A144	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.5
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 12:36	Stop: 2	Time: 12:42
Sample Collection Time	PSS Can:			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe installed 08:37

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/3/18			
Weather Conditions	Clear, cool, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-6-5 ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC033		Flow Reg: A224	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 07:32	Stop: 2	Time: 07:39
Sample Collection Time	PSS Can: 07:39			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe installed 8/2/18 11:25

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/3/18			
Weather Conditions	Clear, warm light breeze			
Probe Designation and Depth (ft. BGS)	SLF-7-5 ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: SLC166		Flow Reg: A418	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC)	Time (Min.)
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 10:36	Stop: 1	Time: 10:42
Sample Collection Time	PSS Can: 10:42			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe located 8/2/18 12:40

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/3/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-7-15 ft.			
Purge Volume of Sample (3PV in cm^3)	1768.9			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.8	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC1270		Flow Reg: A117	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)				
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 10:09	Stop: 3	Time: 10:18
Sample Collection Time	PSS Can: 10:18			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe Installed 8/2/18 12:35

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/3/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-8-5 ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC 861		Flow Reg: A 428	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.5
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 10:56	Stop: 2	Time: 11:02
Sample Collection Time	PSS Can: 11:02			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe Installed 11:50

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/2/18			
Weather Conditions	Clear, Warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-9-5 ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC847		Flow Reg: A445	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 11:55	Stop: 2	Time: 12:01
Sample Collection Time	PSS Can: 12:01			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Collect SLF-9-5ft. Dup
Can LC1067
Reg. A344
Can vac at start 30 IHg
Can vac at end 2 IHg
Can make Restock
Probe installed at 08:05

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/2/18			
Weather Conditions	Clear, warm, light Breeze			
Probe Designation and Depth (ft. BGS)	SLF-9-15 ft.			
Purge Volume of Sample (3PV in cm^3)	1768.9			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.8	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC713		Flow Reg: A464	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.5
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 12:14	Stop: 3	Time: 12:20
Sample Collection Time	PSS Can: 12:20			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe installed 08:00.

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/3/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-10-5 ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC1222		Flow Reg: A214	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 09:41	Stop: 2	Time: 09:47
Sample Collection Time	PSS Can: 09:47			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe Installed 8/2/18 13:05

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/3/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-11-5ft			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC1199		Flow Reg: A49	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 09:18	Stop: 2	Time: 09:25
Sample Collection Time	PSS Can: 09:25			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe installed: 8/2/18 13:20

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/3/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-12-5ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can:			
PSS Canister and Flow Regulator Numbers	PSS Can: LC278		Flow Reg: A498	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.5
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 08:58	Stop: 3	Time: 09:05
Sample Collection Time	PSS Can: 09:05			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe installed 8/2/18 13:35

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/3/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-13-5ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC993		Flow Reg: A151	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 08:32	Stop: 1	Time: 08:39
Sample Collection Time	PSS Can: 08:39			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe Installed 8/2/18 14:30

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/3/18			
Weather Conditions	Clear, cool, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-13-15 ft.			
Purge Volume of Sample (3PV in cm^3)	1768.9			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.8	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC020		Flow Reg: A107	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC)	Time (Min.)
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	20			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 08:01	Stop: 6	Time: 09:00
Sample Collection Time	PSS Can: 6 9:00			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Collect sample SLF-13-15 ft DUP
Can LC385 1 Liter
Regulator A424
Probe Installed 8/2/18 14:25
Start 30 IHg 08:01 Stop 6 IHg 09:00
Low soil vapor flow conditions (vacuum)

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/2/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SVE-14-5 ft.			
Purge Volume of Sample (3PV in cm^3)	1606			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.0	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC1148		Flow Reg: A505	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.5
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 15:10	Stop: 1	Time: 15:17
Sample Collection Time	PSS Can:			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removed	

cc/min = cubic centimeters per minute
PPMV = parts per million by volume
IWC = inches of water column
PV = probe purge volume
IHg = inches of mercury

Notes: Probe installed 8/2/18

Environmental Management Strategies, Inc. Soil Vapor Sampling Field Report Log

Project Name	Shopoff Land Fund V Chula Vista Assemblage			
Project Number	EMS 571			
Sampling Personnel Name	Mike Marello			
Date	8/2/18			
Weather Conditions	Clear, warm, light breeze			
Probe Designation and Depth (ft. BGS)	SLF-14-15 ft.			
Purge Volume of Sample (3PV in cm^3)	1768.9			
Probe Purge Rate (cm^3/min) and Purge Time (min)	Rate: 200		Time: 8.8	
Probe Condition (Good/Poor)	Good			
Sampling Container Size (cm^3 or Liters)	PSS Can: 1 Liter			
PSS Canister and Flow Regulator Numbers	PSS Can: LC446		Flow Reg: A469	
PSS Canister Flow Regulator Rate (cm^3/min)	200			
Shut-In Test Performed	Yes X	No	Vac. (IWC) 110	Time (Min.) 1.0
Shut-In Test Passed	Yes X	No		
Probe Correction Required	Yes	No X		
Liquid Tracer Leak Test Performed	Yes X	No	Tracer: Isopropanol	
Max. Vacuum Measured During Purging (IWC)	0.0			
Vac. in PSS Can at Start and Stop of Sampling (IHg)	Start: 30	Time: 14:39	Stop: 0	Time: 14:46
Sample Collection Time	PSS Can: 14:46			
Samples Labeled	Yes X	No		
Probe Secured at End of Sampling	Yes	No X	Removal	
cc/min = cubic centimeters per minute PPMV = parts per million by volume	IWC = inches of water column PV = probe purge volume		IHg = inches of mercury	

Notes: Probe installed 8/2/18

Appendix B

Laboratory Reports for Soil

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
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949.297.5027 Fax

10 August 2018

Michael Marello
Environmental Management Strategies, Inc.
8 Goodyear, Suite 125
Irvine, CA 92618

RE: SLF V - Chula Vista

Enclosed are the results of analyses for samples received by the laboratory on 08/02/18 17:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi
Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SLF- 1-2FT	T182416-01	Soil	08/02/18 10:04	08/02/18 17:45
SLF- 1-5FT	T182416-02	Soil	08/02/18 10:04	08/02/18 17:45
SLF- 2-2FT	T182416-03	Soil	08/02/18 09:23	08/02/18 17:45
SLF- 2-5FT	T182416-04	Soil	08/02/18 09:25	08/02/18 17:45
SLF- 2-10FT	T182416-05	Soil	08/02/18 09:32	08/02/18 17:45
SLF- 2-15FT	T182416-06	Soil	08/02/18 09:42	08/02/18 17:45
SLF- 3-2FT	T182416-07	Soil	08/02/18 08:58	08/02/18 17:45
SLF- 3-5FT	T182416-08	Soil	08/02/18 08:58	08/02/18 17:45
SLF- 4-2FT	T182416-09	Soil	08/02/18 15:12	08/02/18 17:45
SLF- 4-5FT	T182416-10	Soil	08/02/18 15:12	08/02/18 17:45
SLF- 5-2FT	T182416-11	Soil	08/02/18 08:17	08/02/18 17:45
SLF- 5-5FT	T182416-12	Soil	08/02/18 08:17	08/02/18 17:45
SLF- 5-10FT	T182416-13	Soil	08/02/18 08:23	08/02/18 17:45
SLF- 5-15FT	T182416-14	Soil	08/02/18 08:30	08/02/18 17:45
SLF- 6-2FT	T182416-15	Soil	08/02/18 11:25	08/02/18 17:45
SLF- 6-5FT	T182416-16	Soil	08/02/18 11:25	08/02/18 17:45
SLF- 7-2FT	T182416-17	Soil	08/02/18 12:20	08/02/18 17:45
SLF- 7-5FT	T182416-18	Soil	08/02/18 12:20	08/02/18 17:45
SLF- 7-10FT	T182416-19	Soil	08/02/18 12:30	08/02/18 17:45
SLF- 7-15FT	T182416-20	Soil	08/02/18 12:36	08/02/18 17:45
SLF- 8-2FT	T182416-21	Soil	08/02/18 11:50	08/02/18 17:45
SLF- 8-5FT	T182416-22	Soil	08/02/18 11:50	08/02/18 17:45
SLF- 9-2FT	T182416-23	Soil	08/02/18 07:45	08/02/18 17:45
SLF- 9-5FT	T182416-24	Soil	08/02/18 07:45	08/02/18 17:45
SLF- 9-10FT	T182416-25	Soil	08/02/18 07:50	08/02/18 17:45
SLF- 9-15FT	T182416-26	Soil	08/02/18 07:58	08/02/18 17:45

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.

Mike Jaroudi, Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SLF- 10-2FT	T182416-27	Soil	08/02/18 13:05	08/02/18 17:45
SLF- 10-5FT	T182416-28	Soil	08/02/18 13:05	08/02/18 17:45
SLF- 11-2FT	T182416-29	Soil	08/02/18 13:20	08/02/18 17:45
SLF- 11-5FT	T182416-30	Soil	08/02/18 13:20	08/02/18 17:45
SLF- 12-2FT	T182416-31	Soil	08/02/18 13:34	08/02/18 17:45
SLF- 13-2FT	T182416-32	Soil	08/02/18 14:10	08/02/18 17:45
SLF- 13-5FT	T182416-33	Soil	08/02/18 14:10	08/02/18 17:45
SLF- 13-10FT	T182416-34	Soil	08/02/18 14:17	08/02/18 17:45
SLF- 13-15FT	T182416-35	Soil	08/02/18 14:27	08/02/18 17:45
SLF- 14-2FT	T182416-36	Soil	08/02/18 10:41	08/02/18 17:45
SLF- 14-5FT	T182416-37	Soil	08/02/18 10:41	08/02/18 17:45
SLF- 14-10FT	T182416-38	Soil	08/02/18 10:47	08/02/18 17:45
SLF- 15-15FT	T182416-39	Soil	08/02/18 10:53	08/02/18 17:45
SLF- 12-5FT	T182416-40	Soil	08/02/18 13:34	08/02/18 17:45

SunStar Laboratories, Inc.

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Mike Jaroudi, Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

DETECTIONS SUMMARY

Sample ID: SLF- 1-2FT **Laboratory ID:** T182416-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**42**	1.0	mg/kg	EPA 6010b	
Chromium	**7.4**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.2**	2.0	mg/kg	EPA 6010b	
Copper	**11**	1.0	mg/kg	EPA 6010b	
Lead	**8.7**	3.0	mg/kg	EPA 6010b	
Nickel	**4.4**	2.0	mg/kg	EPA 6010b	
Vanadium	**28**	5.0	mg/kg	EPA 6010b	
Zinc	**28**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 1-5FT **Laboratory ID:** T182416-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**27**	1.0	mg/kg	EPA 6010b	
Chromium	**8.4**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.5**	2.0	mg/kg	EPA 6010b	
Copper	**5.5**	1.0	mg/kg	EPA 6010b	
Nickel	**5.3**	2.0	mg/kg	EPA 6010b	
Vanadium	**30**	5.0	mg/kg	EPA 6010b	
Zinc	**20**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 2-2FT **Laboratory ID:** T182416-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**29**	1.0	mg/kg	EPA 6010b	
Chromium	**7.3**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.5**	2.0	mg/kg	EPA 6010b	
Copper	**5.7**	1.0	mg/kg	EPA 6010b	
Nickel	**4.7**	2.0	mg/kg	EPA 6010b	
Vanadium	**26**	5.0	mg/kg	EPA 6010b	
Zinc	**17**	1.0	mg/kg	EPA 6010b	

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Mike Jaroudi, Project Manager

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	Reported:
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

Sample ID: SLF- 2-5FT **Laboratory ID:** T182416-04

Analyte	Result	Reporting Limit	Units	Method	Notes
C29-C40 (MORO)	**11**	10	mg/kg	EPA 8015B	
Barium	**45**	1.0	mg/kg	EPA 6010b	
Chromium	**11**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.7**	2.0	mg/kg	EPA 6010b	
Copper	**7.7**	1.0	mg/kg	EPA 6010b	
Nickel	**6.3**	2.0	mg/kg	EPA 6010b	
Vanadium	**45**	5.0	mg/kg	EPA 6010b	
Zinc	**25**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 2-10FT **Laboratory ID:** T182416-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**82**	1.0	mg/kg	EPA 6010b	
Chromium	**9.7**	2.0	mg/kg	EPA 6010b	
Cobalt	**8.7**	2.0	mg/kg	EPA 6010b	
Copper	**6.8**	1.0	mg/kg	EPA 6010b	
Nickel	**6.8**	2.0	mg/kg	EPA 6010b	
Vanadium	**42**	5.0	mg/kg	EPA 6010b	
Zinc	**23**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 2-15FT **Laboratory ID:** T182416-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**48**	1.0	mg/kg	EPA 6010b	
Chromium	**6.3**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.4**	2.0	mg/kg	EPA 6010b	
Copper	**4.8**	1.0	mg/kg	EPA 6010b	
Nickel	**4.9**	2.0	mg/kg	EPA 6010b	
Vanadium	**32**	5.0	mg/kg	EPA 6010b	
Zinc	**16**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 3-2FT **Laboratory ID:** T182416-07

Analyte	Result	Reporting Limit	Units	Method	Notes

SunStar Laboratories, Inc.

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	Reported:
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

Sample ID: SLF- 3-2FT **Laboratory ID:** T182416-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**88**	1.0	mg/kg	EPA 6010b	
Chromium	**9.2**	2.0	mg/kg	EPA 6010b	
Cobalt	**8.1**	2.0	mg/kg	EPA 6010b	
Copper	**12**	1.0	mg/kg	EPA 6010b	
Lead	**11**	3.0	mg/kg	EPA 6010b	
Nickel	**6.8**	2.0	mg/kg	EPA 6010b	
Vanadium	**34**	5.0	mg/kg	EPA 6010b	
Zinc	**48**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 3-5FT **Laboratory ID:** T182416-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**5.2**	5.0	mg/kg	EPA 6010b	
Barium	**160**	1.0	mg/kg	EPA 6010b	
Chromium	**13**	2.0	mg/kg	EPA 6010b	
Cobalt	**9.0**	2.0	mg/kg	EPA 6010b	
Copper	**9.8**	1.0	mg/kg	EPA 6010b	
Lead	**7.2**	3.0	mg/kg	EPA 6010b	
Nickel	**7.9**	2.0	mg/kg	EPA 6010b	
Vanadium	**53**	5.0	mg/kg	EPA 6010b	
Zinc	**35**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 4-2FT **Laboratory ID:** T182416-09

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**16**	10	mg/kg	EPA 8015B	
C29-C40 (MORO)	**200**	10	mg/kg	EPA 8015B	
Arsenic	**5.3**	5.0	mg/kg	EPA 6010b	
Barium	**90**	1.0	mg/kg	EPA 6010b	
Chromium	**9.9**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.2**	2.0	mg/kg	EPA 6010b	
Copper	**10**	1.0	mg/kg	EPA 6010b	
Lead	**10**	3.0	mg/kg	EPA 6010b	
Nickel	**5.9**	2.0	mg/kg	EPA 6010b	
Vanadium	**33**	5.0	mg/kg	EPA 6010b	

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Sample ID: SLF- 4-2FT **Laboratory ID:** T182416-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Zinc	**36**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 4-5FT **Laboratory ID:** T182416-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**85**	1.0	mg/kg	EPA 6010b	
Chromium	**9.6**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.8**	2.0	mg/kg	EPA 6010b	
Copper	**11**	1.0	mg/kg	EPA 6010b	
Lead	**7.1**	3.0	mg/kg	EPA 6010b	
Nickel	**5.9**	2.0	mg/kg	EPA 6010b	
Vanadium	**37**	5.0	mg/kg	EPA 6010b	
Zinc	**28**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 5-2FT **Laboratory ID:** T182416-11

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**13**	10	mg/kg	EPA 8015B	
C29-C40 (MORO)	**110**	10	mg/kg	EPA 8015B	
Barium	**68**	1.0	mg/kg	EPA 6010b	
Chromium	**13**	2.0	mg/kg	EPA 6010b	
Cobalt	**8.1**	2.0	mg/kg	EPA 6010b	
Copper	**10**	1.0	mg/kg	EPA 6010b	
Nickel	**5.6**	2.0	mg/kg	EPA 6010b	
Vanadium	**45**	5.0	mg/kg	EPA 6010b	
Zinc	**44**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 5-5FT **Laboratory ID:** T182416-12

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**12**	10	mg/kg	EPA 8015B	
C29-C40 (MORO)	**39**	10	mg/kg	EPA 8015B	
Barium	**110**	1.0	mg/kg	EPA 6010b	
Chromium	**8.2**	2.0	mg/kg	EPA 6010b	

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Sample ID: SLF- 5-5FT **Laboratory ID:** T182416-12

Analyte	Result	Reporting Limit	Units	Method	Notes
Cobalt	**6.8**	2.0	mg/kg	EPA 6010b	
Copper	**13**	1.0	mg/kg	EPA 6010b	
Lead	**11**	3.0	mg/kg	EPA 6010b	
Nickel	**5.5**	2.0	mg/kg	EPA 6010b	
Vanadium	**29**	5.0	mg/kg	EPA 6010b	
Zinc	**54**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 5-10FT **Laboratory ID:** T182416-13

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**35**	1.0	mg/kg	EPA 6010b	
Chromium	**4.7**	2.0	mg/kg	EPA 6010b	
Cobalt	**4.7**	2.0	mg/kg	EPA 6010b	
Copper	**4.8**	1.0	mg/kg	EPA 6010b	
Nickel	**3.2**	2.0	mg/kg	EPA 6010b	
Vanadium	**19**	5.0	mg/kg	EPA 6010b	
Zinc	**12**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 5-15FT **Laboratory ID:** T182416-14

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**41**	1.0	mg/kg	EPA 6010b	
Chromium	**7.9**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.2**	2.0	mg/kg	EPA 6010b	
Copper	**6.9**	1.0	mg/kg	EPA 6010b	
Nickel	**4.8**	2.0	mg/kg	EPA 6010b	
Vanadium	**32**	5.0	mg/kg	EPA 6010b	
Zinc	**17**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 6-2FT **Laboratory ID:** T182416-15

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**6.7**	5.0	mg/kg	EPA 6010b	
Barium	**76**	1.0	mg/kg	EPA 6010b	

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Sample ID: SLF- 6-2FT **Laboratory ID:** T182416-15

Analyte	Result	Reporting Limit	Units	Method	Notes
Chromium	**5.6**	2.0	mg/kg	EPA 6010b	
Cobalt	**5.9**	2.0	mg/kg	EPA 6010b	
Copper	**8.4**	1.0	mg/kg	EPA 6010b	
Nickel	**3.4**	2.0	mg/kg	EPA 6010b	
Vanadium	**42**	5.0	mg/kg	EPA 6010b	
Zinc	**24**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 6-5FT **Laboratory ID:** T182416-16

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**5.2**	5.0	mg/kg	EPA 6010b	
Barium	**100**	1.0	mg/kg	EPA 6010b	
Chromium	**7.9**	2.0	mg/kg	EPA 6010b	
Cobalt	**5.7**	2.0	mg/kg	EPA 6010b	
Copper	**12**	1.0	mg/kg	EPA 6010b	
Lead	**11**	3.0	mg/kg	EPA 6010b	
Nickel	**5.3**	2.0	mg/kg	EPA 6010b	
Vanadium	**29**	5.0	mg/kg	EPA 6010b	
Zinc	**44**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 7-2FT **Laboratory ID:** T182416-17

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**110**	50	mg/kg	EPA 8015B	
C29-C40 (MORO)	**2100**	50	mg/kg	EPA 8015B	
Arsenic	**8.2**	4.5	mg/kg	EPA 6010b	
Barium	**92**	0.91	mg/kg	EPA 6010b	
Chromium	**17**	1.8	mg/kg	EPA 6010b	
Cobalt	**7.4**	1.8	mg/kg	EPA 6010b	
Copper	**25**	0.91	mg/kg	EPA 6010b	
Lead	**14**	2.7	mg/kg	EPA 6010b	
Nickel	**12**	1.8	mg/kg	EPA 6010b	
Vanadium	**47**	4.5	mg/kg	EPA 6010b	
Zinc	**43**	0.91	mg/kg	EPA 6010b	

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Sample ID: SLF- 7-5FT **Laboratory ID:** T182416-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**130**	1.0	mg/kg	EPA 6010b	
Chromium	**8.4**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.2**	2.0	mg/kg	EPA 6010b	
Copper	**14**	1.0	mg/kg	EPA 6010b	
Lead	**19**	3.0	mg/kg	EPA 6010b	
Nickel	**6.5**	2.0	mg/kg	EPA 6010b	
Vanadium	**30**	5.0	mg/kg	EPA 6010b	
Zinc	**69**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 7-10FT **Laboratory ID:** T182416-19

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**81**	1.0	mg/kg	EPA 6010b	
Chromium	**6.8**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.2**	2.0	mg/kg	EPA 6010b	
Copper	**6.6**	1.0	mg/kg	EPA 6010b	
Nickel	**4.6**	2.0	mg/kg	EPA 6010b	
Vanadium	**26**	5.0	mg/kg	EPA 6010b	
Zinc	**18**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 7-15FT **Laboratory ID:** T182416-20

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**110**	1.0	mg/kg	EPA 6010b	
Chromium	**6.6**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.4**	2.0	mg/kg	EPA 6010b	
Copper	**6.7**	1.0	mg/kg	EPA 6010b	
Nickel	**5.5**	2.0	mg/kg	EPA 6010b	
Vanadium	**30**	5.0	mg/kg	EPA 6010b	
Zinc	**17**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 8-2FT **Laboratory ID:** T182416-21

Analyte	Result	Reporting Limit	Units	Method	Notes

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Sample ID: SLF- 8-2FT **Laboratory ID:** T182416-21

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**34**	10	mg/kg	EPA 8015B	
C29-C40 (MORO)	**570**	10	mg/kg	EPA 8015B	
Arsenic	**5.0**	5.0	mg/kg	EPA 6010b	
Barium	**49**	1.0	mg/kg	EPA 6010b	
Chromium	**8.1**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.5**	2.0	mg/kg	EPA 6010b	
Copper	**12**	1.0	mg/kg	EPA 6010b	
Lead	**7.5**	3.0	mg/kg	EPA 6010b	
Nickel	**6.8**	2.0	mg/kg	EPA 6010b	
Vanadium	**46**	5.0	mg/kg	EPA 6010b	
Zinc	**38**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 8-5FT **Laboratory ID:** T182416-22

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**120**	1.0	mg/kg	EPA 6010b	
Chromium	**11**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.1**	2.0	mg/kg	EPA 6010b	
Copper	**140**	1.0	mg/kg	EPA 6010b	
Lead	**29**	3.0	mg/kg	EPA 6010b	
Nickel	**7.2**	2.0	mg/kg	EPA 6010b	
Vanadium	**34**	5.0	mg/kg	EPA 6010b	
Zinc	**160**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 9-2FT **Laboratory ID:** T182416-23

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**14**	10	mg/kg	EPA 8015B	
C29-C40 (MORO)	**130**	10	mg/kg	EPA 8015B	
Arsenic	**5.3**	5.0	mg/kg	EPA 6010b	
Barium	**160**	1.0	mg/kg	EPA 6010b	
Chromium	**11**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.2**	2.0	mg/kg	EPA 6010b	
Copper	**140**	1.0	mg/kg	EPA 6010b	
Lead	**79**	3.0	mg/kg	EPA 6010b	

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Sample ID: SLF- 9-2FT **Laboratory ID:** T182416-23

Analyte	Result	Reporting Limit	Units	Method	Notes
Nickel	**9.1**	2.0	mg/kg	EPA 6010b	
Vanadium	**36**	5.0	mg/kg	EPA 6010b	
Zinc	**610**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 9-5FT **Laboratory ID:** T182416-24

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**78**	1.0	mg/kg	EPA 6010b	
Chromium	**8.8**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.8**	2.0	mg/kg	EPA 6010b	
Copper	**8.0**	1.0	mg/kg	EPA 6010b	
Nickel	**6.1**	2.0	mg/kg	EPA 6010b	
Vanadium	**30**	5.0	mg/kg	EPA 6010b	
Zinc	**46**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 9-10FT **Laboratory ID:** T182416-25

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**140**	1.0	mg/kg	EPA 6010b	
Chromium	**7.4**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.1**	2.0	mg/kg	EPA 6010b	
Copper	**6.9**	1.0	mg/kg	EPA 6010b	
Nickel	**5.2**	2.0	mg/kg	EPA 6010b	
Vanadium	**27**	5.0	mg/kg	EPA 6010b	
Zinc	**41**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 9-15FT **Laboratory ID:** T182416-26

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**12**	10	mg/kg	EPA 8015B	
Barium	**45**	1.0	mg/kg	EPA 6010b	
Chromium	**5.8**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.0**	2.0	mg/kg	EPA 6010b	
Copper	**6.1**	1.0	mg/kg	EPA 6010b	

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Sample ID: SLF- 9-15FT **Laboratory ID:** T182416-26

Analyte	Result	Reporting Limit	Units	Method	Notes
Nickel	**4.4**	2.0	mg/kg	EPA 6010b	
Vanadium	**25**	5.0	mg/kg	EPA 6010b	
Zinc	**94**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 10-2FT **Laboratory ID:** T182416-27

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**13**	10	mg/kg	EPA 8015B	
C29-C40 (MORO)	**14**	10	mg/kg	EPA 8015B	
Barium	**69**	1.0	mg/kg	EPA 6010b	
Chromium	**10**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.1**	2.0	mg/kg	EPA 6010b	
Copper	**12**	1.0	mg/kg	EPA 6010b	
Lead	**11**	3.0	mg/kg	EPA 6010b	
Nickel	**5.9**	2.0	mg/kg	EPA 6010b	
Vanadium	**50**	5.0	mg/kg	EPA 6010b	
Zinc	**59**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 10-5FT **Laboratory ID:** T182416-28

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**5.2**	5.0	mg/kg	EPA 6010b	
Barium	**74**	1.0	mg/kg	EPA 6010b	
Chromium	**13**	2.0	mg/kg	EPA 6010b	
Cobalt	**9.2**	2.0	mg/kg	EPA 6010b	
Copper	**11**	1.0	mg/kg	EPA 6010b	
Lead	**8.0**	3.0	mg/kg	EPA 6010b	
Nickel	**8.1**	2.0	mg/kg	EPA 6010b	
Vanadium	**47**	5.0	mg/kg	EPA 6010b	
Zinc	**42**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 11-2FT **Laboratory ID:** T182416-29

Analyte	Result	Reporting Limit	Units	Method	Notes

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Sample ID: SLF- 11-2FT **Laboratory ID:** T182416-29

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**17**	10	mg/kg	EPA 8015B	
C29-C40 (MORO)	**99**	10	mg/kg	EPA 8015B	
Arsenic	**6.2**	5.0	mg/kg	EPA 6010b	
Barium	**70**	1.0	mg/kg	EPA 6010b	
Chromium	**11**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.9**	2.0	mg/kg	EPA 6010b	
Copper	**8.9**	1.0	mg/kg	EPA 6010b	
Nickel	**5.0**	2.0	mg/kg	EPA 6010b	
Vanadium	**60**	5.0	mg/kg	EPA 6010b	
Zinc	**33**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 11-5FT **Laboratory ID:** T182416-30

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**5.4**	5.0	mg/kg	EPA 6010b	
Barium	**80**	1.0	mg/kg	EPA 6010b	
Chromium	**12**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.3**	2.0	mg/kg	EPA 6010b	
Copper	**15**	1.0	mg/kg	EPA 6010b	
Lead	**9.0**	3.0	mg/kg	EPA 6010b	
Nickel	**7.4**	2.0	mg/kg	EPA 6010b	
Vanadium	**33**	5.0	mg/kg	EPA 6010b	
Zinc	**42**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 12-2FT **Laboratory ID:** T182416-31

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**53**	1.0	mg/kg	EPA 6010b	
Chromium	**9.7**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.1**	2.0	mg/kg	EPA 6010b	
Copper	**7.1**	1.0	mg/kg	EPA 6010b	
Nickel	**6.6**	2.0	mg/kg	EPA 6010b	
Vanadium	**39**	5.0	mg/kg	EPA 6010b	
Zinc	**31**	1.0	mg/kg	EPA 6010b	

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8 Goodyear, Suite 125	Project Number: EMS 571	Reported:
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

Sample ID: SLF- 13-2FT **Laboratory ID:** T182416-32

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**59**	1.0	mg/kg	EPA 6010b	
Chromium	**9.9**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.3**	2.0	mg/kg	EPA 6010b	
Copper	**9.3**	1.0	mg/kg	EPA 6010b	
Nickel	**4.8**	2.0	mg/kg	EPA 6010b	
Vanadium	**64**	5.0	mg/kg	EPA 6010b	
Zinc	**35**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 13-5FT **Laboratory ID:** T182416-33

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**32**	1.0	mg/kg	EPA 6010b	
Chromium	**7.8**	2.0	mg/kg	EPA 6010b	
Cobalt	**7.0**	2.0	mg/kg	EPA 6010b	
Copper	**6.2**	1.0	mg/kg	EPA 6010b	
Nickel	**6.0**	2.0	mg/kg	EPA 6010b	
Vanadium	**31**	5.0	mg/kg	EPA 6010b	
Zinc	**17**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 13-10FT **Laboratory ID:** T182416-34

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**43**	1.0	mg/kg	EPA 6010b	
Chromium	**7.8**	2.0	mg/kg	EPA 6010b	
Cobalt	**11**	2.0	mg/kg	EPA 6010b	
Copper	**7.2**	1.0	mg/kg	EPA 6010b	
Nickel	**8.1**	2.0	mg/kg	EPA 6010b	
Vanadium	**36**	5.0	mg/kg	EPA 6010b	
Zinc	**16**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 13-15FT **Laboratory ID:** T182416-35

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**69**	1.0	mg/kg	EPA 6010b	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

Sample ID: SLF- 13-15FT **Laboratory ID:** T182416-35

Analyte	Result	Reporting Limit	Units	Method	Notes
Chromium	**17**	2.0	mg/kg	EPA 6010b	
Cobalt	**11**	2.0	mg/kg	EPA 6010b	
Copper	**17**	1.0	mg/kg	EPA 6010b	
Nickel	**12**	2.0	mg/kg	EPA 6010b	
Vanadium	**91**	5.0	mg/kg	EPA 6010b	
Zinc	**46**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 14-2FT **Laboratory ID:** T182416-36

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**12**	10	mg/kg	EPA 8015B	
C29-C40 (MORO)	**120**	10	mg/kg	EPA 8015B	
Barium	**75**	1.0	mg/kg	EPA 6010b	
Chromium	**8.7**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.3**	2.0	mg/kg	EPA 6010b	
Copper	**9.0**	1.0	mg/kg	EPA 6010b	
Nickel	**5.8**	2.0	mg/kg	EPA 6010b	
Vanadium	**27**	5.0	mg/kg	EPA 6010b	
Zinc	**30**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 14-5FT **Laboratory ID:** T182416-37

Analyte	Result	Reporting Limit	Units	Method	Notes
C13-C28 (DRO)	**14**	10	mg/kg	EPA 8015B	
C29-C40 (MORO)	**150**	10	mg/kg	EPA 8015B	
Barium	**53**	1.0	mg/kg	EPA 6010b	
Chromium	**7.4**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.8**	2.0	mg/kg	EPA 6010b	
Copper	**7.7**	1.0	mg/kg	EPA 6010b	
Nickel	**6.0**	2.0	mg/kg	EPA 6010b	
Vanadium	**27**	5.0	mg/kg	EPA 6010b	
Zinc	**26**	1.0	mg/kg	EPA 6010b	

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8 Goodyear, Suite 125	Project Number: EMS 571	Reported:
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

Sample ID: SLF- 14-10FT **Laboratory ID:** T182416-38

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**57**	1.0	mg/kg	EPA 6010b	
Chromium	**7.5**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.5**	2.0	mg/kg	EPA 6010b	
Copper	**6.0**	1.0	mg/kg	EPA 6010b	
Nickel	**5.7**	2.0	mg/kg	EPA 6010b	
Vanadium	**33**	5.0	mg/kg	EPA 6010b	
Zinc	**17**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 15-15FT **Laboratory ID:** T182416-39

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**62**	1.0	mg/kg	EPA 6010b	
Chromium	**7.8**	2.0	mg/kg	EPA 6010b	
Cobalt	**6.7**	2.0	mg/kg	EPA 6010b	
Copper	**6.1**	1.0	mg/kg	EPA 6010b	
Nickel	**5.2**	2.0	mg/kg	EPA 6010b	
Vanadium	**36**	5.0	mg/kg	EPA 6010b	
Zinc	**19**	1.0	mg/kg	EPA 6010b	

Sample ID: SLF- 12-5FT **Laboratory ID:** T182416-40

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**7.3**	4.5	mg/kg	EPA 6010b	
Barium	**110**	0.91	mg/kg	EPA 6010b	
Chromium	**12**	1.8	mg/kg	EPA 6010b	
Cobalt	**8.1**	1.8	mg/kg	EPA 6010b	
Copper	**15**	0.91	mg/kg	EPA 6010b	
Lead	**11**	2.7	mg/kg	EPA 6010b	
Nickel	**7.8**	1.8	mg/kg	EPA 6010b	
Vanadium	**38**	4.5	mg/kg	EPA 6010b	
Zinc	**41**	0.91	mg/kg	EPA 6010b	

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8 Goodyear, Suite 125	Project Number:	EMS 571	**Reported:**
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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
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SLF- 1-2FT

T182416-01 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*90.6 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**42**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**7.4**	2.0	"	"	"	"	"	"	
Cobalt	**7.2**	2.0	"	"	"	"	"	"	
Copper	**11**	1.0	"	"	"	"	"	"	
Lead	**8.7**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**4.4**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**28**	5.0	"	"	"	"	"	"	
Zinc	**28**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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SLF- 1-2FT

T182416-01 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	2.5	ug/kg	1	8080308	08/03/18	08/09/18	EPA 8260B	
Bromochloromethane	ND	2.5	"	"	"	"	"	"	
Bromodichloromethane	ND	2.5	"	"	"	"	"	"	
Bromoform	ND	2.5	"	"	"	"	"	"	
Bromomethane	ND	2.5	"	"	"	"	"	"	
n-Butylbenzene	ND	2.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	2.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	2.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.5	"	"	"	"	"	"	
Chlorobenzene	ND	2.5	"	"	"	"	"	"	
Chloroethane	ND	2.5	"	"	"	"	"	"	
Chloroform	ND	2.5	"	"	"	"	"	"	
Chloromethane	ND	2.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	2.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	2.5	"	"	"	"	"	"	
Dibromochloromethane	ND	2.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
Dibromomethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
1,3-Dichloropropane	ND	2.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	2.5	"	"	"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 1-2FT

T182416-01 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	2.5	ug/kg	1	8080308	08/03/18	08/09/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	2.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.5	"	"	"	"	"	"	
Isopropylbenzene	ND	2.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.5	"	"	"	"	"	"	
Methylene chloride	ND	2.5	"	"	"	"	"	"	
Naphthalene	ND	2.5	"	"	"	"	"	"	
n-Propylbenzene	ND	2.5	"	"	"	"	"	"	
Styrene	ND	2.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
Tetrachloroethene	ND	2.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.5	"	"	"	"	"	"	
Trichloroethene	ND	2.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	2.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	2.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	2.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.5	"	"	"	"	"	"	
Benzene	ND	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
o-Xylene	ND	2.5	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.0 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*120 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*97.0 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 1-5FT

T182416-02 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*88.1 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**27**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**8.4**	2.0	"	"	"	"	"	"	
Cobalt	**7.5**	2.0	"	"	"	"	"	"	
Copper	**5.5**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.3**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**30**	5.0	"	"	"	"	"	"	
Zinc	**20**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 1-5FT

T182416-02 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 1-5FT

T182416-02 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*116 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*99.0 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-2FT

T182416-03 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*97.0 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**29**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**7.3**	2.0	"	"	"	"	"	"	
Cobalt	**6.5**	2.0	"	"	"	"	"	"	
Copper	**5.7**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**4.7**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**26**	5.0	"	"	"	"	"	"	
Zinc	**17**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-2FT

T182416-03 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-2FT

T182416-03 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.2 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*115 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*99.1 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-5FT

T182416-04 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	**11**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*87.5 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**45**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**11**	2.0	"	"	"	"	"	"	
Cobalt	**7.7**	2.0	"	"	"	"	"	"	
Copper	**7.7**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**6.3**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**45**	5.0	"	"	"	"	"	"	
Zinc	**25**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-5FT

T182416-04 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-5FT

T182416-04 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.0 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*116 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*96.7 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-10FT

T182416-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*89.8 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**82**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**9.7**	2.0	"	"	"	"	"	"	
Cobalt	**8.7**	2.0	"	"	"	"	"	"	
Copper	**6.8**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**6.8**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**42**	5.0	"	"	"	"	"	"	
Zinc	**23**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-10FT

T182416-05 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	2.5	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	2.5	"	"	"	"	"	"	
Bromodichloromethane	ND	2.5	"	"	"	"	"	"	
Bromoform	ND	2.5	"	"	"	"	"	"	
Bromomethane	ND	2.5	"	"	"	"	"	"	
n-Butylbenzene	ND	2.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	2.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	2.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.5	"	"	"	"	"	"	
Chlorobenzene	ND	2.5	"	"	"	"	"	"	
Chloroethane	ND	2.5	"	"	"	"	"	"	
Chloroform	ND	2.5	"	"	"	"	"	"	
Chloromethane	ND	2.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	2.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	2.5	"	"	"	"	"	"	
Dibromochloromethane	ND	2.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
Dibromomethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
1,3-Dichloropropane	ND	2.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	2.5	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-10FT

T182416-05 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	2.5	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	2.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.5	"	"	"	"	"	"	
Isopropylbenzene	ND	2.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.5	"	"	"	"	"	"	
Methylene chloride	ND	2.5	"	"	"	"	"	"	
Naphthalene	ND	2.5	"	"	"	"	"	"	
n-Propylbenzene	ND	2.5	"	"	"	"	"	"	
Styrene	ND	2.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
Tetrachloroethene	ND	2.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.5	"	"	"	"	"	"	
Trichloroethene	ND	2.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	2.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	2.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	2.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.5	"	"	"	"	"	"	
Benzene	ND	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
o-Xylene	ND	2.5	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.0 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*110 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-15FT

T182416-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*94.2 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**48**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**6.3**	2.0	"	"	"	"	"	"	
Cobalt	**6.4**	2.0	"	"	"	"	"	"	
Copper	**4.8**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**4.9**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**32**	5.0	"	"	"	"	"	"	
Zinc	**16**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 2-15FT

T182416-06 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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SLF- 2-15FT

T182416-06 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.0 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*113 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*95.2 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 3-2FT

T182416-07 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*90.9 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**88**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**9.2**	2.0	"	"	"	"	"	"	
Cobalt	**8.1**	2.0	"	"	"	"	"	"	
Copper	**12**	1.0	"	"	"	"	"	"	
Lead	**11**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**6.8**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**34**	5.0	"	"	"	"	"	"	
Zinc	**48**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 3-2FT

T182416-07 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 3-2FT

T182416-07 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.0 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*118 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*96.1 %*	*83.2-113*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 3-5FT

T182416-08 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*89.4 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**5.2**	5.0	"	"	"	"	"	"	
Barium	**160**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**13**	2.0	"	"	"	"	"	"	
Cobalt	**9.0**	2.0	"	"	"	"	"	"	
Copper	**9.8**	1.0	"	"	"	"	"	"	
Lead	**7.2**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**7.9**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**53**	5.0	"	"	"	"	"	"	
Zinc	**35**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 3-5FT

T182416-08 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 3-5FT

T182416-08 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.6 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*117 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*97.0 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 4-2FT

T182416-09 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	**16**	10	"	"	"	"	"	"	
C29-C40 (MORO)	**200**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*92.0 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**5.3**	5.0	"	"	"	"	"	"	
Barium	**90**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**9.9**	2.0	"	"	"	"	"	"	
Cobalt	**7.2**	2.0	"	"	"	"	"	"	
Copper	**10**	1.0	"	"	"	"	"	"	
Lead	**10**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.9**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**33**	5.0	"	"	"	"	"	"	
Zinc	**36**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 4-2FT

T182416-09 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 4-2FT

T182416-09 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.6 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*117 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*93.6 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 4-5FT

T182416-10 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*85.2 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**85**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**9.6**	2.0	"	"	"	"	"	"	
Cobalt	**7.8**	2.0	"	"	"	"	"	"	
Copper	**11**	1.0	"	"	"	"	"	"	
Lead	**7.1**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.9**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**37**	5.0	"	"	"	"	"	"	
Zinc	**28**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 4-5FT

T182416-10 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 4-5FT

T182416-10 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.6 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*120 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*92.6 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 5-2FT

T182416-11 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	**13**	10	"	"	"	"	"	"	
C29-C40 (MORO)	**110**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*88.1 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**68**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**13**	2.0	"	"	"	"	"	"	
Cobalt	**8.1**	2.0	"	"	"	"	"	"	
Copper	**10**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.6**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**45**	5.0	"	"	"	"	"	"	
Zinc	**44**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 5-2FT

T182416-11 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 5-2FT

T182416-11 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.7 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*120 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*91.6 %*	*83.2-113*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 5-5FT

T182416-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	**12**	10	"	"	"	"	"	"	
C29-C40 (MORO)	**39**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*90.3 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**110**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**8.2**	2.0	"	"	"	"	"	"	
Cobalt	**6.8**	2.0	"	"	"	"	"	"	
Copper	**13**	1.0	"	"	"	"	"	"	
Lead	**11**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.5**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**29**	5.0	"	"	"	"	"	"	
Zinc	**54**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 5-5FT

T182416-12 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 5-5FT

T182416-12 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.5 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*120 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*93.7 %*	*83.2-113*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 5-10FT

T182416-13 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*87.9 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**35**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**4.7**	2.0	"	"	"	"	"	"	
Cobalt	**4.7**	2.0	"	"	"	"	"	"	
Copper	**4.8**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**3.2**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**19**	5.0	"	"	"	"	"	"	
Zinc	**12**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 5-10FT

T182416-13 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 5-10FT

T182416-13 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.0 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*119 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*91.5 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 5-15FT

T182416-14 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*89.0 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**41**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**7.9**	2.0	"	"	"	"	"	"	
Cobalt	**6.2**	2.0	"	"	"	"	"	"	
Copper	**6.9**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**4.8**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**32**	5.0	"	"	"	"	"	"	
Zinc	**17**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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SLF- 5-15FT

T182416-14 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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SLF- 5-15FT

T182416-14 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.7 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*121 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*90.0 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 6-2FT

T182416-15 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*83.5 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**6.7**	5.0	"	"	"	"	"	"	
Barium	**76**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**5.6**	2.0	"	"	"	"	"	"	
Cobalt	**5.9**	2.0	"	"	"	"	"	"	
Copper	**8.4**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**3.4**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**42**	5.0	"	"	"	"	"	"	
Zinc	**24**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 6-2FT

T182416-15 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 6-2FT

T182416-15 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.1 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*109 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*87.6 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 6-5FT

T182416-16 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*87.8 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**5.2**	5.0	"	"	"	"	"	"	
Barium	**100**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**7.9**	2.0	"	"	"	"	"	"	
Cobalt	**5.7**	2.0	"	"	"	"	"	"	
Copper	**12**	1.0	"	"	"	"	"	"	
Lead	**11**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.3**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**29**	5.0	"	"	"	"	"	"	
Zinc	**44**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 6-5FT

T182416-16 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 6-5FT

T182416-16 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.0 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*119 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*90.6 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-2FT

T182416-17 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	50	mg/kg	5	8080637	08/06/18	08/08/18	EPA 8015B	R-07
C13-C28 (DRO)	**110**	50	"	"	"	"	"	"	
C29-C40 (MORO)	**2100**	50	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*73.2 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	2.7	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	1.8	"	"	"	"	"	"	
Arsenic	**8.2**	4.5	"	"	"	"	"	"	
Barium	**92**	0.91	"	"	"	"	"	"	
Beryllium	ND	0.91	"	"	"	"	"	"	
Cadmium	ND	1.8	"	"	"	"	"	"	
Chromium	**17**	1.8	"	"	"	"	"	"	
Cobalt	**7.4**	1.8	"	"	"	"	"	"	
Copper	**25**	0.91	"	"	"	"	"	"	
Lead	**14**	2.7	"	"	"	"	"	"	
Molybdenum	ND	4.5	"	"	"	"	"	"	
Nickel	**12**	1.8	"	"	"	"	"	"	
Selenium	ND	4.5	"	"	"	"	"	"	
Thallium	ND	1.8	"	"	"	"	"	"	
Vanadium	**47**	4.5	"	"	"	"	"	"	
Zinc	**43**	0.91	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-2FT

T182416-17 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	2.5	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	2.5	"	"	"	"	"	"	
Bromodichloromethane	ND	2.5	"	"	"	"	"	"	
Bromoform	ND	2.5	"	"	"	"	"	"	
Bromomethane	ND	2.5	"	"	"	"	"	"	
n-Butylbenzene	ND	2.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	2.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	2.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.5	"	"	"	"	"	"	
Chlorobenzene	ND	2.5	"	"	"	"	"	"	
Chloroethane	ND	2.5	"	"	"	"	"	"	
Chloroform	ND	2.5	"	"	"	"	"	"	
Chloromethane	ND	2.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	2.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	2.5	"	"	"	"	"	"	
Dibromochloromethane	ND	2.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
Dibromomethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
1,3-Dichloropropane	ND	2.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	2.5	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-2FT

T182416-17 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	2.5	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	2.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.5	"	"	"	"	"	"	
Isopropylbenzene	ND	2.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.5	"	"	"	"	"	"	
Methylene chloride	ND	2.5	"	"	"	"	"	"	
Naphthalene	ND	2.5	"	"	"	"	"	"	
n-Propylbenzene	ND	2.5	"	"	"	"	"	"	
Styrene	ND	2.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
Tetrachloroethene	ND	2.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.5	"	"	"	"	"	"	
Trichloroethene	ND	2.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	2.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	2.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	2.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.5	"	"	"	"	"	"	
Benzene	ND	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
o-Xylene	ND	2.5	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.5 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*116 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*95.4 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-5FT

T182416-18 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*85.7 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**130**	1.0	"	"	"	"	08/07/18	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**8.4**	2.0	"	"	"	"	"	"	
Cobalt	**6.2**	2.0	"	"	"	"	"	"	
Copper	**14**	1.0	"	"	"	"	"	"	
Lead	**19**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**6.5**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**30**	5.0	"	"	"	"	"	"	
Zinc	**69**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-5FT

T182416-18 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-5FT

T182416-18 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.8 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*122 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*88.0 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-10FT

T182416-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*82.8 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**81**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**6.8**	2.0	"	"	"	"	"	"	
Cobalt	**6.2**	2.0	"	"	"	"	"	"	
Copper	**6.6**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**4.6**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**26**	5.0	"	"	"	"	"	"	
Zinc	**18**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-10FT

T182416-19 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-10FT

T182416-19 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.6 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*123 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*89.7 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-15FT

T182416-20 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080637	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*82.4 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080641	08/06/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	08/07/18	"	
Arsenic	ND	5.0	"	"	"	"	08/07/18	"	
Barium	**110**	1.0	"	"	"	"	08/07/18	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**6.6**	2.0	"	"	"	"	"	"	
Cobalt	**7.4**	2.0	"	"	"	"	"	"	
Copper	**6.7**	1.0	"	"	"	"	08/07/18	"	
Lead	ND	3.0	"	"	"	"	08/07/18	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.5**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**30**	5.0	"	"	"	"	08/07/18	"	
Zinc	**17**	1.0	"	"	"	"	08/07/18	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080640	08/06/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-15FT

T182416-20 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 7-15FT

T182416-20 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080308	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.2 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*123 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*91.9 %*	*83.2-113*		"	"	"	"	

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 8-2FT

T182416-21 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	**34**	10	"	"	"	"	"	"	
C29-C40 (MORO)	**570**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*94.3 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**5.0**	5.0	"	"	"	"	"	"	
Barium	**49**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**8.1**	2.0	"	"	"	"	"	"	
Cobalt	**6.5**	2.0	"	"	"	"	"	"	
Copper	**12**	1.0	"	"	"	"	"	"	
Lead	**7.5**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**6.8**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**46**	5.0	"	"	"	"	"	"	
Zinc	**38**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 8-2FT

T182416-21 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 8-2FT

T182416-21 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.3 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*121 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*97.0 %*	*83.2-113*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 8-5FT

T182416-22 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*88.8 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**120**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**11**	2.0	"	"	"	"	"	"	
Cobalt	**7.1**	2.0	"	"	"	"	"	"	
Copper	**140**	1.0	"	"	"	"	"	"	
Lead	**29**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**7.2**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**34**	5.0	"	"	"	"	"	"	
Zinc	**160**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 8-5FT

T182416-22 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 8-5FT

T182416-22 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.4 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*116 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*83.2-113*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-2FT

T182416-23 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	**14**	10	"	"	"	"	"	"	
C29-C40 (MORO)	**130**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*91.4 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**5.3**	5.0	"	"	"	"	"	"	
Barium	**160**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**11**	2.0	"	"	"	"	"	"	
Cobalt	**7.2**	2.0	"	"	"	"	"	"	
Copper	**140**	1.0	"	"	"	"	"	"	
Lead	**79**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**9.1**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**36**	5.0	"	"	"	"	"	"	
Zinc	**610**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-2FT

T182416-23 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-2FT

T182416-23 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.5 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*114 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*98.9 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-5FT

T182416-24 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*95.3 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**78**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**8.8**	2.0	"	"	"	"	"	"	
Cobalt	**6.8**	2.0	"	"	"	"	"	"	
Copper	**8.0**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**6.1**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**30**	5.0	"	"	"	"	"	"	
Zinc	**46**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-5FT

T182416-24 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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SLF- 9-5FT

T182416-24 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.4 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*113 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*97.8 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-10FT

T182416-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*88.8 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**140**	1.0	"	"	"	"	08/07/18	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**7.4**	2.0	"	"	"	"	"	"	
Cobalt	**6.1**	2.0	"	"	"	"	"	"	
Copper	**6.9**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.2**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**27**	5.0	"	"	"	"	"	"	
Zinc	**41**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-10FT

T182416-25 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	2.5	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	2.5	"	"	"	"	"	"	
Bromodichloromethane	ND	2.5	"	"	"	"	"	"	
Bromoform	ND	2.5	"	"	"	"	"	"	
Bromomethane	ND	2.5	"	"	"	"	"	"	
n-Butylbenzene	ND	2.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	2.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	2.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.5	"	"	"	"	"	"	
Chlorobenzene	ND	2.5	"	"	"	"	"	"	
Chloroethane	ND	2.5	"	"	"	"	"	"	
Chloroform	ND	2.5	"	"	"	"	"	"	
Chloromethane	ND	2.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	2.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	2.5	"	"	"	"	"	"	
Dibromochloromethane	ND	2.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
Dibromomethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
1,3-Dichloropropane	ND	2.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	2.5	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-10FT

T182416-25 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	2.5	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	2.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.5	"	"	"	"	"	"	
Isopropylbenzene	ND	2.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.5	"	"	"	"	"	"	
Methylene chloride	ND	2.5	"	"	"	"	"	"	
Naphthalene	ND	2.5	"	"	"	"	"	"	
n-Propylbenzene	ND	2.5	"	"	"	"	"	"	
Styrene	ND	2.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
Tetrachloroethene	ND	2.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.5	"	"	"	"	"	"	
Trichloroethene	ND	2.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	2.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	2.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	2.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.5	"	"	"	"	"	"	
Benzene	ND	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
o-Xylene	ND	2.5	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*112 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*102 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-15FT

T182416-26 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	**12**	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*81.7 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**45**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**5.8**	2.0	"	"	"	"	"	"	
Cobalt	**6.0**	2.0	"	"	"	"	"	"	
Copper	**6.1**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**4.4**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**25**	5.0	"	"	"	"	"	"	
Zinc	**94**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-15FT

T182416-26 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 9-15FT

T182416-26 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.9 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*112 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*99.6 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 10-2FT

T182416-27 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	**13**	10	"	"	"	"	"	"	
C29-C40 (MORO)	**14**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*90.5 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**69**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**10**	2.0	"	"	"	"	"	"	
Cobalt	**7.1**	2.0	"	"	"	"	"	"	
Copper	**12**	1.0	"	"	"	"	"	"	
Lead	**11**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.9**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**50**	5.0	"	"	"	"	"	"	
Zinc	**59**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 10-2FT

T182416-27 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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SLF- 10-2FT

T182416-27 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.9 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*115 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*98.0 %*	*83.2-113*		"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 10-5FT

T182416-28 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*95.1 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**5.2**	5.0	"	"	"	"	"	"	
Barium	**74**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**13**	2.0	"	"	"	"	"	"	
Cobalt	**9.2**	2.0	"	"	"	"	"	"	
Copper	**11**	1.0	"	"	"	"	"	"	
Lead	**8.0**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**8.1**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**47**	5.0	"	"	"	"	"	"	
Zinc	**42**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 10-5FT

T182416-28 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 10-5FT

T182416-28 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.2 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*115 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*97.8 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 11-2FT

T182416-29 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/08/18	EPA 8015B	
C13-C28 (DRO)	**17**	10	"	"	"	"	"	"	
C29-C40 (MORO)	**99**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*93.1 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**6.2**	5.0	"	"	"	"	"	"	
Barium	**70**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**11**	2.0	"	"	"	"	"	"	
Cobalt	**7.9**	2.0	"	"	"	"	"	"	
Copper	**8.9**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.0**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**60**	5.0	"	"	"	"	"	"	
Zinc	**33**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 11-2FT

T182416-29 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 11-2FT

T182416-29 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.1 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*116 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*97.8 %*	*83.2-113*		"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 11-5FT

T182416-30 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*86.9 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	**5.4**	5.0	"	"	"	"	"	"	
Barium	**80**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**12**	2.0	"	"	"	"	"	"	
Cobalt	**7.3**	2.0	"	"	"	"	"	"	
Copper	**15**	1.0	"	"	"	"	"	"	
Lead	**9.0**	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**7.4**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**33**	5.0	"	"	"	"	"	"	
Zinc	**42**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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SLF- 11-5FT

T182416-30 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 11-5FT

T182416-30 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.4 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*114 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*83.2-113*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 12-2FT

T182416-31 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*87.0 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**53**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**9.7**	2.0	"	"	"	"	"	"	
Cobalt	**7.1**	2.0	"	"	"	"	"	"	
Copper	**7.1**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**6.6**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**39**	5.0	"	"	"	"	"	"	
Zinc	**31**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 12-2FT

T182416-31 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	2.5	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	2.5	"	"	"	"	"	"	
Bromodichloromethane	ND	2.5	"	"	"	"	"	"	
Bromoform	ND	2.5	"	"	"	"	"	"	
Bromomethane	ND	2.5	"	"	"	"	"	"	
n-Butylbenzene	ND	2.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	2.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	2.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.5	"	"	"	"	"	"	
Chlorobenzene	ND	2.5	"	"	"	"	"	"	
Chloroethane	ND	2.5	"	"	"	"	"	"	
Chloroform	ND	2.5	"	"	"	"	"	"	
Chloromethane	ND	2.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	2.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	2.5	"	"	"	"	"	"	
Dibromochloromethane	ND	2.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
Dibromomethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
1,3-Dichloropropane	ND	2.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloropropene	ND	2.5	"	"	"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 12-2FT

T182416-31 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	2.5	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	2.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.5	"	"	"	"	"	"	
Isopropylbenzene	ND	2.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.5	"	"	"	"	"	"	
Methylene chloride	ND	2.5	"	"	"	"	"	"	
Naphthalene	ND	2.5	"	"	"	"	"	"	
n-Propylbenzene	ND	2.5	"	"	"	"	"	"	
Styrene	ND	2.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
Tetrachloroethene	ND	2.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.5	"	"	"	"	"	"	
Trichloroethene	ND	2.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	2.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	2.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	2.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.5	"	"	"	"	"	"	
Benzene	ND	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
o-Xylene	ND	2.5	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*109 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 13-2FT

T182416-32 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*86.5 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**59**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**9.9**	2.0	"	"	"	"	"	"	
Cobalt	**7.3**	2.0	"	"	"	"	"	"	
Copper	**9.3**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**4.8**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**64**	5.0	"	"	"	"	"	"	
Zinc	**35**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 13-2FT

T182416-32 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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SLF- 13-2FT

T182416-32 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.6 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*116 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*97.2 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 13-5FT

T182416-33 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*87.3 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**32**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**7.8**	2.0	"	"	"	"	"	"	
Cobalt	**7.0**	2.0	"	"	"	"	"	"	
Copper	**6.2**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**6.0**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**31**	5.0	"	"	"	"	"	"	
Zinc	**17**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 13-5FT

T182416-33 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 13-5FT

T182416-33 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.1 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*123 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*93.5 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 13-10FT

T182416-34 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*84.5 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**43**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**7.8**	2.0	"	"	"	"	"	"	
Cobalt	**11**	2.0	"	"	"	"	"	"	
Copper	**7.2**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**8.1**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**36**	5.0	"	"	"	"	"	"	
Zinc	**16**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 13-10FT

T182416-34 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 13-10FT

T182416-34 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.6 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*112 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*98.8 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 13-15FT

T182416-35 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*84.4 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**69**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**17**	2.0	"	"	"	"	"	"	
Cobalt	**11**	2.0	"	"	"	"	"	"	
Copper	**17**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**12**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**91**	5.0	"	"	"	"	"	"	
Zinc	**46**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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SLF- 13-15FT

T182416-35 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 13-15FT

T182416-35 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*115 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*97.6 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 14-2FT

T182416-36 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	**12**	10	"	"	"	"	"	"	
C29-C40 (MORO)	**120**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*82.9 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**75**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**8.7**	2.0	"	"	"	"	"	"	
Cobalt	**6.3**	2.0	"	"	"	"	"	"	
Copper	**9.0**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.8**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**27**	5.0	"	"	"	"	"	"	
Zinc	**30**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 14-2FT

T182416-36 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 14-2FT

T182416-36 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.4 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*115 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*93.5 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 14-5FT

T182416-37 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	**14**	10	"	"	"	"	"	"	
C29-C40 (MORO)	**150**	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*82.7 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**53**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**7.4**	2.0	"	"	"	"	"	"	
Cobalt	**6.8**	2.0	"	"	"	"	"	"	
Copper	**7.7**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**6.0**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**27**	5.0	"	"	"	"	"	"	
Zinc	**26**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 14-5FT

T182416-37 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 14-5FT

T182416-37 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.2 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*120 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*97.2 %*	*83.2-113*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 14-10FT

T182416-38 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*82.6 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**57**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	08/07/18	"	
Cadmium	ND	2.0	"	"	"	"	08/07/18	"	
Chromium	**7.5**	2.0	"	"	"	"	"	"	
Cobalt	**6.5**	2.0	"	"	"	"	"	"	
Copper	**6.0**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.7**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**33**	5.0	"	"	"	"	"	"	
Zinc	**17**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 14-10FT

T182416-38 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 14-10FT

T182416-38 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.4 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*115 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*96.7 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 15-15FT

T182416-39 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*90.6 %*	*65-135*		*"*	*"*	*"*	*"*	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**62**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**7.8**	2.0	"	"	"	"	"	"	
Cobalt	**6.7**	2.0	"	"	"	"	"	"	
Copper	**6.1**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**5.2**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**36**	5.0	"	"	"	"	"	"	
Zinc	**19**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 15-15FT

T182416-39 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 15-15FT

T182416-39 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.7 %*	*82.9-116*		*"*	*"*	*"*	*"*	
Surrogate: Dibromofluoromethane		*117 %*	*80.4-132*		*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*97.1 %*	*83.2-113*		*"*	*"*	*"*	*"*	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 12-5FT

T182416-40 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8080638	08/06/18	08/09/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*89.4 %*	*65-135*		"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	2.7	mg/kg	1	8080733	08/07/18	08/07/18	EPA 6010b	
Silver	ND	1.8	"	"	"	"	"	"	
Arsenic	**7.3**	4.5	"	"	"	"	"	"	
Barium	**110**	0.91	"	"	"	"	08/07/18	"	
Beryllium	ND	0.91	"	"	"	"	"	"	
Cadmium	ND	1.8	"	"	"	"	08/07/18	"	
Chromium	**12**	1.8	"	"	"	"	"	"	
Cobalt	**8.1**	1.8	"	"	"	"	"	"	
Copper	**15**	0.91	"	"	"	"	"	"	
Lead	**11**	2.7	"	"	"	"	"	"	
Molybdenum	ND	4.5	"	"	"	"	"	"	
Nickel	**7.8**	1.8	"	"	"	"	"	"	
Selenium	ND	4.5	"	"	"	"	"	"	
Thallium	ND	1.8	"	"	"	"	"	"	
Vanadium	**38**	4.5	"	"	"	"	"	"	
Zinc	**41**	0.91	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8080731	08/07/18	08/08/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 12-5FT

T182416-40 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	5.0	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

SLF- 12-5FT

T182416-40 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	8080311	08/03/18	08/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.0 %*	*82.9-116*		"	"	"	"	
Surrogate: Dibromofluoromethane		*118 %*	*80.4-132*		"	"	"	"	
Surrogate: Toluene-d8		*94.0 %*	*83.2-113*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080637 - EPA 3510C GC										
Blank (8080637-BLK1)				Prepared: 08/06/18 Analyzed: 08/07/18						
C6-C12 (GRO)	ND	10	mg/kg							
C13-C28 (DRO)	ND	10	"							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*86.8*		*"*	*98.0*		*88.5*	*65-135*			
LCS (8080637-BS1)				Prepared: 08/06/18 Analyzed: 08/07/18						
C13-C28 (DRO)	430	10	mg/kg	490		87.8	75-125			
Surrogate: p-Terphenyl	*77.2*		*"*	*98.0*		*78.8*	*65-135*			
Matrix Spike (8080637-MS1)		**Source: T182416-01**		Prepared: 08/06/18 Analyzed: 08/07/18						
C13-C28 (DRO)	490	10	mg/kg	510	ND	96.2	75-125			
Surrogate: p-Terphenyl	*92.0*		*"*	*102*		*90.1*	*65-135*			
Matrix Spike Dup (8080637-MSD1)		**Source: T182416-01**		Prepared: 08/06/18 Analyzed: 08/07/18						
C13-C28 (DRO)	490	10	mg/kg	490	ND	101	75-125	0.542	20	
Surrogate: p-Terphenyl	*87.6*		*"*	*98.0*		*89.4*	*65-135*			
Batch 8080638 - EPA 3550B GC										
Blank (8080638-BLK1)				Prepared: 08/06/18 Analyzed: 08/08/18						
C6-C12 (GRO)	ND	10	mg/kg							
C13-C28 (DRO)	ND	10	"							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*86.0*		*"*	*100*		*86.0*	*65-135*			
LCS (8080638-BS1)				Prepared: 08/06/18 Analyzed: 08/08/18						
C13-C28 (DRO)	490	10	mg/kg	500		97.1	75-125			
Surrogate: p-Terphenyl	*88.5*		*"*	*100*		*88.5*	*65-135*			

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080638 - EPA 3550B GC										
LCS Dup (8080638-BSD1)				Prepared: 08/06/18 Analyzed: 08/08/18						
C13-C28 (DRO)	550	10	mg/kg	500		109	75-125	12.0	20	
Surrogate: p-Terphenyl	*84.2*		*"*	*100*		*84.2*	*65-135*			

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080641 - EPA 3050B										
Blank (8080641-BLK1)				Prepared: 08/06/18 Analyzed: 08/07/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8080641-BS1)				Prepared: 08/06/18 Analyzed: 08/07/18						
Arsenic	103	5.0	mg/kg	100		103	75-125			
Barium	100	1.0	"	100		100	75-125			
Cadmium	102	2.0	"	100		102	75-125			
Chromium	101	2.0	"	100		101	75-125			
Lead	102	3.0	"	100		102	75-125			
Matrix Spike (8080641-MS1)		**Source: T182416-01**		Prepared: 08/06/18 Analyzed: 08/07/18						
Arsenic	122	5.0	mg/kg	98.0	3.00	122	75-125			
Barium	158	1.0	"	98.0	42.3	118	75-125			
Cadmium	112	2.0	"	98.0	ND	114	75-125			
Chromium	123	2.0	"	98.0	7.40	118	75-125			
Lead	120	3.0	"	98.0	8.67	114	75-125			

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Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080641 - EPA 3050B										
Matrix Spike Dup (8080641-MSD1)		**Source: T182416-01**		Prepared: 08/06/18 Analyzed: 08/07/18						
Arsenic	113	5.0	mg/kg	96.2	3.00	114	75-125	7.82	20	
Barium	154	1.0	"	96.2	42.3	117	75-125	2.09	20	
Cadmium	109	2.0	"	96.2	ND	114	75-125	2.59	20	
Chromium	116	2.0	"	96.2	7.40	113	75-125	5.25	20	
Lead	115	3.0	"	96.2	8.67	111	75-125	4.64	20	
Batch 8080733 - EPA 3050B										
Blank (8080733-BLK1)				Prepared & Analyzed: 08/07/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8080733-BS1)				Prepared & Analyzed: 08/07/18						
Arsenic	106	5.0	mg/kg	100		106	75-125			
Barium	106	1.0	"	100		106	75-125			
Cadmium	105	2.0	"	100		105	75-125			
Chromium	103	2.0	"	100		103	75-125			
Lead	105	3.0	"	100		105	75-125			

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Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080733 - EPA 3050B										
Matrix Spike (8080733-MS1)		**Source: T182416-21**		Prepared & Analyzed: 08/07/18						
Arsenic	106	5.0	mg/kg	92.6	5.02	109	75-125			
Barium	170	1.0	"	92.6	48.9	130	75-125			QM-05
Cadmium	101	2.0	"	92.6	0.737	109	75-125			
Chromium	112	2.0	"	92.6	8.14	112	75-125			
Lead	107	3.0	"	92.6	7.46	107	75-125			
Matrix Spike Dup (8080733-MSD1)		**Source: T182416-21**		Prepared & Analyzed: 08/07/18						
Arsenic	102	5.0	mg/kg	94.3	5.02	103	75-125	3.87	20	
Barium	182	1.0	"	94.3	48.9	141	75-125	7.19	20	QM-05
Cadmium	95.6	2.0	"	94.3	0.737	101	75-125	5.70	20	
Chromium	105	2.0	"	94.3	8.14	103	75-125	6.01	20	
Lead	102	3.0	"	94.3	7.46	101	75-125	4.20	20	

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Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080640 - EPA 7471A Soil										
Blank (8080640-BLK1)				Prepared: 08/06/18 Analyzed: 08/08/18						
Mercury	ND	0.10	mg/kg							
LCS (8080640-BS1)				Prepared: 08/06/18 Analyzed: 08/08/18						
Mercury	0.411	0.10	mg/kg	0.417		98.7	80-120			
Matrix Spike (8080640-MS1)		**Source: T182416-01**		Prepared: 08/06/18 Analyzed: 08/08/18						
Mercury	0.390	0.10	mg/kg	0.410	ND	95.1	75-125			
Matrix Spike Dup (8080640-MSD1)		**Source: T182416-01**		Prepared: 08/06/18 Analyzed: 08/08/18						
Mercury	0.380	0.10	mg/kg	0.397	ND	95.7	75-125	2.66	20	
Batch 8080731 - EPA 7471A Soil										
Blank (8080731-BLK1)				Prepared: 08/07/18 Analyzed: 08/08/18						
Mercury	ND	0.10	mg/kg							
LCS (8080731-BS1)				Prepared: 08/07/18 Analyzed: 08/08/18						
Mercury	0.380	0.10	mg/kg	0.410		92.7	80-120			
Matrix Spike (8080731-MS1)		**Source: T182416-21**		Prepared: 08/07/18 Analyzed: 08/08/18						
Mercury	0.368	0.10	mg/kg	0.391	ND	94.3	75-125			
Matrix Spike Dup (8080731-MSD1)		**Source: T182416-21**		Prepared: 08/07/18 Analyzed: 08/08/18						
Mercury	0.293	0.10	mg/kg	0.391	ND	75.0	75-125	22.8	20	QR-04

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

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 8080308 - EPA 5030 GCMS										
Blank (8080308-BLK1)				Prepared: 08/03/18 Analyzed: 08/07/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	10	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							
1,2-Dichloroethane	ND	5.0	"							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

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 8080308 - EPA 5030 GCMS										
Blank (8080308-BLK1)				Prepared: 08/03/18 Analyzed: 08/07/18						
p-Isopropyltoluene	ND	5.0	ug/kg							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							
Surrogate: 4-Bromofluorobenzene	*38.6*		*"*	*39.6*		*97.4*	*82.9-116*			
Surrogate: Dibromofluoromethane	*46.1*		*"*	*39.6*		*116*	*80.4-132*			
Surrogate: Toluene-d8	*39.0*		*"*	*39.6*		*98.6*	*83.2-113*			
LCS (8080308-BS1)				Prepared: 08/03/18 Analyzed: 08/07/18						
Chlorobenzene	84.4	5.0	ug/kg	99.6		84.7	65.2-124			
1,1-Dichloroethene	88.8	5.0	"	99.6		89.1	60.9-131			
Trichloroethene	83.7	5.0	"	99.6		84.0	62.1-126			
Benzene	92.4	5.0	"	99.6		92.7	65.3-127			
Toluene	84.3	5.0	"	99.6		84.7	64.3-122			
Surrogate: 4-Bromofluorobenzene	*39.5*		*"*	*39.8*		*99.1*	*82.9-116*			
Surrogate: Dibromofluoromethane	*47.7*		*"*	*39.8*		*120*	*80.4-132*			
Surrogate: Toluene-d8	*38.3*		*"*	*39.8*		*96.2*	*83.2-113*			

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

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 8080308 - EPA 5030 GCMS										
Matrix Spike (8080308-MS1)		**Source: T182416-01**		Prepared: 08/03/18 Analyzed: 08/07/18						
Chlorobenzene	102	5.0	ug/kg	99.6	ND	102	75-125			
1,1-Dichloroethene	102	5.0	"	99.6	ND	103	75-125			
Trichloroethene	99.3	5.0	"	99.6	ND	99.7	75-125			
Benzene	107	5.0	"	99.6	ND	107	75-125			
Toluene	100	5.0	"	99.6	ND	100	75-125			
Surrogate: 4-Bromofluorobenzene	*39.6*		*"*	*39.8*		*99.4*	*82.9-116*			
Surrogate: Dibromofluoromethane	*45.3*		*"*	*39.8*		*114*	*80.4-132*			
Surrogate: Toluene-d8	*38.5*		*"*	*39.8*		*96.6*	*83.2-113*			
Matrix Spike Dup (8080308-MSD1)		**Source: T182416-01**		Prepared: 08/03/18 Analyzed: 08/07/18						
Chlorobenzene	105	5.0	ug/kg	99.8	ND	105	75-125	3.27	20	
1,1-Dichloroethene	107	5.0	"	99.8	ND	107	75-125	4.47	20	
Trichloroethene	101	5.0	"	99.8	ND	101	75-125	1.79	20	
Benzene	110	5.0	"	99.8	ND	111	75-125	3.64	20	
Toluene	102	5.0	"	99.8	ND	103	75-125	2.29	20	
Surrogate: 4-Bromofluorobenzene	*39.6*		*"*	*39.9*		*99.2*	*82.9-116*			
Surrogate: Dibromofluoromethane	*45.4*		*"*	*39.9*		*114*	*80.4-132*			
Surrogate: Toluene-d8	*38.2*		*"*	*39.9*		*95.7*	*83.2-113*			
Batch 8080311 - EPA 5030 GCMS										
Blank (8080311-BLK1)				Prepared: 08/03/18 Analyzed: 08/07/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

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 8080311 - EPA 5030 GCMS										
Blank (8080311-BLK1)				Prepared: 08/03/18 Analyzed: 08/07/18						
4-Chlorotoluene	ND	5.0	ug/kg							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	10	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							
1,2-Dichloroethane	ND	5.0	"							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							
p-Isopropyltoluene	ND	5.0	"							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							

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.

Mike Jaroudi, Project Manager

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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

Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

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 8080311 - EPA 5030 GCMS										
Blank (8080311-BLK1)				Prepared: 08/03/18 Analyzed: 08/07/18						
1,2,3-Trichloropropane	ND	5.0	ug/kg							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							
Surrogate: 4-Bromofluorobenzene	*40.5*		*"*	*39.7*		*102*	*82.9-116*			
Surrogate: Dibromofluoromethane	*45.0*		*"*	*39.7*		*113*	*80.4-132*			
Surrogate: Toluene-d8	*39.7*		*"*	*39.7*		*100*	*83.2-113*			
LCS (8080311-BS1)				Prepared: 08/03/18 Analyzed: 08/08/18						
Chlorobenzene	48.2	2.5	ug/kg	39.8		121	65.2-124			
1,1-Dichloroethene	49.1	2.5	"	39.8		123	60.9-131			
Trichloroethene	45.9	2.5	"	39.8		116	62.1-126			
Benzene	50.0	2.5	"	39.8		126	65.3-127			
Toluene	48.6	2.5	"	39.8		122	64.3-122			
Surrogate: 4-Bromofluorobenzene	*40.2*		*"*	*39.8*		*101*	*82.9-116*			
Surrogate: Dibromofluoromethane	*44.3*		*"*	*39.8*		*111*	*80.4-132*			
Surrogate: Toluene-d8	*40.3*		*"*	*39.8*		*101*	*83.2-113*			
LCS Dup (8080311-BSD1)				Prepared: 08/03/18 Analyzed: 08/08/18						
Chlorobenzene	47.1	2.5	ug/kg	40.0		118	65.2-124	2.33	20	
1,1-Dichloroethene	47.6	2.5	"	40.0		119	60.9-131	2.99	20	
Trichloroethene	45.9	2.5	"	40.0		115	62.1-126	0.0530	20	
Benzene	49.9	2.5	"	40.0		125	65.3-127	0.201	20	
Toluene	45.7	2.5	"	40.0		114	64.3-122	6.21	20	
Surrogate: 4-Bromofluorobenzene	*37.8*		*"*	*40.0*		*94.5*	*82.9-116*			
Surrogate: Dibromofluoromethane	*43.9*		*"*	*40.0*		*110*	*80.4-132*			
Surrogate: Toluene-d8	*38.6*		*"*	*40.0*		*96.6*	*83.2-113*			

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.

Mike Jaroudi, Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	08/10/18 11:34

Notes and Definitions

R-07	Reporting limit for this compound(s) has been raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.
QR-04	The pecent recovery and/or RPD was outside acceptance criteria. Results accepted based upon percent recovery results in duplicate QC sample and the CCV and CCB results.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
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.

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.

Mike Jaroudi, Project Manager

SunStar Laboratories

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

Chain of Custody Record

Client: Environmental Management Strategies
Address: 8 Goodyear, Ste 125, Irvine, CA 92618
Phone: 949-679-9500 Fax:
Project Manager: Mike Marello

Date: 8/2/18 Page: 1 Of 3
Project Name: SLF V - Chula Vista
Collector: M. Marello Client Project #: EMS571
Batch #: T182416 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	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				Laboratory ID #	Comments/Preservative	Total # of containers
SLF-1-2 ft	8/2/18	10:04	Soil	Plastic Tube	X							X	X					01	ICE	1
SLF-1-5 ft.		10:04			X							X	X					02		1
SLF-2-2 ft.		9:23		Glass	X							X	X					03		1
SLF-2-5 ft.		9:25		Plastic Tube	X							X	X					04		1
SLF-2-10 ft.		9:32			X							X	X					05		1
SLF-2-15 ft.		9:42			X							X	X					06		1
SLF-3-2 ft.		8:58			X							X	X					07		1
SLF-3-5 ft.		8:58			X							X	X					08		1
SLF-4-2 ft.		15:12			X							X	X					09		1
SLF-4-5 ft.		15:12			X							X	X					10		1
SLF-5-2 ft.		8:17			X							X	X					11		1
SLF-5-5 ft.		8:17			X							X	X					12		1
SLF-5-10 ft.		8:23			X							X	X					13		1
SLF-5-15 ft.		8:30			X							X	X					14		1
SLF-6-2 ft.		11:25			X							X	X					15		1

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	8/2/18 15:30	[signature]	8/2/18 15:30
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	8/2/18 17:45	[signature]	8-2-18 1745
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 19.1

Turn around time: Normal 5 Day

Notes

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

COC 171266

SunStar Laboratories

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

Chain of Custody Record

Client: Environmental Management Strategies
Address: 8 Goodyear, Ste 125, Irvine, CA 92618
Phone: 949-679-9500 Fax:
Project Manager: Mike Morello

Date: 8/2/18 Page: 2 Of 3
Project Name: SLFV - Chula Vista
Collector: Mike Morello Client Project #: EMS 571
Batch #: EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	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				Laboratory ID #	Comments/Preservative	Total # of containers
SLF-6-5ft	8/2/18	11:25	Soil	Plastic Tube	X							X	X					16	ICE	1
SLF-7-2ft		12:20			X							X	X					17		1
SLF-7-5ft		12:20			X							X	X					18		1
SLF-7-10ft		12:30			X							X	X					19		1
SLF-7-15ft		12:36			X							X	X					20		1
SLF-8-2ft		11:50			X							X	X					21		1
SLF-8-5ft		11:50			X							X	X					22		1
SLF-9-2ft		7:45			X							X	X					23		1
SLF-9-5ft		7:45			X							X	X					24		1
SLF-9-10ft		7:50			X							X	X					25		1
SLF-9-15ft		7:58			X							X	X					26		1
SLF-10-2ft		13:05			X							X	X					27		1
SLF-10-5ft		13:05			X							X	X					28		1
SLF-11-2ft		13:20			X							X	X					29		1
SLF-11-5ft		13:20			X							X	X					30		1

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	8/2/18 15:30	[signature]	8/2/18 15:30
[signature]	8/2/18 17:45	[signature]	8-2-18 1745

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 19.1

Notes

Turn around time: 5 day

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

COC 171265

SunStar Laboratories, Inc.
25712 Commercentre Dr
Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

SunStar Laboratories

Client: Environmental Management Strategies, Inc.
Address: 8 Goodyear, Suite 125, Irvine, CA 92618
Phone: 949-679-9500 Fax: 949-679-9501
Project Manager: Mike Marello mike.marello@goemsinc.com

Date: 8/2/18 Page: 3 Of 3
Project Name: ~~Ecowet Express Carwash~~ SLF V - Chula Vista
Collector: Mike Marello Client Project #: ~~EMS566~~ EMS571
Batch #: T182416 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	TPH G/D/O 8015B				Laboratory ID #	Comments/Preservative	Total # of containers
SLF-12-2 ft.	8/2/18	13:34	Soil	Plastic Tube	X							X	X					31	ICE	1
SLF-13-2 ft.		14:10			X							X	X					32		1
SLF-13-5 ft.		14:10			X							X	X					33		1
SLF-13-10 ft.		14:17			X							X	X					34		1
SLF-13-15 ft.		14:27			X							X	X					35		1
SLF-14-2 ft.		10:41			X							X	X					36		1
SLF-14-5 ft.		10:41			X							X	X					37		1
SLF-14-10 ft.		10:47			X							X	X					38		1
SLF-15-15 ft.		10:53			X							X	X					39		1
SLF-12-5 ft.	8/2/18	13:34																40		1

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	8/2/18 15:30	[signature]	8/2/18 15:30
[signature]	8/2/18 17:45	[signature]	8-2-18 1745

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 19.1

Notes

Turn around time: Normal
5 day

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

SunStar Laboratories

Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T182416

Client Name: EMS

Project: SLF V-CHULA VISTA

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

If Courier, Received by:

Date/Time Courier Received:

Lab Received by: DAN

Date/Time Lab Received: 8-2-18 1745

Total number of coolers received:

Temperature:	Cooler #1	17.9 °C +/- the CF (1.2°C) =	19.1	°C corrected temperature
Temperature:	Cooler #2	°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature:	Cooler #3	°C +/- the CF (1.2°C) =		°C corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☐ **Yes** ☒ **No**
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: BC 8-3-18

Comments:

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

Appendix C

Laboratory Reports for Soil Vapor

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WORK ORDER NUMBER: 18-08-0306

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Environmental Management Strategies, Inc.

Client Project Name: Shopoff Land Fund V-Chula Vista

Attention: Mike Marello
8 Goodyear, Suite 125
Irvine, CA 92618-3745

Approved for release on 08/10/2018 by:
Don Burley
Project Manager

ResultLink

Email your PM

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: Shopoff Land Fund V-Chula Vista
Work Order Number: 18-08-0306

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Work Order Narrative

Work Order: 18-08-0306 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 08/03/18. They were assigned to Work Order 18-08-0306.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.

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Sample Summary

Client:	Environmental Management Strategies, Inc. 8 Goodyear, Suite 125 Irvine, CA 92618-3745	Work Order:	18-08-0306
		Project Name:	Shopoff Land Fund V-Chula Vista
		PO Number:	
		Date/Time Received:	08/03/18 14:30
		Number of Containers:	22
Attn:	Mike Marello		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SLF-1-5ft	18-08-0306-1	08/02/18 14:17	1	Air
SLF-2-5ft	18-08-0306-2	08/02/18 13:57	1	Air
SLF-2-15ft	18-08-0306-3	08/02/18 13:41	1	Air
SLF-3-5ft	18-08-0306-4	08/02/18 13:22	1	Air
SLF-4-5ft	18-08-0306-5	08/03/18 11:26	1	Air
SLF-5-5ft	18-08-0306-6	08/02/18 13:01	1	Air
SLF-5-15ft	18-08-0306-7	08/02/18 12:42	1	Air
SLF-6-5ft	18-08-0306-8	08/03/18 07:39	1	Air
SLF-7-5ft	18-08-0306-9	08/03/18 10:42	1	Air
SLF-7-15ft	18-08-0306-10	08/03/18 10:18	1	Air
SLF-8-5ft	18-08-0306-11	08/03/18 11:02	1	Air
SLF-9-5ft	18-08-0306-12	08/02/18 12:01	1	Air
SLF-9-5ft DUP	18-08-0306-13	08/02/18 12:01	1	Air
SLF-9-15ft	18-08-0306-14	08/02/18 12:20	1	Air
SLF-10-5ft	18-08-0306-15	08/03/18 09:47	1	Air
SLF-11-5ft	18-08-0306-16	08/03/18 09:25	1	Air
SLF-12-5ft	18-08-0306-17	08/03/18 09:05	1	Air
SLF-13-5ft	18-08-0306-18	08/03/18 08:39	1	Air
SLF-13-15ft	18-08-0306-19	08/03/18 09:00	1	Air
SLF-13-15ft DUP	18-08-0306-20	08/03/18 09:00	1	Air
SLF-14-5ft	18-08-0306-21	08/02/18 15:17	1	Air
SLF-14-15ft	18-08-0306-22	08/02/18 14:46	1	Air

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 1 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-1-5ft	**18-08-0306-1-A**	**08/02/18 14:17**	**Air**	**GC/MS HH**	**N/A**	**08/08/18 06:04**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Benzene	37	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	54	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	87	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	130	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	4.9	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	46	2.2	1.00	
4-Ethyltoluene	6.6	4.9	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 2 of 50

Parameter	Result	RL	DF	Qualifiers
2-Hexanone	10	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	57	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	70	3.4	1.00	
Toluene	290	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	55	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	25	7.4	1.00	
1,3,5-Trimethylbenzene	7.6	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	51	8.7	1.00	
p/m-Xylene	130	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	110	68-134	
1,2-Dichloroethane-d4	128	67-133	
Toluene-d8	105	70-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-1-5ft	**18-08-0306-1-A**	**08/02/18 14:17**	**Air**	**GC/MS HH**	**N/A**	**08/08/18 22:35**	**180808L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	320	20	4.12	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	109	68-134	
1,2-Dichloroethane-d4	122	67-133	
Toluene-d8	105	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 3 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-2-5ft	**18-08-0306-2-A**	**08/02/18 13:57**	**Air**	**GC/MS HH**	**N/A**	**08/08/18 06:58**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Benzene	72	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	36	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	8.0	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	6.4	2.4	1.00	
Chloromethane	2.2	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	4.0	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	62	2.2	1.00	
4-Ethyltoluene	15	4.9	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 4 of 50

Parameter	Result	RL	DF	Qualifiers
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	10	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	4.8	3.4	1.00	
Toluene	290	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	60	7.4	1.00	
1,3,5-Trimethylbenzene	17	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	76	8.7	1.00	
p/m-Xylene	200	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	108	68-134	
1,2-Dichloroethane-d4	131	67-133	
Toluene-d8	103	70-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-2-5ft	**18-08-0306-2-A**	**08/02/18 13:57**	**Air**	**GC/MS HH**	**N/A**	**08/08/18 23:24**	**180808L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	230	19	4.06	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	106	68-134	
1,2-Dichloroethane-d4	108	67-133	
Toluene-d8	104	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 5 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-2-15ft	**18-08-0306-3-A**	**08/02/18 13:41**	**Air**	**GC/MS HH**	**N/A**	**08/08/18 08:41**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	62	4.8	1.00	
Benzene	6.7	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	25	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	41	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	3.5	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 6 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	11	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	57	3.4	1.00	
Toluene	12	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	37	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	8.7	1.00	
p/m-Xylene	ND	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	105	68-134	
1,2-Dichloroethane-d4	107	67-133	
Toluene-d8	102	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 7 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-3-5ft	**18-08-0306-4-A**	**08/02/18 13:22**	**Air**	**GC/MS HH**	**N/A**	**08/08/18 09:34**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	60	4.8	1.00	
Benzene	5.6	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	23	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	2.8	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	4.0	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 8 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	9.8	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	27	3.4	1.00	
Toluene	16	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	10	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	8.7	1.00	
p/m-Xylene	ND	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	105	68-134	
1,2-Dichloroethane-d4	107	67-133	
Toluene-d8	101	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 9 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-4-5ft	**18-08-0306-5-A**	**08/03/18 11:26**	**Air**	**GC/MS HH**	**N/A**	**08/08/18 10:27**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	29	4.8	1.00	
Benzene	17	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	6.6	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	3.7	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	3.1	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	28	2.2	1.00	
4-Ethyltoluene	6.5	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 10 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	16	3.4	1.00	
Toluene	92	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	4.8	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	28	7.4	1.00	
1,3,5-Trimethylbenzene	9.9	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	33	8.7	1.00	
p/m-Xylene	93	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	109	68-134	
1,2-Dichloroethane-d4	114	67-133	
Toluene-d8	102	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 11 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-5-5ft	**18-08-0306-6-A**	**08/02/18 13:01**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 10:05**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.02	
Acetone	83	4.8	1.02	
Benzene	20	1.6	1.02	
Benzyl Chloride	ND	11	1.02	
Bromodichloromethane	ND	3.4	1.02	
Bromoform	ND	5.3	1.02	
Bromomethane	ND	2.0	1.02	
2-Butanone	22	4.5	1.02	
n-Butylbenzene	ND	28	1.02	
sec-Butylbenzene	ND	28	1.02	
tert-Butylbenzene	ND	28	1.02	
Carbon Disulfide	ND	6.4	1.02	
Carbon Tetrachloride	ND	3.2	1.02	
Chlorobenzene	ND	2.3	1.02	
Chloroethane	ND	1.3	1.02	
Chloroform	2.9	2.5	1.02	
Chloromethane	ND	2.1	1.02	
Dibromochloromethane	ND	4.3	1.02	
1,2-Dibromoethane	ND	3.9	1.02	
1,2-Dichlorobenzene	ND	3.1	1.02	
1,3-Dichlorobenzene	ND	3.1	1.02	
1,4-Dichlorobenzene	ND	3.1	1.02	
Dichlorodifluoromethane	ND	2.5	1.02	
1,1-Dichloroethane	ND	2.1	1.02	
1,2-Dichloroethane	ND	2.1	1.02	
1,1-Dichloroethene	ND	2.0	1.02	
c-1,2-Dichloroethene	ND	2.0	1.02	
t-1,2-Dichloroethene	ND	2.0	1.02	
1,2-Dichloropropane	ND	2.4	1.02	
c-1,3-Dichloropropene	ND	2.3	1.02	
t-1,3-Dichloropropene	ND	4.6	1.02	
Dichlorotetrafluoroethane	ND	14	1.02	
1,1-Difluoroethane	ND	5.5	1.02	
Ethylbenzene	81	2.2	1.02	
4-Ethyltoluene	7.5	5.0	1.02	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 12 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.02	
2-Hexanone	ND	6.3	1.02	
Isopropanol	ND	13	1.02	
Methyl-t-Butyl Ether (MTBE)	ND	7.4	1.02	
Methylene Chloride	ND	18	1.02	
4-Methyl-2-Pentanone	6.4	6.3	1.02	
Styrene	ND	6.5	1.02	
1,1,2,2-Tetrachloroethane	ND	7.0	1.02	
Tetrachloroethene	370	3.5	1.02	
Toluene	130	1.9	1.02	
1,1,1-Trichloroethane	ND	2.8	1.02	
1,1,2-Trichloroethane	ND	2.8	1.02	
Trichloroethene	ND	2.7	1.02	
Trichlorofluoromethane	ND	5.7	1.02	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	12	1.02	
1,2,4-Trimethylbenzene	32	7.5	1.02	
1,3,5-Trimethylbenzene	9.0	5.0	1.02	
Vinyl Acetate	ND	7.2	1.02	
Vinyl Chloride	ND	1.3	1.02	
o-Xylene	130	8.9	1.02	
p/m-Xylene	340	18	1.02	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-134	
1,2-Dichloroethane-d4	93	67-133	
Toluene-d8	98	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 13 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-5-15ft	**18-08-0306-7-A**	**08/02/18 12:42**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 06:48**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.03	
Acetone	100	4.9	1.03	
Benzene	5.9	1.6	1.03	
Benzyl Chloride	ND	11	1.03	
Bromodichloromethane	ND	3.5	1.03	
Bromoform	ND	5.3	1.03	
Bromomethane	ND	2.0	1.03	
2-Butanone	35	4.6	1.03	
n-Butylbenzene	ND	28	1.03	
sec-Butylbenzene	ND	28	1.03	
tert-Butylbenzene	ND	28	1.03	
Carbon Disulfide	7.3	6.4	1.03	
Carbon Tetrachloride	ND	3.2	1.03	
Chlorobenzene	ND	2.4	1.03	
Chloroethane	ND	1.4	1.03	
Chloroform	ND	2.5	1.03	
Chloromethane	ND	2.1	1.03	
Dibromochloromethane	ND	4.4	1.03	
1,2-Dibromoethane	ND	4.0	1.03	
1,2-Dichlorobenzene	ND	3.1	1.03	
1,3-Dichlorobenzene	ND	3.1	1.03	
1,4-Dichlorobenzene	ND	3.1	1.03	
Dichlorodifluoromethane	ND	2.5	1.03	
1,1-Dichloroethane	ND	2.1	1.03	
1,2-Dichloroethane	ND	2.1	1.03	
1,1-Dichloroethene	ND	2.0	1.03	
c-1,2-Dichloroethene	ND	2.0	1.03	
t-1,2-Dichloroethene	ND	2.0	1.03	
1,2-Dichloropropane	ND	2.4	1.03	
c-1,3-Dichloropropene	ND	2.3	1.03	
t-1,3-Dichloropropene	ND	4.7	1.03	
Dichlorotetrafluoroethane	ND	14	1.03	
1,1-Difluoroethane	ND	5.6	1.03	
Ethylbenzene	120	2.2	1.03	
4-Ethyltoluene	ND	5.1	1.03	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 14 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.03	
2-Hexanone	ND	6.3	1.03	
Isopropanol	ND	13	1.03	
Methyl-t-Butyl Ether (MTBE)	ND	7.4	1.03	
Methylene Chloride	ND	18	1.03	
4-Methyl-2-Pentanone	8.2	6.3	1.03	
Styrene	ND	6.6	1.03	
1,1,2,2-Tetrachloroethane	ND	7.1	1.03	
Toluene	19	1.9	1.03	
1,1,1-Trichloroethane	ND	2.8	1.03	
1,1,2-Trichloroethane	ND	2.8	1.03	
Trichloroethene	ND	2.8	1.03	
Trichlorofluoromethane	ND	5.8	1.03	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	12	1.03	
1,2,4-Trimethylbenzene	ND	7.6	1.03	
1,3,5-Trimethylbenzene	ND	5.1	1.03	
Vinyl Acetate	ND	7.3	1.03	
Vinyl Chloride	ND	1.3	1.03	
o-Xylene	230	8.9	1.03	
p/m-Xylene	560	18	1.03	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-134	
1,2-Dichloroethane-d4	94	67-133	
Toluene-d8	100	70-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-5-15ft	**18-08-0306-7-A**	**08/02/18 12:42**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 20:31**	**180808L01**

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	660	7.4	2.18	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-134	
1,2-Dichloroethane-d4	92	67-133	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 15 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-6-5ft	**18-08-0306-8-A**	**08/03/18 07:39**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 07:40**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	30	4.8	1.00	
Benzene	13	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	10	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	8.6	2.4	1.00	
Chloromethane	24	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	36	2.2	1.00	
4-Ethyltoluene	13	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 16 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Toluene	110	1.9	1.00	
1,1,1-Trichloroethane	3.0	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	11	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	58	7.4	1.00	
1,3,5-Trimethylbenzene	20	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	45	8.7	1.00	
p/m-Xylene	130	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-134	
1,2-Dichloroethane-d4	92	67-133	
Toluene-d8	100	70-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-6-5ft	**18-08-0306-8-A**	**08/03/18 07:39**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 21:19**	**180808L01**

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	890	8.3	2.46	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-134	
1,2-Dichloroethane-d4	93	67-133	
Toluene-d8	99	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 17 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-7-5ft	**18-08-0306-9-A**	**08/03/18 10:42**	**Air**	**GC/MS ZZ**	**N/A**	**08/07/18 18:05**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	150	4.8	1.00	
Benzene	19	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	35	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	15	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 18 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	31	3.4	1.00	
Toluene	54	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	14	7.4	1.00	
1,3,5-Trimethylbenzene	5.1	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	14	8.7	1.00	
p/m-Xylene	38	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-134	
1,2-Dichloroethane-d4	97	67-133	
Toluene-d8	100	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 19 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-7-15ft	**18-08-0306-10-A**	**08/03/18 10:18**	**Air**	**GC/MS ZZ**	**N/A**	**08/07/18 18:56**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	190	4.8	1.00	
Benzene	18	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	46	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	23	2.2	1.00	
4-Ethyltoluene	6.5	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 20 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	34	3.4	1.00	
Toluene	55	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	27	7.4	1.00	
1,3,5-Trimethylbenzene	9.8	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	23	8.7	1.00	
p/m-Xylene	65	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	68-134	
1,2-Dichloroethane-d4	95	67-133	
Toluene-d8	98	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 21 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-8-5ft	**18-08-0306-11-A**	**08/03/18 11:02**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 17:51**	**180808L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.02	
Acetone	95	4.8	1.02	
Benzene	57	1.6	1.02	
Benzyl Chloride	ND	11	1.02	
Bromodichloromethane	ND	3.4	1.02	
Bromoform	ND	5.3	1.02	
Bromomethane	ND	2.0	1.02	
2-Butanone	18	4.5	1.02	
n-Butylbenzene	ND	28	1.02	
sec-Butylbenzene	ND	28	1.02	
tert-Butylbenzene	ND	28	1.02	
Carbon Disulfide	11	6.4	1.02	
Carbon Tetrachloride	ND	3.2	1.02	
Chlorobenzene	ND	2.3	1.02	
Chloroethane	3.7	1.3	1.02	
Chloroform	ND	2.5	1.02	
Chloromethane	3.4	2.1	1.02	
Dibromochloromethane	ND	4.3	1.02	
1,2-Dibromoethane	ND	3.9	1.02	
1,2-Dichlorobenzene	ND	3.1	1.02	
1,3-Dichlorobenzene	ND	3.1	1.02	
1,4-Dichlorobenzene	ND	3.1	1.02	
Dichlorodifluoromethane	ND	2.5	1.02	
1,1-Dichloroethane	ND	2.1	1.02	
1,2-Dichloroethane	ND	2.1	1.02	
1,1-Dichloroethene	ND	2.0	1.02	
c-1,2-Dichloroethene	ND	2.0	1.02	
t-1,2-Dichloroethene	ND	2.0	1.02	
1,2-Dichloropropane	ND	2.4	1.02	
c-1,3-Dichloropropene	ND	2.3	1.02	
t-1,3-Dichloropropene	ND	4.6	1.02	
Dichlorotetrafluoroethane	ND	14	1.02	
1,1-Difluoroethane	ND	5.5	1.02	
Ethylbenzene	62	2.2	1.02	
4-Ethyltoluene	16	5.0	1.02	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 22 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.02	
2-Hexanone	ND	6.3	1.02	
Isopropanol	ND	13	1.02	
Methyl-t-Butyl Ether (MTBE)	ND	7.4	1.02	
Methylene Chloride	ND	18	1.02	
4-Methyl-2-Pentanone	ND	6.3	1.02	
Styrene	ND	6.5	1.02	
1,1,2,2-Tetrachloroethane	ND	7.0	1.02	
Tetrachloroethene	4.7	3.5	1.02	
Toluene	180	1.9	1.02	
1,1,1-Trichloroethane	ND	2.8	1.02	
1,1,2-Trichloroethane	ND	2.8	1.02	
Trichloroethene	ND	2.7	1.02	
Trichlorofluoromethane	ND	5.7	1.02	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	12	1.02	
1,2,4-Trimethylbenzene	68	7.5	1.02	
1,3,5-Trimethylbenzene	24	5.0	1.02	
Vinyl Acetate	ND	7.2	1.02	
Vinyl Chloride	ND	1.3	1.02	
o-Xylene	88	8.9	1.02	
p/m-Xylene	220	18	1.02	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	112	68-134	
1,2-Dichloroethane-d4	95	67-133	
Toluene-d8	97	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 23 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-9-5ft	**18-08-0306-12-A**	**08/02/18 12:01**	**Air**	**GC/MS ZZ**	**N/A**	**08/07/18 20:29**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	24	1.60	
Acetone	130	7.6	1.60	
Benzene	43	2.6	1.60	
Benzyl Chloride	ND	17	1.60	
Bromodichloromethane	ND	5.4	1.60	
Bromoform	ND	8.3	1.60	
Bromomethane	ND	3.1	1.60	
2-Butanone	25	7.1	1.60	
n-Butylbenzene	ND	44	1.60	
sec-Butylbenzene	ND	44	1.60	
tert-Butylbenzene	ND	44	1.60	
Carbon Disulfide	17	10	1.60	
Carbon Tetrachloride	ND	5.0	1.60	
Chlorobenzene	ND	3.7	1.60	
Chloroethane	ND	2.1	1.60	
Chloroform	ND	3.9	1.60	
Chloromethane	ND	3.3	1.60	
Dibromochloromethane	ND	6.8	1.60	
1,2-Dibromoethane	ND	6.1	1.60	
1,2-Dichlorobenzene	ND	4.8	1.60	
1,3-Dichlorobenzene	ND	4.8	1.60	
1,4-Dichlorobenzene	ND	4.8	1.60	
Dichlorodifluoromethane	ND	4.0	1.60	
1,1-Dichloroethane	ND	3.2	1.60	
1,2-Dichloroethane	ND	3.2	1.60	
1,1-Dichloroethene	ND	3.2	1.60	
c-1,2-Dichloroethene	ND	3.2	1.60	
t-1,2-Dichloroethene	ND	3.2	1.60	
1,2-Dichloropropane	ND	3.7	1.60	
c-1,3-Dichloropropene	ND	3.6	1.60	
t-1,3-Dichloropropene	ND	7.3	1.60	
Dichlorotetrafluoroethane	ND	22	1.60	
1,1-Difluoroethane	ND	8.6	1.60	
Ethylbenzene	74	3.5	1.60	
4-Ethyltoluene	24	7.9	1.60	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 24 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	26	1.60	
2-Hexanone	ND	9.8	1.60	
Isopropanol	ND	20	1.60	
Methyl-t-Butyl Ether (MTBE)	ND	12	1.60	
Methylene Chloride	ND	28	1.60	
4-Methyl-2-Pentanone	ND	9.8	1.60	
Styrene	36	10	1.60	
1,1,2,2-Tetrachloroethane	ND	11	1.60	
Tetrachloroethene	ND	5.4	1.60	
Toluene	310	3.0	1.60	
1,1,1-Trichloroethane	ND	4.4	1.60	
1,1,2-Trichloroethane	ND	4.4	1.60	
Trichloroethene	ND	4.3	1.60	
Trichlorofluoromethane	ND	9.0	1.60	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	18	1.60	
1,2,4-Trimethylbenzene	91	12	1.60	
1,3,5-Trimethylbenzene	25	7.9	1.60	
Vinyl Acetate	ND	11	1.60	
Vinyl Chloride	ND	2.0	1.60	
o-Xylene	94	14	1.60	
p/m-Xylene	270	28	1.60	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-134	
1,2-Dichloroethane-d4	93	67-133	
Toluene-d8	100	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 25 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-9-5ft DUP	**18-08-0306-13-A**	**08/02/18 12:01**	**Air**	**GC/MS ZZ**	**N/A**	**08/07/18 21:16**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	24	1.60	
Acetone	120	7.6	1.60	
Benzene	44	2.6	1.60	
Benzyl Chloride	ND	17	1.60	
Bromodichloromethane	ND	5.4	1.60	
Bromoform	ND	8.3	1.60	
Bromomethane	ND	3.1	1.60	
2-Butanone	24	7.1	1.60	
n-Butylbenzene	ND	44	1.60	
sec-Butylbenzene	ND	44	1.60	
tert-Butylbenzene	ND	44	1.60	
Carbon Disulfide	15	10	1.60	
Carbon Tetrachloride	ND	5.0	1.60	
Chlorobenzene	ND	3.7	1.60	
Chloroethane	ND	2.1	1.60	
Chloroform	ND	3.9	1.60	
Chloromethane	ND	3.3	1.60	
Dibromochloromethane	ND	6.8	1.60	
1,2-Dibromoethane	ND	6.1	1.60	
1,2-Dichlorobenzene	ND	4.8	1.60	
1,3-Dichlorobenzene	ND	4.8	1.60	
1,4-Dichlorobenzene	ND	4.8	1.60	
Dichlorodifluoromethane	ND	4.0	1.60	
1,1-Dichloroethane	ND	3.2	1.60	
1,2-Dichloroethane	ND	3.2	1.60	
1,1-Dichloroethene	ND	3.2	1.60	
c-1,2-Dichloroethene	ND	3.2	1.60	
t-1,2-Dichloroethene	ND	3.2	1.60	
1,2-Dichloropropane	ND	3.7	1.60	
c-1,3-Dichloropropene	ND	3.6	1.60	
t-1,3-Dichloropropene	ND	7.3	1.60	
Dichlorotetrafluoroethane	ND	22	1.60	
1,1-Difluoroethane	ND	8.6	1.60	
Ethylbenzene	72	3.5	1.60	
4-Ethyltoluene	20	7.9	1.60	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 26 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	26	1.60	
2-Hexanone	ND	9.8	1.60	
Isopropanol	ND	20	1.60	
Methyl-t-Butyl Ether (MTBE)	ND	12	1.60	
Methylene Chloride	ND	28	1.60	
4-Methyl-2-Pentanone	ND	9.8	1.60	
Styrene	26	10	1.60	
1,1,2,2-Tetrachloroethane	ND	11	1.60	
Tetrachloroethene	27	5.4	1.60	
Toluene	300	3.0	1.60	
1,1,1-Trichloroethane	ND	4.4	1.60	
1,1,2-Trichloroethane	ND	4.4	1.60	
Trichloroethene	ND	4.3	1.60	
Trichlorofluoromethane	ND	9.0	1.60	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	18	1.60	
1,2,4-Trimethylbenzene	55	12	1.60	
1,3,5-Trimethylbenzene	20	7.9	1.60	
Vinyl Acetate	ND	11	1.60	
Vinyl Chloride	ND	2.0	1.60	
o-Xylene	82	14	1.60	
p/m-Xylene	240	28	1.60	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-134	
1,2-Dichloroethane-d4	92	67-133	
Toluene-d8	99	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 27 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-9-15ft	**18-08-0306-14-A**	**08/02/18 12:20**	**Air**	**GC/MS ZZ**	**N/A**	**08/07/18 22:07**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	66	4.8	1.00	
Benzene	8.2	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	25	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	11	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 28 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	6.8	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	9.1	3.4	1.00	
Toluene	51	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	10	8.7	1.00	
p/m-Xylene	31	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-134	
1,2-Dichloroethane-d4	92	67-133	
Toluene-d8	100	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 29 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-10-5ft	**18-08-0306-15-A**	**08/03/18 09:47**	**Air**	**GC/MS ZZ**	**N/A**	**08/07/18 22:58**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Benzene	89	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	62	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	110	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	5.9	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	38	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 30 of 50

Parameter	Result	RL	DF	Qualifiers
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	13	3.4	1.00	
Toluene	290	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	10	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	12	8.7	1.00	
p/m-Xylene	63	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	68-134	
1,2-Dichloroethane-d4	93	67-133	
Toluene-d8	99	70-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-10-5ft	**18-08-0306-15-A**	**08/03/18 09:47**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 08:26**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	300	48	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-134	
1,2-Dichloroethane-d4	92	67-133	
Toluene-d8	96	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 31 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-11-5ft	**18-08-0306-16-A**	**08/03/18 09:25**	**Air**	**GC/MS ZZ**	**N/A**	**08/07/18 23:46**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	19	1.25	
Acetone	180	5.9	1.25	
Benzene	63	2.0	1.25	
Benzyl Chloride	ND	13	1.25	
Bromodichloromethane	ND	4.2	1.25	
Bromoform	ND	6.5	1.25	
Bromomethane	ND	2.4	1.25	
2-Butanone	59	5.5	1.25	
n-Butylbenzene	ND	34	1.25	
sec-Butylbenzene	ND	34	1.25	
tert-Butylbenzene	ND	34	1.25	
Carbon Disulfide	42	7.8	1.25	
Carbon Tetrachloride	ND	3.9	1.25	
Chlorobenzene	ND	2.9	1.25	
Chloroethane	5.5	1.6	1.25	
Chloroform	ND	3.1	1.25	
Chloromethane	9.8	2.6	1.25	
Dibromochloromethane	ND	5.3	1.25	
1,2-Dibromoethane	ND	4.8	1.25	
1,2-Dichlorobenzene	ND	3.8	1.25	
1,3-Dichlorobenzene	ND	3.8	1.25	
1,4-Dichlorobenzene	ND	3.8	1.25	
Dichlorodifluoromethane	3.3	3.1	1.25	
1,1-Dichloroethane	ND	2.5	1.25	
1,2-Dichloroethane	ND	2.5	1.25	
1,1-Dichloroethene	ND	2.5	1.25	
c-1,2-Dichloroethene	ND	2.5	1.25	
t-1,2-Dichloroethene	ND	2.5	1.25	
1,2-Dichloropropane	9.0	2.9	1.25	
c-1,3-Dichloropropene	ND	2.8	1.25	
t-1,3-Dichloropropene	ND	5.7	1.25	
Dichlorotetrafluoroethane	ND	17	1.25	
1,1-Difluoroethane	ND	6.8	1.25	
Ethylbenzene	85	2.7	1.25	
4-Ethyltoluene	14	6.1	1.25	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 32 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	20	1.25	
2-Hexanone	ND	7.7	1.25	
Isopropanol	ND	15	1.25	
Methyl-t-Butyl Ether (MTBE)	ND	9.0	1.25	
Methylene Chloride	ND	22	1.25	
4-Methyl-2-Pentanone	8.3	7.7	1.25	
Styrene	ND	8.0	1.25	
1,1,2,2-Tetrachloroethane	ND	8.6	1.25	
Tetrachloroethene	32	4.2	1.25	
Toluene	250	2.4	1.25	
1,1,1-Trichloroethane	ND	3.4	1.25	
1,1,2-Trichloroethane	ND	3.4	1.25	
Trichloroethene	3.6	3.4	1.25	
Trichlorofluoromethane	ND	7.0	1.25	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	14	1.25	
1,2,4-Trimethylbenzene	56	9.2	1.25	
1,3,5-Trimethylbenzene	24	6.1	1.25	
Vinyl Acetate	ND	8.8	1.25	
Vinyl Chloride	2.0	1.6	1.25	
o-Xylene	100	11	1.25	
p/m-Xylene	320	22	1.25	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-134	
1,2-Dichloroethane-d4	94	67-133	
Toluene-d8	98	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 33 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-12-5ft	**18-08-0306-17-A**	**08/03/18 09:05**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 00:38**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	60	4.8	1.00	
Benzene	8.7	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	25	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	2.7	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	17	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 34 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	6.2	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	18	3.4	1.00	
Toluene	49	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	2.9	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	21	7.4	1.00	
1,3,5-Trimethylbenzene	6.2	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	22	8.7	1.00	
p/m-Xylene	59	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-134	
1,2-Dichloroethane-d4	93	67-133	
Toluene-d8	99	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 35 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-13-5ft	**18-08-0306-18-A**	**08/03/18 08:39**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 01:29**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	90	4.8	1.00	
Benzene	18	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	19	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	9.1	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	31	2.2	1.00	
4-Ethyltoluene	8.3	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 36 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	8.4	3.4	1.00	
Toluene	120	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	35	7.4	1.00	
1,3,5-Trimethylbenzene	12	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	38	8.7	1.00	
p/m-Xylene	110	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-134	
1,2-Dichloroethane-d4	93	67-133	
Toluene-d8	99	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 37 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-13-15ft	**18-08-0306-19-A**	**08/03/18 09:00**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 18:48**	**180808L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	21	1.42	
Acetone	88	6.7	1.42	
Benzene	23	2.3	1.42	
Benzyl Chloride	ND	15	1.42	
Bromodichloromethane	ND	4.8	1.42	
Bromoform	ND	7.3	1.42	
Bromomethane	ND	2.8	1.42	
2-Butanone	30	6.3	1.42	
n-Butylbenzene	ND	39	1.42	
sec-Butylbenzene	ND	39	1.42	
tert-Butylbenzene	ND	39	1.42	
Carbon Disulfide	20	8.8	1.42	
Carbon Tetrachloride	ND	4.5	1.42	
Chlorobenzene	ND	3.3	1.42	
Chloroethane	ND	1.9	1.42	
Chloroform	ND	3.5	1.42	
Chloromethane	7.7	2.9	1.42	
Dibromochloromethane	ND	6.0	1.42	
1,2-Dibromoethane	ND	5.5	1.42	
1,2-Dichlorobenzene	ND	4.3	1.42	
1,3-Dichlorobenzene	ND	4.3	1.42	
1,4-Dichlorobenzene	ND	4.3	1.42	
Dichlorodifluoromethane	ND	3.5	1.42	
1,1-Dichloroethane	ND	2.9	1.42	
1,2-Dichloroethane	ND	2.9	1.42	
1,1-Dichloroethene	ND	2.8	1.42	
c-1,2-Dichloroethene	ND	2.8	1.42	
t-1,2-Dichloroethene	ND	2.8	1.42	
1,2-Dichloropropane	ND	3.3	1.42	
c-1,3-Dichloropropene	ND	3.2	1.42	
t-1,3-Dichloropropene	ND	6.4	1.42	
Dichlorotetrafluoroethane	ND	20	1.42	
1,1-Difluoroethane	ND	7.7	1.42	
Ethylbenzene	13	3.1	1.42	
4-Ethyltoluene	ND	7.0	1.42	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 38 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	23	1.42	
2-Hexanone	ND	8.7	1.42	
Isopropanol	ND	17	1.42	
Methyl-t-Butyl Ether (MTBE)	ND	10	1.42	
Methylene Chloride	ND	25	1.42	
4-Methyl-2-Pentanone	ND	8.7	1.42	
Styrene	ND	9.1	1.42	
1,1,2,2-Tetrachloroethane	ND	9.7	1.42	
Tetrachloroethene	57	4.8	1.42	
Toluene	58	2.7	1.42	
1,1,1-Trichloroethane	ND	3.9	1.42	
1,1,2-Trichloroethane	ND	3.9	1.42	
Trichloroethene	ND	3.8	1.42	
Trichlorofluoromethane	ND	8.0	1.42	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	16	1.42	
1,2,4-Trimethylbenzene	16	10	1.42	
1,3,5-Trimethylbenzene	ND	7.0	1.42	
Vinyl Acetate	ND	10	1.42	
Vinyl Chloride	ND	1.8	1.42	
o-Xylene	16	12	1.42	
p/m-Xylene	43	25	1.42	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-134	
1,2-Dichloroethane-d4	95	67-133	
Toluene-d8	97	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 39 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-13-15ft DUP	**18-08-0306-20-A**	**08/03/18 09:00**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 19:41**	**180808L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	24	1.61	
Acetone	49	7.6	1.61	
Benzene	13	2.6	1.61	
Benzyl Chloride	ND	17	1.61	
Bromodichloromethane	ND	5.4	1.61	
Bromoform	ND	8.3	1.61	
Bromomethane	ND	3.1	1.61	
2-Butanone	18	7.1	1.61	
n-Butylbenzene	ND	44	1.61	
sec-Butylbenzene	ND	44	1.61	
tert-Butylbenzene	ND	44	1.61	
Carbon Disulfide	12	10	1.61	
Carbon Tetrachloride	ND	5.1	1.61	
Chlorobenzene	ND	3.7	1.61	
Chloroethane	ND	2.1	1.61	
Chloroform	ND	3.9	1.61	
Chloromethane	3.7	3.3	1.61	
Dibromochloromethane	ND	6.9	1.61	
1,2-Dibromoethane	ND	6.2	1.61	
1,2-Dichlorobenzene	ND	4.8	1.61	
1,3-Dichlorobenzene	ND	4.8	1.61	
1,4-Dichlorobenzene	ND	4.8	1.61	
Dichlorodifluoromethane	ND	4.0	1.61	
1,1-Dichloroethane	ND	3.3	1.61	
1,2-Dichloroethane	ND	3.3	1.61	
1,1-Dichloroethene	ND	3.2	1.61	
c-1,2-Dichloroethene	ND	3.2	1.61	
t-1,2-Dichloroethene	ND	3.2	1.61	
1,2-Dichloropropane	ND	3.7	1.61	
c-1,3-Dichloropropene	ND	3.7	1.61	
t-1,3-Dichloropropene	ND	7.3	1.61	
Dichlorotetrafluoroethane	ND	23	1.61	
1,1-Difluoroethane	ND	8.7	1.61	
Ethylbenzene	6.5	3.5	1.61	
4-Ethyltoluene	ND	7.9	1.61	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 40 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	26	1.61	
2-Hexanone	ND	9.9	1.61	
Isopropanol	ND	20	1.61	
Methyl-t-Butyl Ether (MTBE)	ND	12	1.61	
Methylene Chloride	ND	28	1.61	
4-Methyl-2-Pentanone	ND	9.9	1.61	
Styrene	ND	10	1.61	
1,1,2,2-Tetrachloroethane	ND	11	1.61	
Tetrachloroethene	ND	5.5	1.61	
Toluene	33	3.0	1.61	
1,1,1-Trichloroethane	ND	4.4	1.61	
1,1,2-Trichloroethane	ND	4.4	1.61	
Trichloroethene	ND	4.3	1.61	
Trichlorofluoromethane	ND	9.0	1.61	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	19	1.61	
1,2,4-Trimethylbenzene	ND	12	1.61	
1,3,5-Trimethylbenzene	ND	7.9	1.61	
Vinyl Acetate	ND	11	1.61	
Vinyl Chloride	ND	2.1	1.61	
o-Xylene	ND	14	1.61	
p/m-Xylene	ND	28	1.61	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-134	
1,2-Dichloroethane-d4	93	67-133	
Toluene-d8	98	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 41 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-14-5ft	**18-08-0306-21-A**	**08/02/18 15:17**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 03:53**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	42	4.8	1.00	
Benzene	8.7	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	12	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	13	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 42 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	7.4	3.4	1.00	
Toluene	49	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	11	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	19	8.7	1.00	
p/m-Xylene	51	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-134	
1,2-Dichloroethane-d4	93	67-133	
Toluene-d8	100	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 43 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SLF-14-15ft	**18-08-0306-22-A**	**08/02/18 14:46**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 04:45**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	74	4.8	1.00	
Benzene	7.6	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	24	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	7.7	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 44 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	5.4	3.4	1.00	
Toluene	25	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	11	8.7	1.00	
p/m-Xylene	29	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-134	
1,2-Dichloroethane-d4	95	67-133	
Toluene-d8	100	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 45 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-20527**	**N/A**	**Air**	**GC/MS HH**	**N/A**	**08/07/18 17:08**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	ND	4.8	1.00	
Benzene	ND	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	ND	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	ND	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 46 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	8.7	1.00	
p/m-Xylene	ND	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-134	
1,2-Dichloroethane-d4	110	67-133	
Toluene-d8	97	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 47 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-20524**	**N/A**	**Air**	**GC/MS ZZ**	**N/A**	**08/07/18 15:34**	**180807L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	ND	4.8	1.00	
Benzene	ND	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	ND	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	ND	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 48 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	8.7	1.00	
p/m-Xylene	ND	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-134	
1,2-Dichloroethane-d4	94	67-133	
Toluene-d8	99	70-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-20532**	**N/A**	**Air**	**GC/MS HH**	**N/A**	**08/08/18 18:30**	**180808L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	4.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-134	
1,2-Dichloroethane-d4	112	67-133	
Toluene-d8	97	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	08/03/18
8 Goodyear, Suite 125		Work Order:	18-08-0306
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista			Page 49 of 50

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-20531**	**N/A**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 16:30**	**180808L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	ND	4.8	1.00	
Benzene	ND	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	ND	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	ND	2.2	1.00	
4-Ethyltoluene	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: Shopoff Land Fund V-Chula Vista		Page 50 of 50

Parameter	Result	RL	DF	Qualifiers
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	8.7	1.00	
p/m-Xylene	ND	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-134	
1,2-Dichloroethane-d4	91	67-133	
Toluene-d8	99	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: Shopoff Land Fund V-Chula Vista		Page 1 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-20527	**LCS**	**Air**	**GC/MS HH**	**N/A**	**08/07/18 14:30**	**180807L01**
095-01-021-20527	**LCSD**	**Air**	**GC/MS HH**	**N/A**	**08/07/18 15:20**	**180807L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
1,2,4-Trichlorobenzene	185.5	223.4	120	226.1	122	31-151	11-171	1	0-30	
Acetone	59.39	62.15	105	62.18	105	67-133	56-144	0	0-30	
Benzene	79.87	73.78	92	74.32	93	70-130	60-140	1	0-30	
Benzyl Chloride	129.4	144.1	111	142.5	110	38-158	18-178	1	0-30	
Bromodichloromethane	167.5	175.9	105	175.7	105	70-130	60-140	0	0-30	
Bromoform	258.4	272.2	105	270.3	105	63-147	49-161	1	0-30	
Bromomethane	97.08	100.8	104	100.1	103	70-139	58-150	1	0-30	
2-Butanone	73.73	64.21	87	64.12	87	66-132	55-143	0	0-30	
n-Butylbenzene	137.2	133.9	98	132.1	96	50-150	33-167	1	0-30	
sec-Butylbenzene	137.2	131.7	96	130.0	95	50-150	33-167	1	0-30	
tert-Butylbenzene	137.2	136.9	100	135.1	98	50-150	33-167	1	0-30	
Carbon Disulfide	77.85	77.74	100	78.12	100	68-146	55-159	0	0-30	
Carbon Tetrachloride	157.3	175.8	112	174.9	111	70-136	59-147	1	0-30	
Chlorobenzene	115.1	115.8	101	115.4	100	70-130	60-140	0	0-30	
Chloroethane	65.96	67.31	102	67.61	103	65-149	51-163	0	0-30	
Chloroform	122.1	118.9	97	118.7	97	70-130	60-140	0	0-30	
Chloromethane	51.63	49.98	97	50.00	97	69-141	57-153	0	0-30	
Dibromochloromethane	213.0	220.9	104	219.3	103	70-138	59-149	1	0-30	
1,2-Dibromoethane	192.1	195.2	102	194.9	101	70-133	60-144	0	0-30	
1,2-Dichlorobenzene	150.3	162.9	108	160.7	107	48-138	33-153	1	0-30	
1,3-Dichlorobenzene	150.3	160.8	107	158.9	106	56-134	43-147	1	0-30	
1,4-Dichlorobenzene	150.3	162.8	108	160.7	107	52-136	38-150	1	0-30	
Dichlorodifluoromethane	123.6	125.4	101	124.2	100	67-139	55-151	1	0-30	
1,1-Dichloroethane	101.2	94.47	93	94.41	93	70-130	60-140	0	0-30	
1,2-Dichloroethane	101.2	106.7	105	107.0	106	70-132	60-142	0	0-30	
1,1-Dichloroethene	99.12	105.3	106	106.5	107	70-135	59-146	1	0-30	
c-1,2-Dichloroethene	99.12	96.79	98	96.76	98	70-130	60-140	0	0-30	
t-1,2-Dichloroethene	99.12	96.60	97	95.77	97	70-130	60-140	1	0-30	
1,2-Dichloropropane	115.5	103.2	89	103.8	90	70-130	60-140	1	0-30	
c-1,3-Dichloropropene	113.5	119.9	106	119.0	105	70-130	60-140	1	0-30	
t-1,3-Dichloropropene	113.5	126.7	112	127.0	112	70-147	57-160	0	0-30	
Dichlorotetrafluoroethane	174.8	189.4	108	187.7	107	51-135	37-149	1	0-30	
1,1-Difluoroethane	67.54	53.55	79	53.49	79	70-131	60-141	0	0-30	
Ethylbenzene	108.6	113.3	104	112.4	104	70-130	60-140	1	0-30	
4-Ethyltoluene	122.9	136.0	111	134.2	109	68-130	58-140	1	0-30	
Hexachloro-1,3-Butadiene	266.6	312.4	117	317.8	119	44-146	27-163	2	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: Shopoff Land Fund V-Chula Vista		Page 2 of 8

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2-Hexanone	102.4	94.45	92	93.49	91	70-136	59-147	1	0-30	
Isopropanol	61.45	60.12	98	60.00	98	57-135	44-148	0	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	88.73	98	89.44	99	68-130	58-140	1	0-30	
Methylene Chloride	86.84	86.28	99	87.54	101	69-130	59-140	1	0-30	
4-Methyl-2-Pentanone	102.4	95.69	93	95.47	93	70-130	60-140	0	0-30	
Styrene	106.5	109.3	103	108.8	102	65-131	54-142	0	0-30	
1,1,2,2-Tetrachloroethane	171.6	164.0	96	163.5	95	63-130	52-141	0	0-30	
Tetrachloroethene	169.6	169.7	100	169.9	100	70-130	60-140	0	0-30	
Toluene	94.21	88.82	94	89.25	95	70-130	60-140	0	0-30	
1,1,1-Trichloroethane	136.4	145.4	107	145.3	106	70-130	60-140	0	0-30	
1,1,2-Trichloroethane	136.4	133.2	98	132.2	97	70-130	60-140	1	0-30	
Trichloroethene	134.3	135.5	101	134.4	100	70-130	60-140	1	0-30	
Trichlorofluoromethane	140.5	157.3	112	155.7	111	63-141	50-154	1	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	191.6	202.6	106	203.1	106	70-136	59-147	0	0-30	
1,2,4-Trimethylbenzene	122.9	136.6	111	134.8	110	60-132	48-144	1	0-30	
1,3,5-Trimethylbenzene	122.9	138.3	112	136.1	111	62-130	51-141	2	0-30	
Vinyl Acetate	88.03	75.68	86	76.45	87	58-130	46-142	1	0-30	
Vinyl Chloride	63.91	65.70	103	65.18	102	70-134	59-145	1	0-30	
o-Xylene	108.6	107.9	99	107.9	99	69-130	59-140	0	0-30	
p/m-Xylene	217.1	217.6	100	216.3	100	70-132	60-142	1	0-30	

Total number of LCS compounds: 56
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: Shopoff Land Fund V-Chula Vista		Page 3 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-20532	**LCS**	**Air**	**GC/MS HH**	**N/A**	**08/08/18 15:56**	**180808L01**
095-01-021-20532	**LCSD**	**Air**	**GC/MS HH**	**N/A**	**08/08/18 16:46**	**180808L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
1,2,4-Trichlorobenzene	185.5	225.6	122	230.0	124	31-151	11-171	2	0-30	
Acetone	59.39	61.85	104	63.21	106	67-133	56-144	2	0-30	
Benzene	79.87	71.98	90	74.10	93	70-130	60-140	3	0-30	
Benzyl Chloride	129.4	143.0	111	144.0	111	38-158	18-178	1	0-30	
Bromodichloromethane	167.5	176.2	105	180.2	108	70-130	60-140	2	0-30	
Bromoform	258.4	273.2	106	274.8	106	63-147	49-161	1	0-30	
Bromomethane	97.08	101.0	104	103.5	107	70-139	58-150	3	0-30	
2-Butanone	73.73	62.15	84	63.24	86	66-132	55-143	2	0-30	
n-Butylbenzene	137.2	134.7	98	134.3	98	50-150	33-167	0	0-30	
sec-Butylbenzene	137.2	129.9	95	131.1	96	50-150	33-167	1	0-30	
tert-Butylbenzene	137.2	135.3	99	136.3	99	50-150	33-167	1	0-30	
Carbon Disulfide	77.85	75.95	98	77.47	100	68-146	55-159	2	0-30	
Carbon Tetrachloride	157.3	179.4	114	182.7	116	70-136	59-147	2	0-30	
Chlorobenzene	115.1	114.3	99	114.4	99	70-130	60-140	0	0-30	
Chloroethane	65.96	66.59	101	68.29	104	65-149	51-163	3	0-30	
Chloroform	122.1	117.6	96	120.5	99	70-130	60-140	2	0-30	
Chloromethane	51.63	49.94	97	49.95	97	69-141	57-153	0	0-30	
Dibromochloromethane	213.0	220.0	103	221.3	104	70-138	59-149	1	0-30	
1,2-Dibromoethane	192.1	192.9	100	194.1	101	70-133	60-144	1	0-30	
1,2-Dichlorobenzene	150.3	162.4	108	163.3	109	48-138	33-153	1	0-30	
1,3-Dichlorobenzene	150.3	160.7	107	160.6	107	56-134	43-147	0	0-30	
1,4-Dichlorobenzene	150.3	162.3	108	162.3	108	52-136	38-150	0	0-30	
Dichlorodifluoromethane	123.6	128.3	104	128.5	104	67-139	55-151	0	0-30	
1,1-Dichloroethane	101.2	91.86	91	94.43	93	70-130	60-140	3	0-30	
1,2-Dichloroethane	101.2	107.7	106	109.8	109	70-132	60-142	2	0-30	
1,1-Dichloroethene	99.12	104.2	105	107.4	108	70-135	59-146	3	0-30	
c-1,2-Dichloroethene	99.12	93.98	95	97.41	98	70-130	60-140	4	0-30	
t-1,2-Dichloroethene	99.12	92.86	94	96.12	97	70-130	60-140	3	0-30	
1,2-Dichloropropane	115.5	100.4	87	102.8	89	70-130	60-140	2	0-30	
c-1,3-Dichloropropene	113.5	118.0	104	120.5	106	70-130	60-140	2	0-30	
t-1,3-Dichloropropene	113.5	125.9	111	129.0	114	70-147	57-160	2	0-30	
Dichlorotetrafluoroethane	174.8	192.2	110	195.5	112	51-135	37-149	2	0-30	
1,1-Difluoroethane	67.54	53.30	79	53.01	78	70-131	60-141	1	0-30	
Ethylbenzene	108.6	111.0	102	112.0	103	70-130	60-140	1	0-30	
4-Ethyltoluene	122.9	134.5	109	135.0	110	68-130	58-140	0	0-30	
Hexachloro-1,3-Butadiene	266.6	328.4	123	319.9	120	44-146	27-163	3	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: Shopoff Land Fund V-Chula Vista		Page 4 of 8

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2-Hexanone	102.4	90.83	89	92.20	90	70-136	59-147	2	0-30	
Isopropanol	61.45	59.06	96	61.20	100	57-135	44-148	4	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	87.15	97	90.13	100	68-130	58-140	3	0-30	
Methylene Chloride	86.84	85.48	98	87.13	100	69-130	59-140	2	0-30	
4-Methyl-2-Pentanone	102.4	93.24	91	95.43	93	70-130	60-140	2	0-30	
Styrene	106.5	107.5	101	107.9	101	65-131	54-142	0	0-30	
1,1,2,2-Tetrachloroethane	171.6	160.6	94	160.6	94	63-130	52-141	0	0-30	
Tetrachloroethene	169.6	168.1	99	169.4	100	70-130	60-140	1	0-30	
Toluene	94.21	87.01	92	87.42	93	70-130	60-140	0	0-30	
1,1,1-Trichloroethane	136.4	146.5	107	149.6	110	70-130	60-140	2	0-30	
1,1,2-Trichloroethane	136.4	129.4	95	133.3	98	70-130	60-140	3	0-30	
Trichloroethene	134.3	134.6	100	137.7	103	70-130	60-140	2	0-30	
Trichlorofluoromethane	140.5	161.1	115	164.6	117	63-141	50-154	2	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	191.6	200.3	105	205.0	107	70-136	59-147	2	0-30	
1,2,4-Trimethylbenzene	122.9	135.6	110	136.0	111	60-132	48-144	0	0-30	
1,3,5-Trimethylbenzene	122.9	135.9	111	137.5	112	62-130	51-141	1	0-30	
Vinyl Acetate	88.03	74.30	84	75.78	86	58-130	46-142	2	0-30	
Vinyl Chloride	63.91	65.20	102	66.09	103	70-134	59-145	1	0-30	
o-Xylene	108.6	107.5	99	107.8	99	69-130	59-140	0	0-30	
p/m-Xylene	217.1	215.9	99	217.6	100	70-132	60-142	1	0-30	

Total number of LCS compounds: 56
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: Shopoff Land Fund V-Chula Vista		Page 5 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-20524	**LCS**	**Air**	**GC/MS ZZ**	**N/A**	**08/07/18 12:56**	**180807L01**
095-01-021-20524	**LCSD**	**Air**	**GC/MS ZZ**	**N/A**	**08/07/18 13:45**	**180807L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
1,2,4-Trichlorobenzene	185.5	202.8	109	213.6	115	31-151	11-171	5	0-30	
Acetone	59.39	61.11	103	60.15	101	67-133	56-144	2	0-30	
Benzene	79.87	78.90	99	79.28	99	70-130	60-140	0	0-30	
Benzyl Chloride	129.4	127.8	99	132.9	103	38-158	18-178	4	0-30	
Bromodichloromethane	167.5	171.1	102	171.8	103	70-130	60-140	0	0-30	
Bromoform	258.4	253.7	98	262.0	101	63-147	49-161	3	0-30	
Bromomethane	97.08	94.91	98	95.65	99	70-139	58-150	1	0-30	
2-Butanone	73.73	69.94	95	69.39	94	66-132	55-143	1	0-30	
n-Butylbenzene	137.2	133.4	97	138.8	101	50-150	33-167	4	0-30	
sec-Butylbenzene	137.2	134.1	98	138.8	101	50-150	33-167	3	0-30	
tert-Butylbenzene	137.2	139.3	101	144.2	105	50-150	33-167	3	0-30	
Carbon Disulfide	77.85	77.05	99	76.68	98	68-146	55-159	0	0-30	
Carbon Tetrachloride	157.3	167.2	106	167.4	106	70-136	59-147	0	0-30	
Chlorobenzene	115.1	118.4	103	121.6	106	70-130	60-140	3	0-30	
Chloroethane	65.96	64.32	98	65.05	99	65-149	51-163	1	0-30	
Chloroform	122.1	123.4	101	121.9	100	70-130	60-140	1	0-30	
Chloromethane	51.63	49.63	96	49.62	96	69-141	57-153	0	0-30	
Dibromochloromethane	213.0	215.2	101	221.2	104	70-138	59-149	3	0-30	
1,2-Dibromoethane	192.1	198.0	103	202.2	105	70-133	60-144	2	0-30	
1,2-Dichlorobenzene	150.3	152.4	101	158.7	106	48-138	33-153	4	0-30	
1,3-Dichlorobenzene	150.3	154.1	103	160.3	107	56-134	43-147	4	0-30	
1,4-Dichlorobenzene	150.3	153.7	102	159.2	106	52-136	38-150	3	0-30	
Dichlorodifluoromethane	123.6	113.6	92	110.2	89	67-139	55-151	3	0-30	
1,1-Dichloroethane	101.2	100.1	99	98.86	98	70-130	60-140	1	0-30	
1,2-Dichloroethane	101.2	100.8	100	99.53	98	70-132	60-142	1	0-30	
1,1-Dichloroethene	99.12	98.16	99	97.56	98	70-135	59-146	1	0-30	
c-1,2-Dichloroethene	99.12	100.3	101	100.4	101	70-130	60-140	0	0-30	
t-1,2-Dichloroethene	99.12	101.4	102	101.9	103	70-130	60-140	0	0-30	
1,2-Dichloropropane	115.5	117.2	101	117.0	101	70-130	60-140	0	0-30	
c-1,3-Dichloropropene	113.5	119.5	105	119.0	105	70-130	60-140	0	0-30	
t-1,3-Dichloropropene	113.5	119.8	106	121.1	107	70-147	57-160	1	0-30	
Dichlorotetrafluoroethane	174.8	178.6	102	177.0	101	51-135	37-149	1	0-30	
1,1-Difluoroethane	67.54	61.20	91	61.05	90	70-131	60-141	0	0-30	
Ethylbenzene	108.6	111.5	103	114.3	105	70-130	60-140	2	0-30	
4-Ethyltoluene	122.9	127.2	103	130.9	107	68-130	58-140	3	0-30	
Hexachloro-1,3-Butadiene	266.6	276.4	104	282.2	106	44-146	27-163	2	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: Shopoff Land Fund V-Chula Vista		Page 6 of 8

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2-Hexanone	102.4	101.1	99	103.7	101	70-136	59-147	3	0-30	
Isopropanol	61.45	57.80	94	57.35	93	57-135	44-148	1	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	90.72	101	90.26	100	68-130	58-140	1	0-30	
Methylene Chloride	86.84	87.98	101	87.28	101	69-130	59-140	1	0-30	
4-Methyl-2-Pentanone	102.4	102.4	100	102.6	100	70-130	60-140	0	0-30	
Styrene	106.5	108.7	102	110.8	104	65-131	54-142	2	0-30	
1,1,2,2-Tetrachloroethane	171.6	173.0	101	175.7	102	63-130	52-141	2	0-30	
Tetrachloroethene	169.6	178.1	105	182.4	108	70-130	60-140	2	0-30	
Toluene	94.21	91.93	98	93.74	99	70-130	60-140	2	0-30	
1,1,1-Trichloroethane	136.4	140.8	103	139.3	102	70-130	60-140	1	0-30	
1,1,2-Trichloroethane	136.4	142.7	105	142.4	104	70-130	60-140	0	0-30	
Trichloroethene	134.3	140.7	105	141.0	105	70-130	60-140	0	0-30	
Trichlorofluoromethane	140.5	140.0	100	139.1	99	63-141	50-154	1	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	191.6	198.6	104	198.1	103	70-136	59-147	0	0-30	
1,2,4-Trimethylbenzene	122.9	129.2	105	134.1	109	60-132	48-144	4	0-30	
1,3,5-Trimethylbenzene	122.9	127.9	104	132.1	107	62-130	51-141	3	0-30	
Vinyl Acetate	88.03	82.88	94	81.13	92	58-130	46-142	2	0-30	
Vinyl Chloride	63.91	64.80	101	64.49	101	70-134	59-145	0	0-30	
o-Xylene	108.6	107.2	99	109.5	101	69-130	59-140	2	0-30	
p/m-Xylene	217.1	220.2	101	226.4	104	70-132	60-142	3	0-30	

Total number of LCS compounds: 56
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: Shopoff Land Fund V-Chula Vista		Page 7 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-20531	**LCS**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 14:03**	**180808L01**
095-01-021-20531	**LCSD**	**Air**	**GC/MS ZZ**	**N/A**	**08/08/18 14:52**	**180808L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
1,2,4-Trichlorobenzene	185.5	202.6	109	210.7	114	31-151	11-171	4	0-30	
Acetone	59.39	59.39	100	59.53	100	67-133	56-144	0	0-30	
Benzene	79.87	79.30	99	79.36	99	70-130	60-140	0	0-30	
Benzyl Chloride	129.4	126.6	98	130.3	101	38-158	18-178	3	0-30	
Bromodichloromethane	167.5	167.3	100	167.4	100	70-130	60-140	0	0-30	
Bromoform	258.4	249.5	97	257.7	100	63-147	49-161	3	0-30	
Bromomethane	97.08	92.45	95	93.30	96	70-139	58-150	1	0-30	
2-Butanone	73.73	66.86	91	67.22	91	66-132	55-143	1	0-30	
n-Butylbenzene	137.2	130.6	95	135.1	98	50-150	33-167	3	0-30	
sec-Butylbenzene	137.2	133.5	97	137.1	100	50-150	33-167	3	0-30	
tert-Butylbenzene	137.2	137.5	100	140.9	103	50-150	33-167	2	0-30	
Carbon Disulfide	77.85	75.63	97	76.25	98	68-146	55-159	1	0-30	
Carbon Tetrachloride	157.3	161.3	103	162.0	103	70-136	59-147	0	0-30	
Chlorobenzene	115.1	117.5	102	119.2	104	70-130	60-140	1	0-30	
Chloroethane	65.96	64.13	97	64.81	98	65-149	51-163	1	0-30	
Chloroform	122.1	118.0	97	118.6	97	70-130	60-140	0	0-30	
Chloromethane	51.63	47.51	92	48.29	94	69-141	57-153	2	0-30	
Dibromochloromethane	213.0	212.5	100	218.1	102	70-138	59-149	3	0-30	
1,2-Dibromoethane	192.1	196.4	102	201.8	105	70-133	60-144	3	0-30	
1,2-Dichlorobenzene	150.3	150.8	100	155.0	103	48-138	33-153	3	0-30	
1,3-Dichlorobenzene	150.3	152.9	102	157.3	105	56-134	43-147	3	0-30	
1,4-Dichlorobenzene	150.3	152.5	101	156.1	104	52-136	38-150	2	0-30	
Dichlorodifluoromethane	123.6	105.6	85	103.8	84	67-139	55-151	2	0-30	
1,1-Dichloroethane	101.2	96.42	95	97.11	96	70-130	60-140	1	0-30	
1,2-Dichloroethane	101.2	94.52	93	95.91	95	70-132	60-142	1	0-30	
1,1-Dichloroethene	99.12	93.67	94	94.85	96	70-135	59-146	1	0-30	
c-1,2-Dichloroethene	99.12	98.03	99	99.58	100	70-130	60-140	2	0-30	
t-1,2-Dichloroethene	99.12	99.26	100	100.1	101	70-130	60-140	1	0-30	
1,2-Dichloropropane	115.5	116.9	101	116.6	101	70-130	60-140	0	0-30	
c-1,3-Dichloropropene	113.5	117.8	104	119.0	105	70-130	60-140	1	0-30	
t-1,3-Dichloropropene	113.5	118.4	104	119.0	105	70-147	57-160	0	0-30	
Dichlorotetrafluoroethane	174.8	171.7	98	172.2	99	51-135	37-149	0	0-30	
1,1-Difluoroethane	67.54	58.48	87	58.94	87	70-131	60-141	1	0-30	
Ethylbenzene	108.6	110.3	102	112.2	103	70-130	60-140	2	0-30	
4-Ethyltoluene	122.9	124.8	102	128.7	105	68-130	58-140	3	0-30	
Hexachloro-1,3-Butadiene	266.6	264.3	99	273.9	103	44-146	27-163	4	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	08/03/18
8 Goodyear, Suite 125	Work Order:	18-08-0306
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: Shopoff Land Fund V-Chula Vista		Page 8 of 8

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2-Hexanone	102.4	100.1	98	101.9	100	70-136	59-147	2	0-30	
Isopropanol	61.45	55.68	91	55.98	91	57-135	44-148	1	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	88.36	98	88.12	98	68-130	58-140	0	0-30	
Methylene Chloride	86.84	85.17	98	86.76	100	69-130	59-140	2	0-30	
4-Methyl-2-Pentanone	102.4	102.9	100	102.6	100	70-130	60-140	0	0-30	
Styrene	106.5	107.4	101	111.4	105	65-131	54-142	4	0-30	
1,1,2,2-Tetrachloroethane	171.6	170.6	99	176.1	103	63-130	52-141	3	0-30	
Tetrachloroethene	169.6	176.9	104	181.6	107	70-130	60-140	3	0-30	
Toluene	94.21	90.73	96	93.43	99	70-130	60-140	3	0-30	
1,1,1-Trichloroethane	136.4	133.3	98	134.4	99	70-130	60-140	1	0-30	
1,1,2-Trichloroethane	136.4	141.9	104	142.1	104	70-130	60-140	0	0-30	
Trichloroethene	134.3	138.8	103	138.3	103	70-130	60-140	0	0-30	
Trichlorofluoromethane	140.5	131.6	94	132.2	94	63-141	50-154	0	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	191.6	192.6	101	194.5	102	70-136	59-147	1	0-30	
1,2,4-Trimethylbenzene	122.9	127.9	104	130.6	106	60-132	48-144	2	0-30	
1,3,5-Trimethylbenzene	122.9	125.1	102	129.3	105	62-130	51-141	3	0-30	
Vinyl Acetate	88.03	79.95	91	80.96	92	58-130	46-142	1	0-30	
Vinyl Chloride	63.91	64.34	101	64.32	101	70-134	59-145	0	0-30	
o-Xylene	108.6	105.8	97	108.6	100	69-130	59-140	3	0-30	
p/m-Xylene	217.1	217.0	100	223.5	103	70-132	60-142	3	0-30	

Total number of LCS compounds: 56
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Summa Canister Vacuum Summary

Work Order: 18-08-0306

Sample Name	Vacuum Out	Vacuum In	Equipment	Description
SLF-1-5ft	-29.50 in Hg	-2.30 in Hg	LC1037	Summa Canister 1L
SLF-2-5ft	-29.50 in Hg	-2.60 in Hg	SLC077	Summa Canister 1L
SLF-2-15ft	-29.50 in Hg	-2.80 in Hg	LC1243	Summa Canister 1L
SLF-3-5ft	-29.50 in Hg	-1.30 in Hg	LC866	Summa Canister 1L
SLF-4-5ft	-29.50 in Hg	-2.90 in Hg	LC1154	Summa Canister 1L
SLF-5-5ft	-29.50 in Hg	-2.70 in Hg	LC012	Summa Canister 1L
SLF-5-15ft	-29.50 in Hg	-6.00 in Hg	LC715	Summa Canister 1L
SLF-6-5ft	-29.50 in Hg	-1.00 in Hg	LC033	Summa Canister 1L
SLF-7-5ft	-29.50 in Hg	-1.20 in Hg	SLC166	Summa Canister 1L
SLF-7-15ft	-29.50 in Hg	-2.50 in Hg	LC1270	Summa Canister 1L
SLF-8-5ft	-29.50 in Hg	-1.70 in Hg	LC861	Summa Canister 1L
SLF-9-5ft	-29.50 in Hg	-2.40 in Hg	LC847	Summa Canister 1L
SLF-9-5ft DUP	-29.50 in Hg	-3.30 in Hg	LC1067	Summa Canister 1L
SLF-9-15ft	-29.50 in Hg	-3.50 in Hg	LC713	Summa Canister 1L
SLF-10-5ft	-29.50 in Hg	-3.20 in Hg	LC1222	Summa Canister 1L
SLF-11-5ft	-29.50 in Hg	-1.10 in Hg	LC1199	Summa Canister 1L
SLF-12-5ft	-29.50 in Hg	-2.20 in Hg	LC278	Summa Canister 1L
SLF-13-5ft	-29.50 in Hg	-2.00 in Hg	LC993	Summa Canister 1L
SLF-13-15ft	-29.50 in Hg	-7.50 in Hg	LC020	Summa Canister 1L
SLF-13-15ft DUP	-29.50 in Hg	-7.00 in Hg	LC385	Summa Canister 1L
SLF-14-5ft	-29.50 in Hg	-1.80 in Hg	LC1148	Summa Canister 1L
SLF-14-15ft	-29.50 in Hg	-4.00 in Hg	LC446	Summa Canister 1L

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Sample Analysis Summary Report

Work Order: 18-08-0306

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA TO-15	N/A	1087	GC/MS HH	2
EPA TO-15	N/A	1145	GC/MS ZZ	2

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Glossary of Terms and Qualifiers

Work Order: 18-08-0306

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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AIR CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY: 18-08-0306

DATE: 8/3/18
PAGE: 1 OF 3

LABORATORY CLIENT: Environmental Management Strategies, Inc.
ADDRESS: 8 Goodyear, Ste 125
CITY: Irvine STATE: CA ZIP: 92618
TEL: 949-679-9500 E-MAIL: Mike.Marello@gaemsinc.com

CLIENT PROJECT NAME / NO.: Shopoff Land Fund V - Chula Vista
P.O. NO.: EMS 571
PROJECT CONTACT: Mike Marello
LAB CONTACT OR QUOTE NO.: Don Burley
PROJECT ADDRESS: 676, 678, 680 Moss St.
SAMPLER(S): (PRINT) Mike Marello
CITY: Chula Vista STATE: CA ZIP:

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"): ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ STANDARD
EDD: ☐ COELT EDF ☐ OTHER
UNITS: ug/m3

SPECIAL INSTRUCTIONS: TO-15 Full Scan List + Isopropanol

REQUESTED ANALYSES: EPA TO-15 Full Scan + Isopropanol

LAB USE ONLY	SAMPLE ID	FIELD ID / POINT OF COLLECTION	MATRIX (Indoor (I) Soil Vap. (SV) Ambient (A))	SAMPLING EQUIPMENT: Media ID	Canister Size 6L or 1L	Flow Controller ID	START SAMPLING INFORMATION: Date	Time (24 hr clock)	Canister Pressure (in Hg)	STOP SAMPLING INFORMATION: Date	Time (24 hr clock)	Canister Pressure (in Hg)	EPA TO-15 Full Scan	+ Isopropanol
1	SLF-1-5ft		SV	LC1037	1L	A173	8/2/18	14:11	-30	8/2/18	14:17	-2	X	
2	SLF-2-5ft		SV	LC077	1L	A71	8/2/18	13:51	-30	8/2/18	13:57	-1	X	
3	SLF-2-15ft.		SV	LC1243	1L	A396	8/2/18	13:35	-30	8/2/18	13:41	-2	X	
4	SLF-3-5ft		SV	LC866	1L	A176	8/2/18	13:22	-30	8/2/18	13:22	-2	X	
5	SLF-4-5ft		SV	LC154	1L	A272	8/3/18	11:20	-30	8/3/18	11:26	-2	X	
6	SLF-5-5ft.		SV	LC012	1L	A33	8/2/18	~~13:55~~	-30	8/2/18	13:01	-2	X	
7	SLF-5-15ft.		SV	LC775	1L	A144	8/2/18	12:36	-30	8/2/18	12:42	-2	X	
8	SLF-6-5ft.		SV	LC033	1L	A224	8/3/18	07:32	-30	8/3/18	07:39	-2	X	
9	SLF-7-5ft		SV	LC166	1L	A418	8/3/18	10:36	-30	8/3/18	10:42	-1	X	
10	SLF-7-15ft.		SV	LC1270	1L	A117	8/3/18	10:09	-30	8/3/18	10:18	-2	X	

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature] EC	8-3-18	14:30
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

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AIR CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY: 0306

DATE: 08/03/18

PAGE: 2 OF 3

LABORATORY CLIENT: Environmental Management Strategies

ADDRESS:

CITY: STATE: ZIP:

TEL: E-MAIL:

CLIENT PROJECT NAME / NO.: Shapoff Land Fund V-Chula Vista

P.O. NO.: EMS 571

PROJECT CONTACT: Mike Morello

LAB CONTACT OR QUOTE NO.: Don Berkey

PROJECT ADDRESS: 676, 678, 680 Moss Street

SAMPLER(S): (PRINT)

CITY: Chula Vista STATE: CA ZIP:

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ STANDARD

EDD: ☐ COELT EDF ☐ OTHER

UNITS: ug/m3

SPECIAL INSTRUCTIONS:

TO-15 Full Scan List + Isopropanol

REQUESTED ANALYSES: EPA TO-15 Full Scan + Isopropanol

LAB USE ONLY	SAMPLE ID	FIELD ID / POINT OF COLLECTION	MATRIX: Indoor (I) Soil Vap. (SV) Ambient (A)	SAMPLING EQUIPMENT: Media ID	Canister Size 6L or 1L	Flow Controller ID	START SAMPLING INFORMATION: Date	Time (24 hr clock)	Canister Pressure (in Hg)	STOP SAMPLING INFORMATION: Date	Time (24 hr clock)	Canister Pressure (in Hg)	EPA TO-15 Full Scan + Isopropanol				
11	SLF-8-5 ft.		SV	LC861	1L	A428	8/3/18	10:56	-30	8/3/18	11:02	-2	X				
12	SLF-9-5 ft.		SV	LC847	1L	A445	8/2/18	11:55	-30	8/2/18	12:01	-2	X				
13	SLF-9-5ft DUP		SV	LC1067	1L	A344	8/2/18	11:55	-30	8/2/18	12:01	-2	X				
14	SLF-9-15 ft.		SV	LC713	1L	A464	8/2/18	~~12:20~~ 12:14	-30	8/2/18	12:20	-3	X				
15	SLF-10-5 ft.		SV	LC1222	1L	A214	8/3/18	09:41	-30	8/3/18	09:47	-2	X				
16	SLF-11-5 ft.		SV	LC1199	1L	A49	8/3/18	09:18	-30	8/3/18	09:35	-2	X				
17	SLF-12-5 ft.		SV	LC278	1L	A498	8/3/18	08:58	-30	8/3/18	09:05	-3	X				
18	SLF-13-5 ft.		SV	LC993	1L	A151	8/3/18	08:32	-30	8/3/18	08:39	-1	X				
19	SLF-13-15 ft.		SV	LC020	1L	A107	8/3/18	08:01	-30	8/3/18	09:00	-6	X				
20	SLF-13-15ft DUP		SV	LC385	1L	A424	8/3/18	08:01	-3	8/3/18	09:00	-6	X				

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature] EC	8-3-18	14:30
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

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AIR CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY: 0306

DATE: 8/3/18
PAGE: 3 OF 3

LABORATORY CLIENT: Environmental Management Strategies, Inc.
ADDRESS:
CITY: STATE: ZIP:
TEL: E-MAIL:

CLIENT PROJECT NAME / NO.: Shapoff Land Fund V - Chula Vista
P.O. NO.: EMS 571
PROJECT CONTACT: Mike Morello
LAB CONTACT OR QUOTE NO.: Don Burley
PROJECT ADDRESS: 676, 678, 680 Moss St.
SAMPLER(S): (PRINT)
CITY: Chula Vista STATE: CA ZIP:

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ STANDARD

EDD: ☐ COELT EDF ☐ OTHER
UNITS: ug/M3

SPECIAL INSTRUCTIONS:
EPA TO-15 Full Scan + Isopropanol

REQUESTED ANALYSES: EPA TO-15 Full Scan + Isopropanol

LAB USE ONLY	SAMPLE ID	FIELD ID / POINT OF COLLECTION	MATRIX: Indoor (I) Soil Vap. (SV) Ambient (A)	SAMPLING EQUIPMENT: Media ID	Canister Size 6L or 1L	Flow Controller ID	START SAMPLING INFORMATION: Date	Time (24 hr clock)	Canister Pressure (in Hg)	STOP SAMPLING INFORMATION: Date	Time (24 hr clock)	Canister Pressure (in Hg)	EPA TO-15 Full Scan + Isopropanol
21	SVF-14-5ft.		SV	2C1148	1L	A505	8/2/18	15:10	-30	8/2/18	15:17	1	X
22	SVF-14-15ft.		SV	2C446	1L	A469	8/2/18	14:39	-30	8/2/18	14:46	2	X

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[signature]	[signature] EC	8-3-18	14:30
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

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WORK ORDER NUMBER: 18-08-0306

SAMPLE RECEIPT CHECKLIST

COOLER 0 OF 0

CLIENT: EMS

DATE: 08 / 3 / 2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: -0.5°C); Temperature (w/o CF): _____°C (w/ CF): _____°C; ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☑ Air ☐ Filter Checked by: 1053

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present (Box) ☐ N/A Checked by: 1053

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: SM

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGB**s** (pH__2) ☐ 250PB ☐ 250PB**n** (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** (pH__2) ☐ 1AGB**s** (O&G) ☐ 1PB ☐ 1PB**na** (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (___) ☐ EnCores® (___) ☐ TerraCores® (___) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☑ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: SM

s = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: 1053

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Appendix D

Geotracker Database Information for Gasoline Release Locations

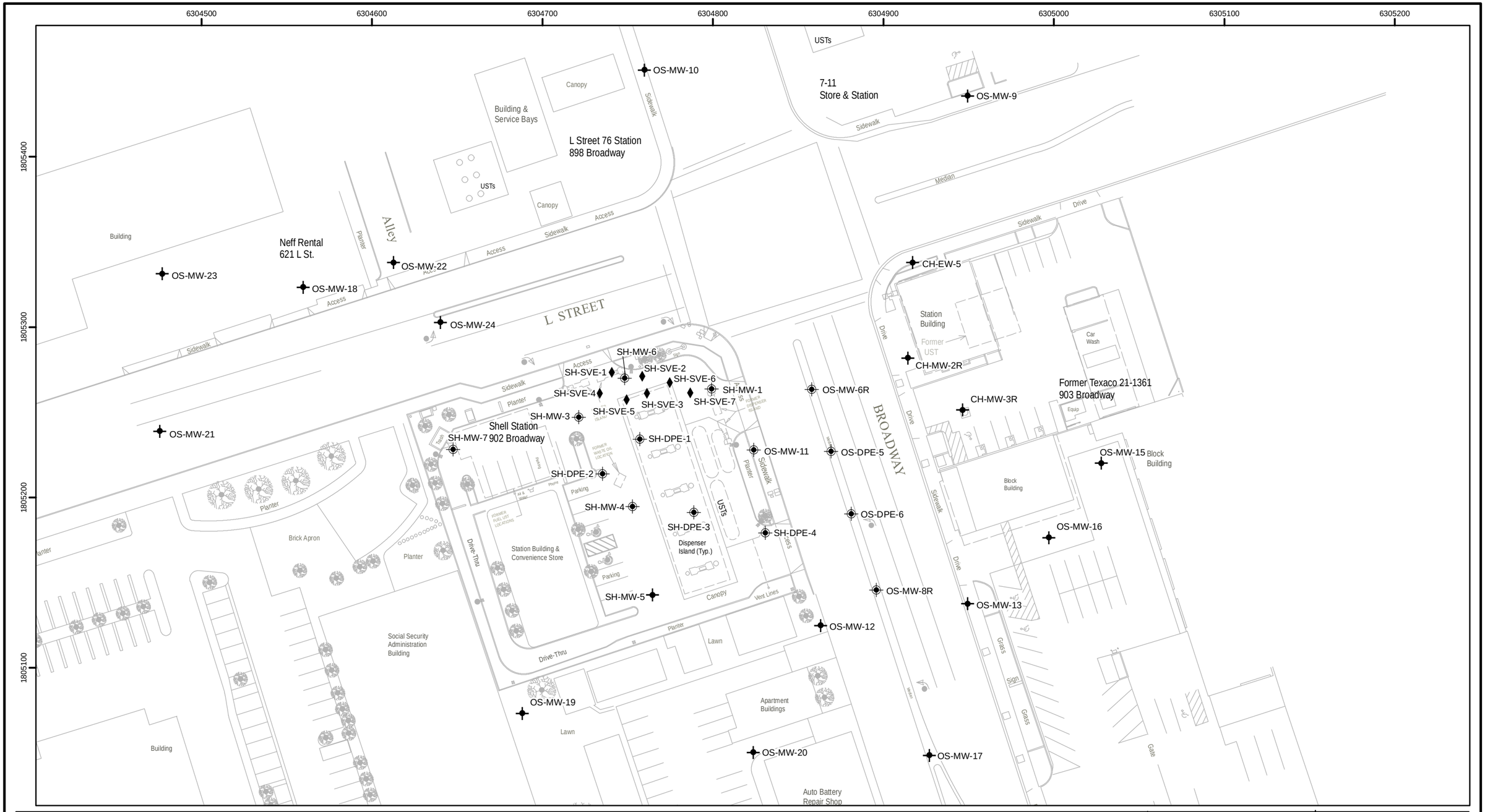

FIGURE 2a - Site Plan (Current)

Legend

- Groundwater Monitoring Well
- Dual-Phase Extraction Well
- Soil Vapor Extraction Well

Feet 0 25 50

Date:	7/13/2015
Designed:	RGS
Drawn:	RGS
Checked:	SV
Approved:	CC

PARSONS

Projection & Grid Coordinates:
NAD 1983 StatePlane CA VI

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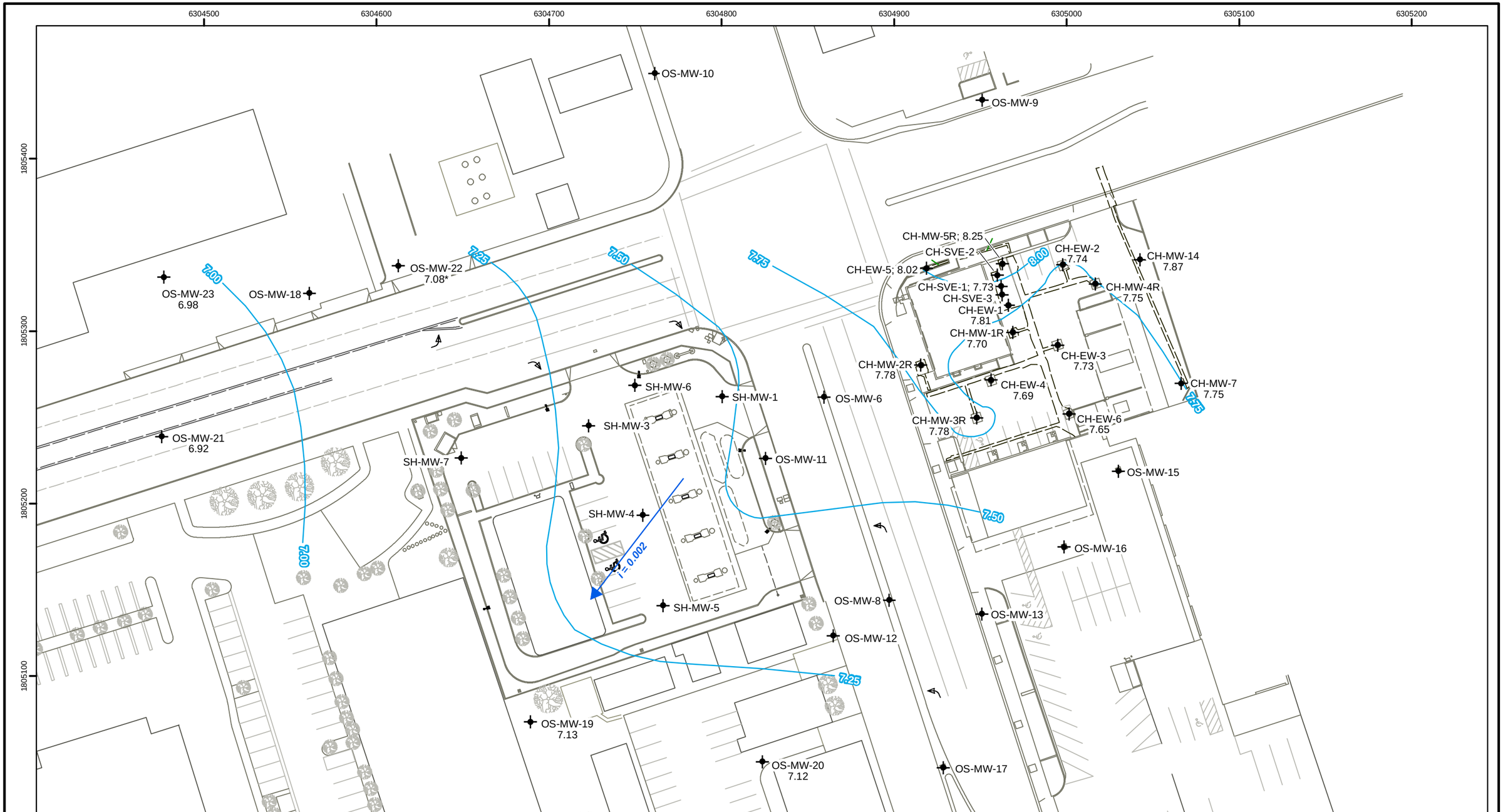

FIGURE 2 - Groundwater Elevation Contours, March 4, 2013

Legend

- Groundwater Well with Elevation above Mean Sea Level (msl)
- Approximate Groundwater Flow and Hydraulic Gradient (i)
- Groundwater Elevation Contour (Dashed Where Inferred) - 0.1 Contour Interval

NOTES
* = Groundwater elevation not used due to presence of LPH.
CH-SVE-3 omitted because water is limited to within the end cap.

Feet 0 25 50

Date:	4/12/2013
Designed:	RGS
Drawn:	RGS
Checked:	FM
Approved:	SO

PARSONS

Projection & Grid Coorindates:
NAD 1983 StatePlane CA VI

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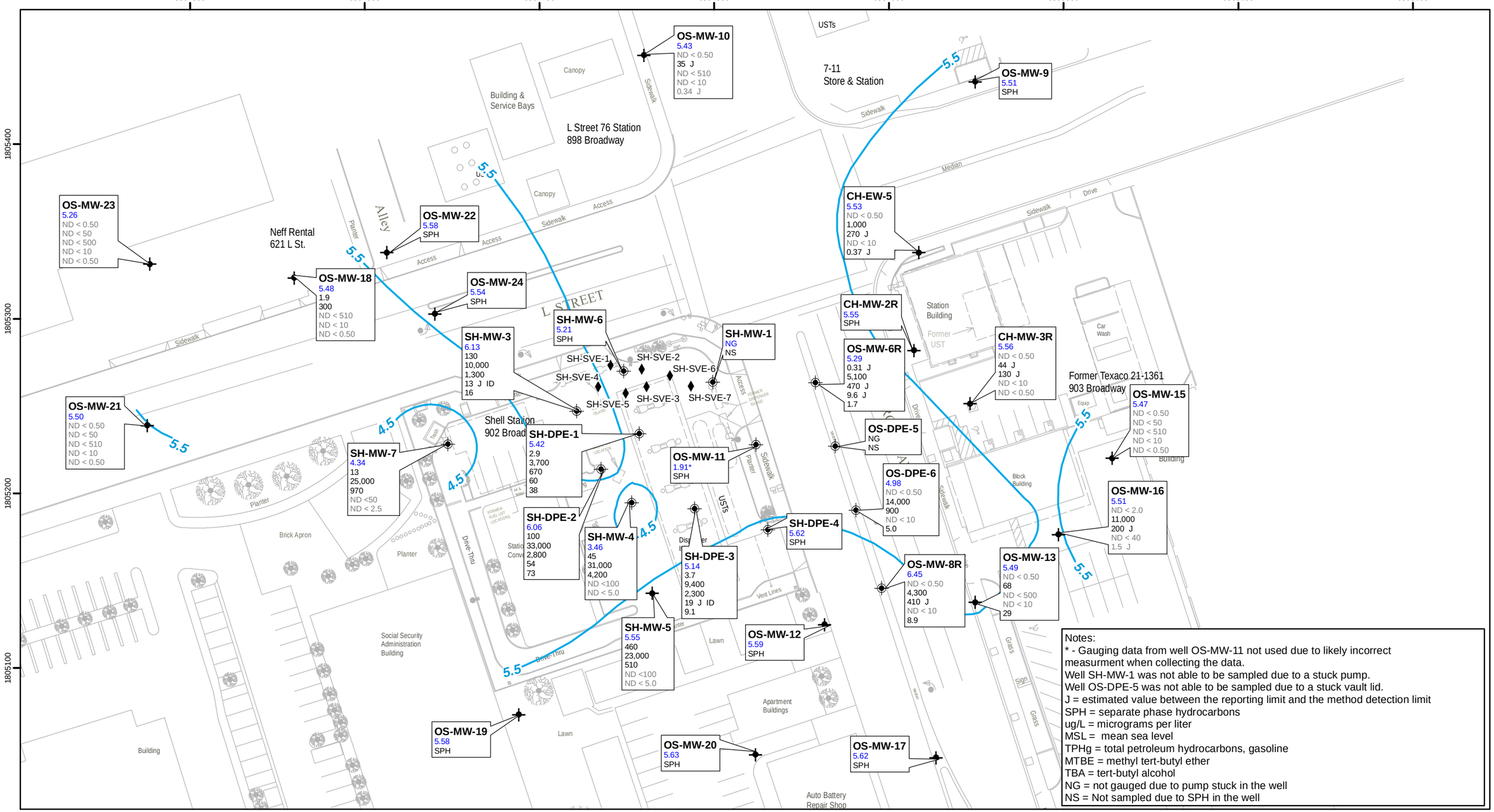

Notes:
* - Gauging data from well OS-MW-11 not used due to likely incorrect measurment when collecting the data.
Well SH-MW-1 was not able to be sampled due to a stuck pump.
Well OS-DPE-5 was not able to be sampled due to a stuck vault lid.
J = estimated value between the reporting limit and the method detection limit
SPH = separate phase hydrocarbons
ug/L = micrograms per liter
MSL = mean sea level
TPHg = total petroleum hydrocarbons, gasoline
MTBE = methyl tert-butyl ether
TBA = tert-butyl alcohol
NG = not gauged due to pump stuck in the well
NS = Not sampled due to SPH in the well

FIGURE 3 - Groundwater Elevation and Chemical Concentrations, September 6, 2016

Legend

- Groundwater Monitoring Well with Elevation above Mean Sea Level (msl)
- Dual-Phase Extraction Well
- Soil Vapor Extraction Well
- Groundwater Elevation Contour (Dashed Where Inferred) - 1.0 Contour Interval (Elevations adjusted for SPH Thickness.)

Well Name	C13-GW3
GW Elevation	6.98
Values: Benzene	84
TPHg	5600
TPHd	850
TBA	110
MTBE	16 J ← Flag

Feet 0 25 50

Date:	10/20/2016
Designed:	RGS
Drawn:	RGS
Checked:	SV
Approved:	CC

PARSONS

Projection & Grid Coorindates:
NAD 1983 StatePlane CA VI

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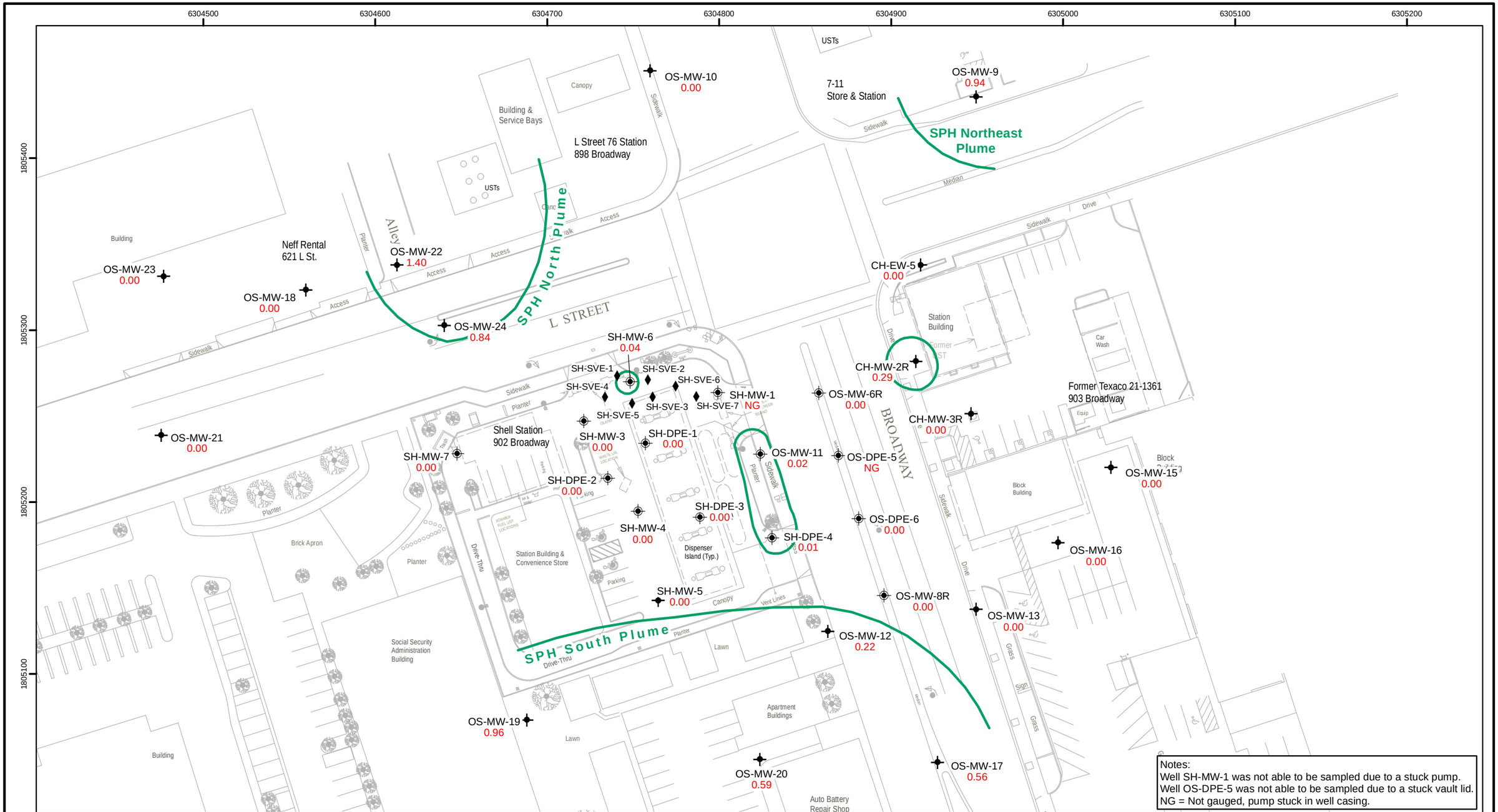

Notes:
Well SH-MW-1 was not able to be sampled due to a stuck pump.
Well OS-DPE-5 was not able to be sampled due to a stuck vault lid.
NG = Not gauged, pump stuck in well casing.

FIGURE 4 - SPH Thickness, September 6, 2016

Legend

- Groundwater Monitoring Well
- Dual-Phase Extraction Well
- Soil Vapor Extraction Well
- SPH Plume; dashed where inferred

NOTES
SPH = Separate Phase Hydrocarbons
0.00 = SPH thickness in feet.

Feet 0 25 50

Date:	10/20/2016
Designed:	RGS
Drawn:	RGS
Checked:	SV
Approved:	CC

PARSONS

Projection & Grid Coordinates:
NAD 1983 StatePlane CA VI

X:\GISCADD\projects\RELLC\mapfiles\GW_Samp_Report_3Q_2016\sph_thickness.mxd

E-3: Supplemental Phase II ESA

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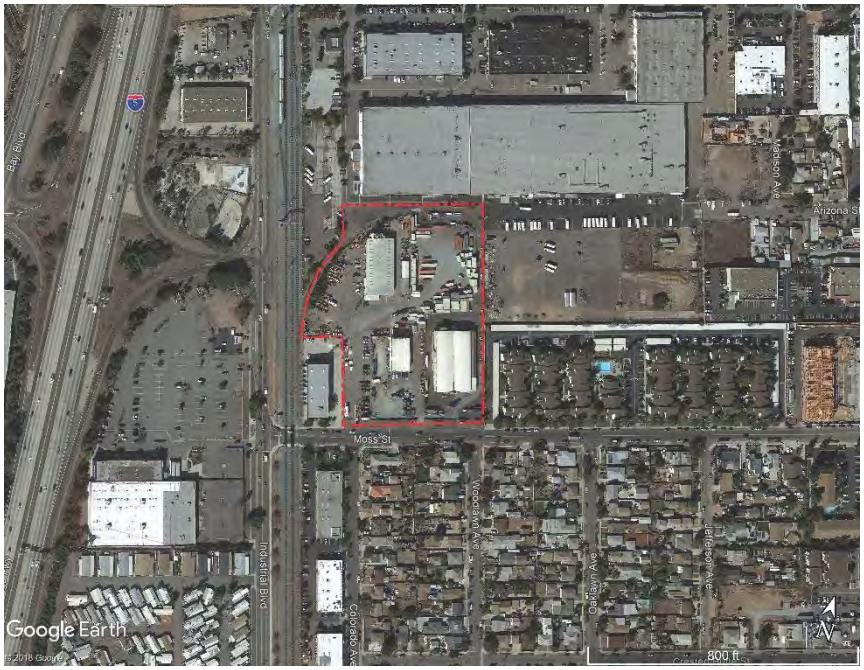
SUPPLEMENTAL PHASE II ENVIRONMENTAL SITE ASSESSMENT

676, 676B AND 680 MOSS STREET CHULA VISTA, CALIFORNIA 91911



SHOPOFF LAND FUND V, LP
2 PARK PLAZA, SUITE 700
IRVINE, CA 92614

PROJECT NUMBER EMS571

SEPTEMBER 13, 2018

EMS
ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.

TECHNICAL REPORT

SUPPLEMENTAL PHASE II ENVIRONMENTAL SITE ASSESSMENT

676, 676B AND 680 MOSS STREET
CHULA VISTA, CALIFORNIA 91911

PREPARED FOR:

SHOPOFF LAND FUND V, LP
2 PARK PLAZA, SUITE 700
IRVINE, CA 92614

PREPARED BY:

ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.
8 GOODYEAR, SUITE 125
IRVINE, CA 92618

PROJECT NUMBER EMS571

SEPTEMBER 13, 2018

Limitations and Certifications

Environmental Management Strategies, Inc. (EMS) has prepared this Report for **Shopoff Land Fund V, LP** assigned parties only. EMS' services in preparation of this document have been performed and rendered in accordance with procedures, practices and standards generally accepted and customary in the consultant's profession for use in similar assignments. No other warranty, expressed or implied, is made.

EMS assumes no responsibility for issues arising from changes in environmental standards, practices, or regulations subsequent to the preparation of this Report and any attached documents. In the event that any changes occur in waste management practices, site conditions, or uses of the property, the information in this document should be reviewed and modified or verified in writing by EMS. EMS does not warrant the accuracy of information supplied by others, or the use of segregated portions of this document.

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Appendix A: Groundwater Monitoring Well Installation Permit
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List of Acronyms

AST	Above Ground Storage Tank
AMSL	Above Mean Sea Level
ASTM	American Society of Testing Methods
bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
BTOC	Below Top of Casing
Cal-EPA	California Environmental Protection Agency
CAM	California Administrative Code
C.Hg.	California Certified Hydrogeologist
DTSC	California Department of Toxic Substances Control
ELAP	Environmental Laboratory Accreditation Program
EMS	Environmental Management Strategies, Inc.
ESA	Environmental Site Assessment
ESL	Environmental Screening Level
ft.	Feet
GW	Groundwater
HERO	DTSC Human and Ecological Risk Office
mg/kg	Milligrams per Kilogram
NELAP	National Environmental Laboratory Accreditation Program
PCE	Tetrachloroethene
P.G.	California Professional Geologist
PID	Photoionization Detector
QA/QC	Quality Assurance and Quality Control
REC	Recognized Environmental Condition
RL	Laboratory Reporting Limit
RSL	USEPA Region 9 Regional Screening Level
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SSL	Human Health Soil Screening Level
SWRCB	California State Water Resources Control Board
SVSL	Human Health Soil Vapor Screening Level
TCE	Trichloroethene
TPH	Total Petroleum Hydrocarbons
USCS	Uniform Soil Classification System
UST	Underground Storage Tank
VI	Vapor Intrusion
VOC	Volatile Organic Compound
µg/kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
$\mu g/m^3$	Micrograms per Cubic Meter
USEPA	United States Environmental Protection Agency

1 Introduction

Environmental Management Strategies, Inc. (EMS) has completed a Supplemental Phase II Environmental Site Assessment (Phase II ESA) for the properties located at 676, 676B and 680 Moss Street, in the City of Chula Vista, San Diego County, California (the "Site", **Figure 1**). Shopoff Land Fund V, LP (Shopoff) retained EMS to perform the Supplemental Phase II ESA in support of Shopoff's planned purchase and redevelopment of the Site. This work was performed by EMS to further investigate the potential occurrence and distribution of Total Petroleum Hydrocarbons (TPH) and volatile organic compounds (VOC) in soil, soil vapor and groundwater beneath the Site. A previous Phase II ESA performed by EMS identified the presence of low concentrations of TPH as diesel and motor oil in soil and low concentrations of VOCs in soil vapor at the Site. The previous Phase II ESA was performed to investigate potential impact from Recognized Environmental Conditions (RECs) identified in a Phase I ESA dated July 2018 prepared by EMS.

2 Project Background

2.1 Site Setting and Property Use

The Site is located at 676, 676B and 680 Moss Street in a mixed industrial and residential area within the City of Chula Vista, San Diego County, California. The site is bordered to the north by a storage facility used by the Sweetwater School District, to the east by residences and a parking lot used by Sweetwater School District, to the west by a rail right-of-way and Industrial Avenue and to the south by Moss Street and residences.

The site is comprised of three parcels of land identified as parcel numbers 618-010-26-01, 618-010-31-00 and 618-010-32-00. Current tenants at the Site are Hawthorne Cat at 680 Moss Street, Southwest Mobile Storage at 680 Moss Street, Boat Yard S.D. at 676 Moss Street, Rapid Prep at 676 Moss Street and Kleen Blast at 676B Moss Street. Hawthorne Cat is a heavy machinery rental and sales yard. Southwest Mobile Storage refurbishes, repairs and rents metal storage containers. Boat Yard S.D. appears to perform boat repair. Rapid Prep is a rental location for steel surface preparation equipment. Kleen Blast sells specialty abrasives and sand blast media.

2.2 Phase I Environmental Site Assessment

A Phase I ESA prepared by EMS dated July 2018 identified several RECs for the Site including the following items listed below. EMS recommended a Phase II ESA be performed to evaluate the potential impact to soil and soil vapor at the Site from these RECs (EMS, July 2018).

- Three diesel above ground storage tanks (ASTs) were observed on the 680 Moss Street property and are a concern for subsurface contamination.
- The Hawthorne Cat equipment wash area at 680 Moss Street is a concern for subsurface

contamination.

- The motor oil, transmission oil, and drive train oil and used oil storage area at 680 Moss Street is a concern for subsurface contamination.
- Soil staining was observed at the 676 Moss Street, Boat Yard S.D. property and is a concern for subsurface contamination.
- Housekeeping on the Boat Yard S.D. property was very poor with equipment and chemicals stored haphazardly throughout the yard and is a concern for subsurface contamination.
- The equipment wash area and clarifier located at the 676 Moss Street, Rapid Prep property are concerns for subsurface contamination.
- The clarifier at the 676B Moss Street, Kleen Blast property is a concern for subsurface contamination.
- A 4,000-gallon underground fuel storage tank (UST) was removed from the northeast corner of Site during 1987 by American Mill & Manufacturing, Inc. The tank appeared to have been installed in 1970 and stored unleaded gasoline. Comments from the County of San Diego Hazardous Materials Management Unit, Abandoned Underground Tank Report state that the tank had no apparent leaks. However, UST case records do not include a closure or "no further action" letter.

2.3 Phase II Environmental Site Assessment

EMS performed a Phase II ESA at the Site during August 2018 to investigate RECs identified by the Phase I ESA. The findings of the Phase II ESA are presented in EMS' report dated August 14, 2018. The scope of work performed by EMS for the initial Phase II ESA included the following tasks:

- Advancement of 14 direct-push (GeoProbe™) borings at the locations indicated on **Figure 2**. The borings were advanced to depths of 5-feet and 15-feet below the ground surface (bgs).
- Collection of soil samples in each of the 14 borings at depths of 2-feet and 5-feet bgs, and at 10-feet and 15-feet in the 15-foot borings. Chemical analysis of soil for volatile organic compounds (VOC) by EPA Method 8260B, total petroleum hydrocarbons (TPH) as gasoline, diesel and motor oil by EPA method 8015B and for California Administrative Code (CAM) 17 Metals by EPA Method 6000/7000 series.
- Installation of soil vapor probes in each of the 14 borings. Single probes were set at 5-feet in the 5-foot borings and nested probes were set at 5-feet and 15-feet in the 15-foot borings.
- Collection of soil vapor samples from each probe according to the DTSC July 2015 Advisory on Active Soil Gas Investigations for chemical analysis of VOCs by EPA Method TO-15.

Summaries of the chemical analysis results for soil and soil vapor samples collected for this investigation are provided in **Tables 1**, **2** and **3.** The distribution of total petroleum

hydrocarbons detected in soil and PCE and benzene detected in soil vapor are shown on **Figures 3** and **4.** A summary of the Phase II ESA findings is provided below.

- The concentrations of metals detected in soil at the locations and depths sampled do not appear to present a significant direct or indirect soil contact health risk to current or potential current or future human receptors at the Site.
- VOCs were not detected in any of the soil samples collected by EMS as the Site.
- Shallow soil at certain areas of the Site contain low concentrations of TPH as motor oil-range and lesser concentrations of diesel-range organics. The concentrations of TPH detected in soil at the locations and depths sampled do not exceed the San Francisco Bay Regional Water Quality Environmental Screening Levels (ESLs) for direct soil exposure to humans at residential sites and are not expected to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.
- Low concentrations of twenty-two VOCs were detected in soil vapor samples collected at the Site. The occurrence of VOCs in soil vapor is wide-spread across the Site. The most prevalent VOCs detected in soil vapor were acetone, 2-butanone (methyl ethyl ketone), BTEX compounds (benzene, toluene, ethylbenzene and xylene), and tetrachloroethene (PCE). PCE detected in the soil vapor samples at two locations (SLF-5 and SLF-6) marginally exceed a future residential soil vapor screening level (SVSL) of 460 micrograms per cubic meter ($\mu g/m^3$) determined using current DTSC 2011 VI Guidance and DTSC June 2018 HERO Note 3 indoor air screening levels. No other VOCs detected in soil vapor exceed future residential SVSLs based on current DTSC VI guidance.

3 Scope of Work

EMS performed the scope of work described below in completion of this Supplemental Phase II ESA at the Site. All Phase II work was directly supervised by a California Professional Geologist (P.G.) and Certified Hydrogeologist (C.Hg).

- Obtain groundwater monitoring well installation permits from the County of San Diego (**Appendix A**).
- Mark boring locations and Notify Underground Service Alert (Dig Alert) of the proposed work and schedule.
- Update the Site Health and Safety Plan for work to be performed.
- Advancement of five borings using hollow-stem auger drilling methods at the locations indicated on **Figure 2** (borings GMW-1 though GMW-5) The borings were advanced to depths of 40 feet bgs.
- Collection of soil samples in each of the five borings at depths of 20, 25 and 30 feet bgs. Chemical analysis of soil for volatile organic compounds (VOC) by EPA Method 8260B and for total petroleum hydrocarbons (TPH) as gasoline, diesel and motor oil by EPA method

8015B.

- Installation of 2-inch diameter PVC groundwater monitoring wells in each of the five borings.
- Install soil vapor probes in the well sand packs at a depth of 25 feet bgs in wells GMW-1, GMW-2 and GMW-3.
- Development of each groundwater monitoring well by surging and bailing.
- Collection of soil vapor samples from each probe according to the DTSC July 2015 Advisory on Active Soil Gas Investigations for chemical analysis of VOCs by EPA Method TO-15.
- Measurement of groundwater depths and collection of groundwater samples from each monitoring well after purging and recording of pH, temperature, conductivity, oxidation-reduction potential, dissolved oxygen and turbidity in purge water.
- Survey well head elevations.
- Preparation of a groundwater flow map based on groundwater elevation data collected by EMS.
- Preparation of this Supplemental Phase II ESA Report.

4 Soil Sample Collection and Chemical Analysis

4.1 Soil Sample Collection

Hollow-stem auger equipment was used to drill five soil borings on-Site at the locations indicated on **Figure 2** (boring GMW-1 through GMW-5). The borings were drilled on August 29 and 30, 2018 by Baja Exploration, Inc., using a CME-95 drill rig equipped with eight-inch OD hollow-stem auger. The auger was cleaned using a hot water pressure wash before use and between borings. Soil cuttings and decontamination fluids generated during drilling were contained in steel 55-gallon drums for temporary on-Site storage and subsequent disposal.

Soil samples were collected at 20, 25 and 30 feet bgs in each boring using a 1.5-inch ID split-barrel sampler loaded with new 6-inch length stainless steel sample tubes. Groundwater was encountered during drilling near 30 feet bgs. Boring logs describing soil types and other properties encountered during drilling are provided in **Appendix B.**

Approximate 5-gram soil sub-cores were collected from the bottom stainless steel tube of each sampling interval using disposable Lock-N-Load™ syringes for preservation in the field according to EPA Method 5035 Option A and B for volatile organic compounds (Cal-EPA, November 2004). EPA Method 5035 utilizes sodium bisulfate and methanol field preservation for low and high VOC concentration analysis, respectively, by closed system purge and trap. The second stainless steel tube from each sampling interval was retained by sealing with Teflon™ sheets and plastic end caps. The steel tubes and vials containing the preserved soil sub-cores were labeled, recorded on a chain of custody form and placed in an ice chest containing bagged ice for temporary cold storage. Reaming soil from each sampling interval was placed in

plastic bags and screened for volatile organic content using a portable photoionization detector (PID). Low PID reading were recorded for soil ranging from 0.1 to 0.4 parts per million by volume (ppmv).

4.2 Soil Sample Chemical Analysis

The soil samples collected by EMS from borings GMW-1 though GMW-5 were submitted to Sunstar Laboratories, Inc. (Sunstar) for chemical analysis of VOCs by EPA Method 8260B and for TPH as gasoline, diesel and motor oil-rage hydrocarbons by EPA Method 8015B (California ELAP Number 2250). The soil samples were analyzed within the holding time specified by the EPA Methods. VOC and TPH were not detected in any of the soil samples collected from boring GMW-1 through GMW-5. A summary of the soil chemical analysis data is provided in **Table 1**. The laboratory analytical report and chain of custody document are provided in **Appendix C.**

5 Groundwater Monitoring Well Construction

Soil borings GMW-1 through GMW-5 were completed as groundwater monitoring wells ranging in total depth from 36 to 40 feet bgs. . Well construction diagrams are provided in **Appendix B**. Two-inch diameter Schedule 40 PVC well screen and blank casings were used for groundwater monitoring well construction. Groundwater was encountered near 30 feet bgs. Fifteen feet of screened casing was installed in each well. The wells were completed at the surface with locking caps and 10-inch diameter traffic-rated well covers and three-foot diameter concrete surface seals.

The new wells were developed by surging, bailing and pumping by Baja Exploration on August 31, 2018. The groundwater wells produce water at a generally slow rate. Between two and twelve gallons of water were removed from the wells for development. The well development water was placed in a steel 55-gallon drum for temporary on-Site storage. The elevations and geo-polar positioning coordinates of the well casing tops were surveyed by EMS on September 4 and 11, 2018. A summary of recent surveying data is provided in **Table 4.**

6 Soil Vapor Probe Construction, Sampling and Chemical Analysis

6.1 Soil Vapor Probe Construction

Soil vapor monitoring probes were installed between 21 and 25 feet bgs within the annular space sand packs of wells GMW-1, GMW-2 and GMW-3. This depth is within vadose zone soil approximately 5 to 7 feet above groundwater. Soil vapor probe construction details are provided in **Appendix B**. The soil vapor monitoring probes are designated GMW-1-SV, GMS-2-SV and GMW-3-SV. EMS used 0.25-inch outside diameter Nylafow™ tubing and stainless-steel implant filters for vapor probe construction. The probe tubing was attached to the outside of the well casing using plastic straps.

6.2 Soil Vapor Sample Collection

Soil vapor samples were collected from soil vapor probes GMW-1-SV, GMW-2-SV and GMW-3-SV prior to groundwater sampling by EMS on September 4, 2018 after allowing approximately five-days of probe equilibration time before sampling. The soil vapor samples were collected using batch certified clean one-liter passivated stainless-steel canisters (e.g. Summa™ Canisters) and 150-200 cc/min flow controllers provided by Eurofins/Calscience Laboratory located in Garden Grove, California (NELAP Number CA300001). The canisters were supplied with minimum internal vacuums of 29.50 inches of mercury. Probe leak testing was performed in accordance with the DTSC 2015 Advisory which included vacuum shut-in tests and use of a liquid leak tracer (isopropanol) during sample collection for each probe. As recommended in the DTSC 2015 Advisory, samples were collected after removing approximately three purge volumes of soil vapor from each probe.

6.3 Soil Vapor Sample Chemical Analysis

The soil vapor samples collected for this project were submitted to Eurofins/Calscience Laboratory located in Garden Grove, California for chemical analysis. The soil vapor samples were analyzed for the full-scan list of VOCs using EPA Method TO-15 within the method holding time. The soil vapor samples were also analyzed for the leak tracer compound isopropanol. The laboratory reports and chain-of-custody documents for the soil vapor analyses are provided in **Appendix D.** A summary of the analytical data for soil vapor is provided as **Table 3.** Low concentrations of nine VOCs were detected in soil vapor samples collected from probes GWM-1-SV, GMW-2-SV and GWM-3-SV on September 4, 2018 consisting of acetone, benzene, 2-butanone, carbon disulfide, chloromethane, ethylbenzene, 4-methyl-2-pentanone and 1,1-dichloroethane.

7 Groundwater Sample Collection and Chemical Analysis

7.1 Groundwater Sample Collection

Groundwater samples were collected by EMS from monitoring wells GMW-1 through GMW-5 on September 4, 2018. The groundwater samples were collected after measurement of groundwater depth using a Solinst electronic interface meter. Well elevation data and groundwater depth measurements are provided in **Table 4**.

The wells were purged using a traditional three well casing volume method using a Grundfos Rediflow 2™ variable speed electric submersible pump at a rate between 0.3 and 0.5 gallons per minute. A traditional three well casing purge method was selected for the initial sampling to remove water present in wells casings that may have been affected by well development. New polyethylene tubing was used for purging each well. The pump was decontaminated before use and between wells by scrubbing and circulating potable water containing Alconox solution through the pump for five minutes followed by rinsing with clean potable water and a final

distilled water rinse. The section of the pump electrical cord exposed to groundwater was decontaminated using a three-bucket wash chain.

Temperature, pH, conductivity and turbidity were monitored and recorded during purging using a Horiba U52-2 Water Quality Meter. Groundwater purge parameter logs are provided in **Appendix E**. Well purge water was placed in a steel drum and left in a secure location on-Site for temporary storage and subsequent disposal.

Quality assurance and quality control (QA/QC) samples for groundwater sampling were prepared as follows:

- An equipment blank sample labeled EB-1 was prepared after a decontamination event by pouring distilled water through and over the pump.
- A field duplicate sample was collected from well GMW-2 and labeled GMW-2-Dup.

Groundwater sample aliquots were collected from the wells after purging a minimum of three well casing volumes of groundwater and recording of purge parameters. The groundwater samples were placed in 40 milliliter (ml) VOA vials containing hydrochloric acid as a preservative for VOC analysis by EPA Method 8260B. The sample containers were labeled, placed in separate plastic bags, logged on a chain-of-custody form and placed in an ice chest along with QA/QC samples for temporary cold storage. A copy of the chain-of-custody form is provided in **Appendix F**.

7.2 Groundwater Sample Chemical Analysis

The groundwater and QA/QC samples were submitted to Sunstar Environmental Laboratories, Inc. for chemical analysis. The samples were analyzed for VOCs and Gasoline-Range Organics (GRO) by EPA Method 8260B within the method holding time. A summary of the groundwater analytical data is provided as **Table 5**. The certified laboratory report for the September 4, 2018 groundwater sampling event is provided in **Appendix F**. **Figure 5** is a map showing the concentrations of VOCs detected in groundwater.

Gasoline-range organics were not detected in any of the groundwater samples from wells GMW-1 through GMW-5. The only VOC detected in groundwater was chloromethane ranging in concentration from 9.7 micrograms per liter (µg/L) to 12 µg/L.

8 Geology and Hydrogeology

Shallow soil types encountered by EMS beneath the Site to a depth of 30-feet bgs primarily consisted of silt with some sand and clay. A preliminary geotechnical investigation performed at the Site by LGC Valley, Inc., during June 2018 described soil beneath the Site to be primarily composed of massively bedded, reddish-brown, dark brown, and gray-brown, weakly cemented, stiff to hard, silty to sandy clay, clayey silt, and silty to clayey sand. This unit was encountered to the maximum drilling depth of 51 feet bgs. Undocumented fill soils were encountered by LGC on-Site consisting of dark brown silty clay, sandy clay, and clayey sand derived of onsite

alluvial flood-plain deposits. Fill below the existing buildings are expected to be relatively shallow, while the fill above old drainage channels are expected to possibly exceed 12 feet in depth. Groundwater was encountered during drilling by LGC at approximately 32 feet below the ground surface (bgs) which is approximately at sea level.

Groundwater (water-saturated soil) was encountered during drilling borings for groundwater monitoring wells GMW-1 through GMW-5 near 30 feet below the ground surface. Water-bearing soils at this depth are primarily composed of sandy silt (USCS symbol ML), silty sand (SM) and fine to medium sand (SP). A summary of well construction and groundwater elevation data for wells GMW-1 through GMW-5 is provided as **Table 4**. The depths to groundwater measured in the wells on September 11, 2018 ranged from 27.65 to 30.83 feet below top of casing (BTOC). Corresponding groundwater surface elevations ranged from approximately 4.34 to 4.64 feet above mean sea level (AMSL). A map showing estimated groundwater equipotential lines and apparent flow direction is provided as **Figure 6**. Based on groundwater elevation data collected by EMS, the apparent groundwater flow direction beneath the Site on September 11, 2018 was generally northwest at a generally flat average gradient of 0.0007 ft/ft.

9 Laboratory Report QA/QC Review

The laboratory analytical reports were reviewed and evaluated to assess the overall quality and usability of the data. No quality assurance and quality control (QA/QC) deficiencies or data qualifiers were noted that would otherwise disqualify use of the data for the project purpose. Supporting QA/QC documentation that was evaluated for soil, soil vapor and groundwater analytical reports included the following major items:

- Chain of Custody
- Holding Times
- Surrogate Spike Recoveries
- Method Blanks (MB)
- Laboratory Control Samples (LCS)
- Laboratory Control Sample Duplicates (LCSD)
- Matrix Spike Samples (MD)
- Matrix Spike Duplicate Samples (MSD)
- Field Duplicates
- Equipment Blanks
- Method Detection Level (MDL) and Reporting Limit (RL)
- Data Qualifiers

9.1 Data Qualifiers

Provided below is a summary of data qualifiers contained in laboratory analytical reports prepared for this investigation.

- Sunstar Lab Report 9/7/18 Data Qualifier "M-02": Multiple analysis yielded poor internal standard and/or surrogate recoveries for soil sample GMW-2-20 ft. due to matrix effect. Results reported are from the most complete recovery of internal standards, however, recoveries were not within the acceptable limits of the method. The results of the analysis of sample GMW-2-20 ft. is consistent with all other soil analyses performed by Sunstar. This occurrence is not expected to significantly impact laboratory data quality for soil.

9.2 QA/QC Water Samples

Low concentrations of chloromethane, bromodichloromethane, chloroform and dibromochloromethane were detected in the Equipment Blank sample prepared from distilled water. Chloromethane was also detected in all of the groundwater samples collected at the Site. The remaining VOCs detected in the Equipment Blank sample are common trihalomethane residuals from drinking water disinfection and were not detected in groundwater samples. These VOCs appear to have been present in the rinse water source used for decontamination or to prepare the Equipment Blank sample. The presence of these VOCs in the Equipment Blank sample does not affect the data quality for groundwater.

9.3 Soil Vapor Probe Shut-In and Leak Tracer Testing

The soil vapor sampling apparatus used by EMS for this project is equipped with a vacuum gauge and valves used to perform a shut-in leak test of the sampling train between the top of the probe and the inlet to the vacuum pump. Shut-in tests were performed for each probe at a vacuum of at least 100 inches of water column for a period of at least one minute. No visible movement of the vacuum gauge needle was observed during the tests. Leak testing was also performed by applying a liquid leak tracer (isopropanol) to cotton swabs placed at the points where the probes daylight from the subsurface, and at the connections to the sampling apparatus. Isopropanol was not detected in any of the soil vapor samples analyzed for this project by EPA Method TO-15. These results demonstrate leakage of ambient air into the soil vapor probes did not occur during sampling.

10 Investigation Derived Waste

Soil, groundwater and equipment decontamination water generated during this investigation were placed in steel 55-gallon drums for temporary on-Site Storage. The drums containing investigation derived waste (IDW) were transported for off-Site recycling/disposal by Belshire Environmental Services, Inc., on September 11, 2018. The soil was transported as non-hazardous waste to Soil Safe, Inc. for thermal treatment. The water was transported to DeMenno Kerdoon, Inc., for processing. Waste transport manifests are provided in **Appendix G**

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11 Preliminary Risk Screening Evaluation Update

Provided below is an up-date of the preliminary screening evaluation of health risk contained in EMS's August 14, 2018 Phase II ESA Report. This evaluation used site-specific soil and soil vapor analytical data in comparison to "Tier 1" health-based environmental screening levels for soil and soil vapor published by the California DTSC, US EPA Region 9 and the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). These publications are listed below.

- DTSC Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, October 2011
- DTSC Human and Ecological Risk Office (HERO) Note 3, June 2018
- US EPA Region 9 Regional Screening Levels (RSLs), June 2018
- SFBRWQCB Environmental Screening Levels, February 2016

11.1 Total Petroleum Hydrocarbons in Soil

TPH-gasoline was not detected in any of the 54 soil samples collected by EMS at the Site. The concentrations of TPH-diesel and TPH-motor oil detected in soil do not exceed the San Francisco Bay Regional Water Quality Environmental Screening Levels (ESLs) for direct soil exposure to humans at residential sites of (**Table 1**). Based on this screening-level evaluation, the concentrations of TPH detected in soil at the locations and depths sampled by EMS are not expected to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.

11.2 Volatile Organic Compounds in Soil

VOCs were not detected in any of the 54 soil samples collected by EMS as the Site. VOCs in soil matrix at the locations and depths samples by EMS are not expected to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.

11.3 Volatile Organic Compounds in Soil Vapor

PCE concentrations in the soil vapor samples from probes SLF-5-15 ft. and SLF-6-5 ft. sampled on August 3, 2018 marginally exceed a residential soil vapor screening level (SVSL) for potential vapor intrusion of 460 micrograms per cubic meter ($\mu g/m^3$) using DTSC June 2018 HERO Note 3 indoor air screening levels and the DTSC October 2011 Vapor Intrusion (VI) Guideline attenuation factor (α) for future residential buildings of 0.001 (**Table 3**). Since residential buildings are planned for the Site, the DTSC future residential building α was used for this evaluation. PCE was detected in samples SLF-5-15 ft. and SLF-6-5 ft. and 660 $\mu g/m^3$ to 890 $\mu g/m^3$, respectively. These concentrations do not exceed Commercial SVSLs determined using the same references. No other VOCs detected in soil vapor exceed future residential SVSLs calculated using current DTSC June 2018 HERO Note 3 and US EPA May 2018 Region 9 Regional Screening Level (RSL) guidance documents. A comparison of VOC concentrations detected in soil vapor with future residential and commercial SVSLs is provided in **Table 3**. The

reported VOC concentrations detected in soil vapor beneath the Site are considered low. It is the opinion of EMS that the VOCs detected in soil vapor are not likely to present a significant health risk from potential vapor intrusion to existing or future buildings on-Site.

11.4 Volatile Organic Compounds in Groundwater

Gasoline-range organics were not detected in any of the groundwater samples from wells GMW-1 through GMW-5. The only VOC detected in groundwater was chloromethane ranging in concentration from 9.7 micrograms per liter (µg/L) to 12 µg/L. A Maximum Contaminant Level (MCL) for drinking water has not been established by the State of California or the US EPA for chloromethane. Chloromethane is a common VOC detected in air, water and soil. According to the Agency for Toxic Substances and Disease Registry (ATSDR), it is estimated that 99% of chloromethane released to the environment comes from natural sources. Chloromethane is always present in air at low levels (ATSDR, December 1998). Chloromethane is not considered a Site-related contaminant, or a contaminant of concern for this Site.

12 Conclusions

The purpose of this Supplemental Phase II ESA was to further investigate the potential occurrence and distribution of VOCs in soil and groundwater at the Site. EMS concludes the following based on the finding of this supplemental Phase II ESA:

- The concentrations of metals detected in soil at the locations and depths sampled are not expected to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.
- Shallow soil at certain areas of the Site contain low concentrations of total petroleum hydrocarbons (TPH) as motor oil-range organics and lesser concentrations of diesel-range organics. The source of TPH may be from limited surface spillage at the Site or from asphalt debris in shallow fill soil beneath the Site. The concentrations of TPH detected in soil at the locations and depths sampled do not exceed the San Francisco Bay Regional Water Quality Environmental Screening Levels (ESLs) for direct soil exposure to humans at residential sites and are not expected to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.
- VOCs were not detected in any of the soil samples collected by EMS as the Site. VOCs in soil matrix at the locations and depths sampled by EMS are not expected to present a significant direct or indirect soil contact health risk to current or potential future human receptors at the Site.
- Except for low concentrations of chloromethane, VOCs were not detected in groundwater samples collected from the five groundwater monitoring wells at the Site. Chloromethane is not considered a Site-related VOC or a contaminant of concern for this Site. These results demonstrate that this Site is not a source of VOC impact to groundwater and does not appear to have been impacted by potential un-gradient, off-Site sources of VOC groundwater contamination.
- Low concentrations of twenty-three VOCs were detected in soil vapor samples collected at the Site. The occurrence of VOCs in soil vapor is wide-spread across the Site. EMS did not identify a soil source of VOCs and the distribution of these VOCs in soil vapor did not identify a specific potential release area or "hot-spot" on-Site. VOC detected in soil vapor may be from both on and off-Site sources.
- PCE detected in two soil vapor samples at two locations (SLF-5 and SLF-6) near a clarifier and equipment wash area at 676 Moss Street marginally exceed a future residential soil vapor screening level (SVSLs) of 460 micrograms per cubic meter ($\mu g/m^3$) determined using current DTSC 2011 VI Guidance and DTSC June 2018 HERO Note 3 indoor air screening levels. These results suggest soil beneath these structures may be a weak source of the relatively higher concentrations of PCE detected in soil vapor near this area. No other VOCs detected in soil vapor across the Site exceed future residential SVSLs based on current DTSC VI guidance. These results demonstrate the potential vapor intrusion risk to existing or future buildings from VOCs present in soil vapor beneath the Site is low.

13 Recommendations

The findings of the Phase II Environmental Site Assessments performed by EMS at the Site do not indicate the Site is unsuitable for the intended residential redevelopment, or that soil remediation is likely necessary prior to Site redevelopment. A weak source of PCE may exist in soil beneath a clarifier and wash area at 676 Moss Street (soil vapor sampling locations SLF-5 and SLF-6, **Figure 4**). It is anticipated that these structures will be removed as part of redevelopment earthwork. EMS recommends soil samples be collected from beneath these structures after removal for testing of VOCs. If present, EMS recommends soil containing elevated concentrations of VOCs be excavated and removed from the Site. Removal of impacted soil, if present, would likely eliminate the low potential risk of vapor intrusion that may be caused by this source.

Because the assessment of soil for contamination is dependent on, and limited by, discrete sampling at specific locations and depths, the possibility of encountering some soil containing petroleum hydrocarbons or other products during grading or construction that were not identified by previous sampling activities cannot be completely ruled out for an industrial site. Therefore, EMS recommends a Soil Management Plan (SMP) be prepared to address potentially contaminated soil that may be encountered during building demolition, grading or construction activities at this Site. The SMP would establish procedures for the identification, detection, excavation, removal and disposal of any impacted soil discovered during Site demolition and grading. Using an SMP is a Best Management Practice (BMP) that facilitates a cost-effective and efficient process for the removal of impacted soil with minimal impact to Site construction and development activities.

Five groundwater monitoring well were installed of this project. EMS recommends these wells remain in place should additional groundwater testing be necessary. These wells will require proper abandonment once they are no longer needed. All well-heads and covers should be protected from damage during any Site construction, earthwork or paving. A permit should be obtained from the County of San Diego prior to abandonment.

14 References

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Tables

Summary of Total Petroleum Hydrocarbon and Volatile Organic Compound Analytical Data for Soil
Shopoff Land Fund V, Moss Street Assemblage, Chula Vista, California

Sample Number/Depth	Date Collected mm/dd/yy	TPH-Gasoline (mg/kg)	TPH-Diesel (mg/kg)	TPH-Motor Oil (mg/kg)	VOCs (All) (µg/kg)
SLF-1-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-1-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-2-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-2-5 ft.	08/02/18	ND<10	ND<10	11	ND
SLF-2-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-2-15 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-3-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-3-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-4-2 ft.	08/02/18	ND<10	16	200	ND
SLF-4-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-5-2 ft.	08/02/18	ND<10	13	110	ND
SLF-5-5 ft.	08/02/18	ND<10	12	39	ND
SLF-5-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-5-15 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-6-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-6-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-7-2 ft.	08/02/18	ND<10	110	2,100	ND
SLF-7-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-7-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-7-15 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-8-2 ft.	08/02/18	ND<10	34	570	ND
SLF-8-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-9-2 ft.	08/02/18	ND<10	14	130	ND
SLF-9-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-9-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-9-15 ft.	08/02/18	ND<10	12	ND<10	ND
SLF-10-2 ft.	08/02/18	ND<10	13	14	ND
SLF-10-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-11-2 ft.	08/02/18	ND<10	17	99	ND
SLF-11-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-12-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-12-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-13-2 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-13-5 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-13-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND

Sample Number/Depth	Date Collected mm/dd/yy	TPH-Gasoline (mg/kg)	TPH-Diesel (mg/kg)	TPH-Motor Oil (mg/kg)	VOCs (All) (µg/kg)
SLF-13-15 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-14-2 ft.	08/02/18	ND<10	12	120	ND
SLF-14-5 ft.	08/02/18	ND<10	14	150	ND
SLF-14-10 ft.	08/02/18	ND<10	ND<10	ND<10	ND
SLF-14-15 ft.	08/02/18	ND<10	ND<10	ND<10	ND
GMW-1-20 ft.	08/30/18	ND<10	ND<10	ND<10	ND
GMW-1-25 ft.	08/30/18	ND<10	ND<10	ND<10	ND
GMW-1-30 ft.	08/30/18	ND<10	ND<10	ND<10	ND
GMW-2-20 ft.	08/29/18	ND<10	ND<10	ND<10	ND
GMW-2-25 ft.	08/29/18	ND<10	ND<10	ND<10	ND
GMW-2-30 ft.	08/29/18	ND<10	ND<10	ND<10	ND
GMW-3-20 ft.	08/30/18	ND<10	ND<10	ND<10	ND
GMW-3-25 ft.	08/30/18	ND<10	ND<10	ND<10	ND
GMW-3-30 ft.	08/30/18	ND<10	ND<10	ND<10	ND
GMW-4-20 ft.	08/29/18	ND<10	ND<10	ND<10	ND
GMW-4-25 ft.	08/29/18	ND<10	ND<10	ND<10	ND
GMW-4-30 ft.	08/29/18	ND<10	ND<10	ND<10	ND
GMW-5-20 ft.	08/30/18	ND<10	ND<10	ND<10	ND
GMW-5-25 ft.	08/30/18	ND<10	ND<10	ND<10	ND
GMW-5-30 ft.	08/30/18	ND<10	ND<10	ND<10	ND
SSL Residential		NA	230[a]	11,000[a]	NA
SSL Commercial		NA	1,100[a]	140,000[a]	NA

TPH = total petroleum hydrocarbons by EPA method 8015B as gasoline (C6-C12), diesel (C13-C28) and motor oil (C29-C40)
VOCs = Volatile Organic Compounds by EPA Method 8206B
mg/kg = milligrams per kilogram or parts per million
µg/kg = micrograms per kilogram or parts per billion
ND = not detected at or above laboratory reporting limit (RL)
SSL = soil screening level for residential and commercial use properties
[a] = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (SFBRWQCB 2016)
NA = not applicable, screening level not established or chemical not detected in soil

Table 2
Summary of CAM Title 22 Metals Analytical Data for Soil
Shopoff Land Fund V - Moss Street Assemblage, Chula Vista, California

Sample Number/Depth	Arsenic (mg/kg)	Barium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SLF-1-2 ft.	ND<5.0	42	7.4	7.2	11	8.7	28	28	28
SLF-1-5 ft.	ND<5.0	27	8.4	7.5	5.5	ND<3.0	5.3	30	20
SLF-2-2 ft.	ND<5.0	29	7.3	6.5	5.7	ND<3.0	4.7	26	17
SLF-2-5 ft.	ND<5.0	45	11	7.7	7.7	ND<3.0	6.3	45	25
SLF-2-10 ft.	ND<5.0	82	9.7	8.7	6.8	ND<3.0	6.8	42	23
SLF-2-15 ft.	ND<5.0	48	6.3	6.4	4.8	ND<3.0	4.9	32	16
SLF-3-2 ft.	ND<5.0	88	9.2	8.1	12	11	6.8	34	48
SLF-3-5 ft.	5.2	160	13	9	9.8	7.2	7.9	53	35
SLF-4-2 ft.	5.3	90	9.9	7.2	10	10	5.9	33	36
SLF-4-5 ft.	ND<5.0	85	9.6	7.8	11	7.1	5.9	37	28
SLF-5-2 ft.	ND<5.0	68	13	8.1	10	ND<3.0	5.6	45	44
SLF-5-5 ft.	ND<5.0	110	8.2	6.8	13	11	5.5	29	54
SLF-5-10 ft.	ND<5.0	35	4.7	4.7	4.8	ND<3.0	3.2	19	12
SLF-5-15 ft.	ND<5.0	41	7.9	6.2	6.9	ND<3.0	4.8	32	17
SLF-6-2 ft.	6.7	76	5.6	5.9	8.4	ND<3.0	3.4	42	24
SLF-6-5 ft.	5.2	100	7.9	5.7	12	11	5.3	29	44
SLF-7-2 ft.	8.2	92	17	7.4	25	14	12	47	43
SLF-7-5 ft.	ND<5.0	130	8.4	6.2	14	19	6.5	30	69
SLF-7-10 ft.	ND<5.0	81	6.8	6.2	6.6	ND<3.0	4.6	26	18
SLF-7-15 ft.	ND<5.0	110	6.6	7.4	6.7	ND<3.0	5.5	30	17
SLF-8-2 ft.	5.0	49	8.1	6.5	12	7.5	6.8	46	38
SLF-8-5 ft.	ND<5.0	120	11	7.1	140	29	7.2	34	160
SLF-9-2 ft.	5.3	160	11	7.2	140	79	9.1	36	610
SLF-9-5 ft.	ND<5.0	78	8.8	6.8	8.0	ND<3.0	6.1	30	46
SLF-9-10 ft.	ND<5.0	140	7.4	6.1	6.9	ND<3.0	5.2	27	41
SLF-9-15 ft.	ND<5.0	45	5.8	6.0	6.1	ND<3.0	4.4	25	94
SLF-10-2 ft.	ND<5.0	69	10	7.1	12	11	5.9	50	59
SLF-10-5 ft.	5.2	74	13	9.2	11	8.0	8.1	47	42
SLF-11-2 ft.	6.2	70	11	7.9	8.9	ND<3.0	5.0	60	33
SLF-11-5 ft.	5.4	80	12	7.3	15	9.0	7.4	33	42
SLF-12-2 ft.	ND<5.0	53	9.7	7.1	7.1	ND<3.0	6.6	39	31
SLF-12-5 ft.	7.3	110	12	8.1	15	11	7.8	38	41
SLF-13-2 ft.	ND<5.0	59	9.9	7.3	9.3	ND<3.0	4.8	64	35
SLF-13-5 ft.	ND<5.0	32	7.8	7.0	6.2	ND<3.0	6.0	31	17
SLF-13-10 ft.	ND<5.0	43	7.8	11	7.2	ND<3.0	8.1	36	16
SLF-13-15 ft.	ND<5.0	69	17	11	17	ND<3.0	12	91	46

Sample Number/Depth	Arsenic (mg/kg)	Barium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SLF-14-2 ft.	ND<5.0	75	8.7	6.3	9.0	ND<3.0	5.8	27	30
SLF-14-5 ft.	ND<5.0	53	7.4	6.8	7.7	ND<3.0	6.0	27	26
SLF-14-10 ft.	ND<5.0	57	7.5	6.5	6.0	ND<3.0	5.7	33	17
SLF-14-15 ft.	ND<5.0	62	7.8	6.7	6.1	ND<3.0	5.2	36	19
SSL - Residential	0.11[a,c]	15,000[b]	36,000[a]	23[b]	3,100[b]	80[a]	490[a]	390[a]	23,000[b]
SSL - Commercial	0.36[a,c]	220,000[b]	170,000[a]	350[b]	47,000[b]	320[a]	3,100[a]	1,000[a]	350,000[b]
Calif. Background	12[d]	509	122	14.9	28.7	23.9	57	112	149

mg/kg = Milligrams per kilogram or parts per million
ND = Not detected at or above laboratory reporting limit
RL = Laboratory reporting limit
SSL = Soil screening level for residential and commercial properties. Listed value is the lower of either cancer or non-cancer health effect concentration.
Background = Average background concentrations of metals in California soil (Bradford, 1996)
[a] = DTSC HERO HHRA Screening Level for residential soil (DTSC June 2018). SSL for Cr as CrIII.
[b] = USA EPA Region 9 Regional Screening Level for residential soil (EPA June 2018)
[c] = As noted in DTSC HERO HHRA Note 6, the SSL for arsenic assumes 100% of the metal is bioavailable leading to an over estimation of risk. The DTSC has determined arsenic in southern California soil to be 12 mg/kg. This background level is used as a baseline for determining elevated site-specific sources.
[d] = Determination of a Southern California Regional Background Arsenic Concentration in Soil (DTSC, 2008 and Undated Publication)

Table 3
Summary of Volatile Organic Compound Analytical Data for Soil Vapor Samples
Chemical Analysis by EPA Method TO-15
Shopoff Land Fund V, Moss Street Assemblage, Chula Vista, California

Sample Number/Depth	Collected (mm/dd/yy)	Acetone (µg/m³)	Benzene (µg/m³)	MEK (µg/m³)	CDS (µg/m³)	Chloroethane (µg/m³)	Chloroform (µg/m³)	Chloromethane (µg/m³)	E.Benzene (µg/m³)	4-Ethyltoluene (µg/m³)	MIBK (µg/m³)	PCE (µg/m³)	TCE (µg/m³)	VC (µg/m³)	1,1-DCA (µg/m³)	1,1,1-TCA (µg/m³)	Styrene (µg/m³)	Toluene (µg/m³)	1,2-DCP (µg/m³)	Freon 12 (µg/m³)	1,2,4-TMB (µg/m³)	1,3,5-TMB (µg/m³)	o-Xylene (µg/m³)	p/m-Xylene (µg/m³)	IPA (µg/m³)
SLF-1-5 ft.	08/02/18	320	37	54	87	ND	130	ND	46	6.6	57	70	55	ND	ND	ND	ND	290	ND	4.9	25	7.6	51	130	ND
SLF-2-5 ft.	08/02/18	230	72	36	8.0	ND	6.4	2.2	62	15	ND	4.8	ND	ND	ND	ND	ND	290	ND	4.0	60	17	76	200	ND
SLF-2-15 ft.	08/02/18	62	6.7	25	ND	ND	41	ND	3.5	ND	11	57	37	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	ND	ND
SLF-3-5 ft.	08/02/18	60	5.6	23	ND	ND	ND	ND	4.0	ND	9.8	27	10	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	ND
SLF-4-5 ft.	08/03/18	29	17	6.6	ND	ND	3.7	ND	28	6.5	ND	16	4.8	ND	ND	ND	ND	92	ND	3.1	28	9.9	33	93	ND
SLF-5-5 ft.	08/03/18	83	20	22	ND	ND	2.9	ND	81	7.5	6.4	370	ND	ND	ND	ND	ND	130	ND	ND	32	9.0	130	340	ND
SLF-5-15 ft.	08/03/18	100	5.9	35	7.3	ND	ND	ND	120	ND	8.2	**660**	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	230	560	ND
SLF-6-5 ft.	08/03/18	30	13	10	ND	ND	8.6	24	36	13	ND	**890**	11	ND	ND	3.0	ND	110	ND	ND	58	20	45	130	ND
SLF-7-5 ft.	08/03/18	150	19	35	ND	ND	ND	ND	15	ND	ND	31	ND	ND	ND	ND	ND	54	ND	ND	14	5.1	14	38	ND
SLF-7-15 ft.	08/03/18	190	18	46	ND	ND	ND	ND	23	6.5	ND	34	ND	ND	ND	ND	ND	55	ND	ND	27	9.8	23	65	ND
SLF-8-5 ft.	08/03/18	95	57	18	11	3.7	ND	3.4	62	16	ND	4.7	ND	ND	ND	ND	ND	180	ND	ND	68	24	88	220	ND
SLF-9-5 ft.	08/02/18	130	43	25	17	ND	ND	ND	74	24	ND	ND	ND	ND	ND	ND	36	310	ND	ND	91	25	94	270	ND
SLF-9-5 ft. DUP	08/02/18	120	44	24	15	ND	ND	ND	72	20	ND	27	ND	ND	ND	ND	ND	300	ND	ND	55	20	82	240	ND
SLF-9-15 ft.	08/02/18	66	8.2	25	ND	ND	ND	ND	11	ND	6.8	9.1	ND	ND	ND	ND	ND	51	ND	ND	ND	ND	10	31	ND
SLF-10-5 ft.	08/03/18	300	89	62	110	ND	ND	ND	ND	ND	ND	13	10	ND	ND	ND	ND	290	5.9	ND	ND	ND	12	63	ND
SLF-11-5 ft.	08/03/18	180	63	59	42	5.5	ND	9.8	85	14	8.3	32	3.6	2.0	ND	ND	ND	250	ND	3.3	56	24	ND	ND	ND
SLF-12-5 ft.	08/03/18	60	8.7	25	ND	ND	2.7	ND	17	ND	6.2	18	2.9	ND	ND	ND	ND	49	ND	ND	21	6.2	22	59	ND
SLF-13-5 ft.	08/03/18	90	18	19	9.1	ND	ND	ND	31	8.3	ND	8.4	ND	ND	ND	ND	ND	120	ND	ND	ND	35	12	110	ND
SLF-13-15 ft.	08/03/18	88	23	20	20	ND	ND	7.7	13	ND	ND	57	ND	ND	ND	ND	ND	58	ND	ND	16	ND	16	43	ND
SLF-13-15 ft. DUP	08/03/18	49	13	18	12	ND	ND	3.7	6.5	ND	ND	ND	ND	ND	ND	ND	ND	33	ND	ND	ND	ND	ND	ND	ND
SLF-14-5 ft.	08/02/18	42	8.7	12	ND	ND	ND	ND	13	ND	ND	7.4	ND	ND	ND	ND	ND	49	ND	ND	11	ND	19	51	ND
SLF-14-15 ft.	08/02/18	74	7.6	24	ND	ND	ND	ND	7.7	ND	ND	5.4	ND	ND	ND	ND	ND	25	ND	ND	ND	ND	11	29	ND
GMW-1-SV	09/04/18	13	3.7	15	21	ND	ND	5.6	2.5	ND	350	ND	ND	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	ND	ND
GMW-2-SV	09/04/18	44	5.2	26	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	5.0	ND	ND	15	ND	ND	ND	ND	ND	ND	ND
GMW-3-SV	09/04/18	29	4.7	9.4	6.5	ND	ND	2.6	3.1	ND	300	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Reporting Limit Range		4.8-760	1.6-2.6	4.4-7.1	6.2-10	1.3-2.1	2.4-3.9	2.1-3.3	2.2-3.5	4.9-7.9	6.1-9.8	3.4-8.3	2.7-4.3	1.3-2.0	2.0-4.0	2.7-4.4	6.4-10	1.9-3.0	2.3-3.7	2.5-4.0	7.4-12	4.9-7.9	8.7-14	17-28	12-20
SVSL - Future Residential		3.2E+07	97	5.2E+06	730,000	NE	120	94,000	1,100	NE	3.1E+06	**460**	480	9.5	1,800	1.0E+06	940,000	310,000	760	100,000	63,000	63,000	100,000	100,000	NA
SVSL - Future Commercial		2.8E+08	840	4.4E+07	6.2E+06	NE	1,060	780,000	9,800	NE	2.6E+07	4,000	6,000	320	15,400	8.8E+06	7.8E+06	2.6E+06	6,600	880,000	520,000	520,000	880,000	880,000	NA
Health Risk		NC	C	NC	NC	NE	C	NC	C	NE	NC	C	C	C	C	NC	NC	NC	C	NC	NC	NC	NC	NC	NA

E. Benzene = ethylbenzene
MIBK = methyl isobutyl ketone or 4-methyl-2-pentanone
PCE = tetrachloroethene
TCE = trichloroethene
VC = vinyl chloride
1,2-DCP =1,2-dichloropropane
1,2,4-TMB = 1,2,4-trimethylbenzene
1,3,5-TMB - 1,3,5-trimethylbenzene
CDS = carbon disulfide

MEK = methyl ethyl ketone (2-butanone)
IPA = isopropyl alcohol (leak tracer compound)
DUP = Duplicate sample
µg/m^3 = micrograms per cubic meter
C = cancer end-point human health risk
NC = non-cancer end-point human health risk
ND = not detected above laboratory reporting limit (RL)
NE = not established
NA = not applicable

SVSL = soil vapor screening level for future residential and commercial buildings. Calculated using DTSC HERO Note 3 (June 2018) and US EPA Region 9 RSLs (May 2018) and DTSC VI Guidance (October 2011) attenuation factors.
VOC concentrations in Red exceed future residential building soil vapor screening levels. No VOC concentrations exceed future commercial building soil vapor screening levels.

Table 4
Summary of Groundwater Monitororing Well Construction and Elevation Data
Shopoff Land Fund V, Moss Street Assemblage, Chula Vista, California

Well Number	Well Depth (ft. BGS)	Screen Interval (ft. BGS)	GPS Location Coordinates	TOC Elevation (ft. AMSL)	Date (mm/dd/yy)	GW Depth (ft. BTOC)	GW Elevation (ft. AMSL)
GMW-1	37	22 to 37	N32.61422 W117.08763	34.60	09/04/18	30.19	4.41
					09/11/18	30.24	4.36
GMW-2	36	21 to 36	N32.61340 W117.08868	32.00	09/04/18	27.60	4.40
					09/11/18	27.65	4.35
GMW-3	40	25 to 40	N32.61350 W117.08722	34.22	09/04/18	29.70	4.52
					09/11/18	29.74	4.48
GMW-4	38	23 to 38	N32.61271 W117.08818	31.08	09/04/18	26.44	4.64
					09/11/18	26.49	4.59
GMW-5	40	25 to 40	N32.61274 W117.08699	35.47	09/04/18	30.78	4.69
					09/11/18	30.83	4.64

ft. BGS = feet below ground surface
TOC = top of casing, notch on north side
AMSL = above mean sea level (approximate)
ft. BTOC = feet below top of casing
GW = groundwater
TOC elevation for GMW-2 assumed as 32.00 ft. AMSL based on Alta/NSPS Land Survey Map dated 08/07/18

Table 5
Summary of Volatile Organic Compound Analytical Data for Groundwater
Shopoff Land Fund V, Moss Street Assemblage, Chula Vista, California

Sample Number	Date Sampled (mm/dd/yy)	EPA Analytical Method	Chloromethane (µg/L)	Other VOCs (µg/L)	GRO (µg/L)
GMW-1	09/04/18	8260B	9.7	ND	ND
GMW-2	09/04/18	8260B	9.7	ND	ND
GMW-2 DUP	09/04/18	8260B	7.2	ND	ND
GMW-3	09/04/18	8260B	11	ND	ND
GMW-4	09/04/18	8260B	12	ND	ND
GMW-5	09/04/18	8260B	9.6	ND	ND
Laboratory Reporting Limit			1.0	0.5-5.0	50
Calif. MCL			NE	NA	NA

VOCs = Volatile organic compounds by EPA Method 8260B
GRO = Gasoline-range organics by EPA Method 8260B
DUP = Duplicate sample
µg/L = Micrograms per liter
ND = Not detected at or above laboratory reporting limit
Calif. MCL = California Maximum Contaminant Level for Drinking Water
NE = Not established
NA = Not applicable. Compound not detected.

Figures

Figure 1
Aerial Image Site Location Map
Moss Street Assemblage
676, 676B and 680 Moss Street
Chula Vista, California

Map Key

- 5 ft. Soil and Soil Vapor Sampling Location
- 15 ft. Soil and Soil Vapor Sampling Location
- 40 ft. Groundwater Monitoring Well Location
  25 ft. Soil Vapor Probes Set in GMW-1, 2 and 3

Approximate Scale

0 80 160 ft.

Aerial Image Source: Google Earth Pro, 2018

N

Figure 2

Soil, Soil Vapor and Groundwater Sampling Locations
SLF V 676-680 Moss Street
Chula Vista, California

Drawn By: MM	Date: 8/31/18	EMS Proj. 571

Environmental Management Strategies, Inc.

Map Key

- 5 ft. Soil Boring
- 15 ft. Soil Boring
- 40 ft. Soil Boring and Groundwater Monitioring Well

TPH-D = TPH as Diesel TPH-O = TPH as Motor Oil
ND = Not Detected
Depth in feet below ground surface.
Concentrations in milligrams per kilogram.

Approximate Scale

0 80 160 ft.

Aerial Image Source: Google Earth Pro, 2018

N

Figure 3

Total Petreolum Hydrocarbons as Diesel and Motor Oil Detected in Soil
SLF V 676-680 Moss Street
Chula Vista, California

Drawn By: MM	Date: 9/11/18	EMS Proj. 571

Environmental Management Strategies, Inc.

Map Key

- 5 ft. Soil Vapor Sampling Location
- 5 ft. and 15 ft. Soil Vapor Sampling Location
- 25 ft. Soil Vapor Sampling Location and Groundwater Monitoring Well

PCE = Tetrachloroethene Benz. = Benzene
Concentrations in micrograms per cubic meter.
Depth in feet below ground surface.
Concentrations in red exceed future residential soil vapor screening level (DTSC 2011, 2018).

Approximate Scale

0 80 160 ft.

Aerial Image Source: Google Earth Pro, 2018

N

Figure 4

PCE and Benzene Detected in Soil Vapor
SLF V 676-680 Moss Street
Chula Vista, California

Drawn By: MM	Date: 9/12/18	EMS Proj. 571

Environmental Management Strategies, Inc.

Map Key

- 5 ft. soil and soil vapor sampling location
- 15 ft. soil and soil vapor sampling location
- 40 ft. groundwater monitoring well location showing concentrations of VOCs detected in 9/4/18 groundwater samples. Concentrations in ug/L. ND = Not Detected

Approximate Scale

0 80 160 ft.

Aerial Image Source: Google Earth Pro, 2018

N

Figure 5

VOCs Detected in Groundwater
SLF V 676-680 Moss Street
Chula Vista, California

Drawn By: MM	Date: 9/11/18	EMS Proj. 571

Environmental Management Strategies, Inc.

Map Key

Groundwater Monitoring Well Location Showing Depth to Groundwater in Ft. BTOC and Groundwater Elevation in Ft. AMSL on September 11, 2018

Approximate Scale

0 80 160 ft.

Aerial Image Source: Google Earth Pro, 2018

N

Figure 6

Estimated Groundwater Equipotential Contours and Apparent Flow Direction on September 11, 2018
SLF V 676-680 Moss Street
Chula Vista, California

Drawn By: MM	Date: 9/11/18	EMS Proj. 571

Environmental Management Strategies, Inc.

Appendix A

Groundwater Monitoring Well Installation Permit

PERMIT #: LMWP-003600
A.P.N. #: 618-010-26, 31
EST #: None

COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION
MONITORING WELL PROGRAM

MONITORING WELL CONSTRUCTION PERMIT

SITE NAME: PRESSLEY FAMILY TRUST PROPERTY

SITE ADDRESS: 676 MOSS STREET, CHULA VISTA 91911

PERMIT FOR: CONSTRUCTION OF MONITORING WELLS (5)

PERMIT APPROVAL DATE: 8/23/2018

PERMIT EXPIRES ON: 12/21/2018

RESPONSIBLE PARTY: SHOPOFF LAND FUND V, LP

PERMIT CONDITIONS:

1. Wells must have a **minimum 3-foot concrete surface seal**. The surface seal shall consist of concrete able to withstand the maximum anticipated load without cracking or deteriorating. The concrete should meet Class A specifications of a minimum 4000-pound compressive strength. **Bentonite slurries are not an acceptable annular sealing material in the unsaturated zone.**

2. All water and soil resulting from the activities covered by this permit must be managed, stored and disposed of as specified in the SAM Manual in Section 5, II, D-4. In addition, drill cuttings must be properly handled and disposed in compliance with the Stormwater Best Management Practices of the local jurisdiction.

3. Within 60 days of completing work, submit a well construction report, including all well and/or boring logs and laboratory data to the Well Permit Desk. This report must include all items required by the SAM Manual, Section 5, Pages 6 & 7.

4. This office must be given 24-hour notice of any drilling activity on this site and advanced notification of drilling cancellation. Please contact the Well Permit Desk at (858) 505-6688.

NOTE: **This permit does not constitute approval of a work plan as defined in Section 2722 of Article 11 of C.C.R., Title 23. Work plans are required for all unauthorized release investigations in San Diego County.**

APPROVED BY: _____ DATE: 8/23/2018
JON SENAHA

PERMIT APPLICATION
GROUNDWATER
AND VADOSE MONITORING WELLS
AND EXPLORATORY OR TEST BORINGS

OFFICE USE ONLY
PERMIT LMWP# 003600
SAM CASE Y/N # None
DATE RECEIVED: 8/22/2018
FEE PAID: $1247.00
CHECK # 1743

A. RESPONSIBLE PARTY Shopoff Land Fund V, LP E-mail mbrady@shopoff.com
(The person, persons, or company responsible for the construction, maintenance, and destruction of the proposed borings and/or wells.)
Mailing Address 2 Park Plaza, Suite 700 City Irvine State CA Zip 92614
Contact Person Matt Brady Phone 949-417-9941 Ext.

B. SITE ASSESSMENT PROJECT NUMBER – IF APPLICABLE #

C. CONSULTING FIRM Environmental Management Strategies,Inc.
Mailing Address 8 Goodyear, Suite 125 City Irvine State CA Zip 92618
Registered Professional Michael Marello Phone 949-679-9500 Registration # 5339 (RCE, CEG, PG)
E-mail mike.marello@goemsinc.com Circle if applicable
Contact Person Michael Marello Phone 949-679-9500 Ext. 104 Email mike.marello@goemsinc.com

D. DRILLING COMPANY Baja Exploration C57# 804318
Contact Name Dave Hogan E-mail dhogan@bajaexploration.com
Mailing Address 1915 Commercial Street City Escondido State CA Zip 92029
Phone (760) 743-7678 Ext.

E. CONSTRUCTION INFORMATION

TYPE OF WELLS/ BORINGS TO BE CONSTRUCTED

	#
☐ Groundwater	5
☐ Vadose	
☐ Boring	
☐ Soil Vapor	
☐ Other	

NUMBER OF WELLS TO BE DESTROYED

☐ Destruction

MATERIALS TO BE USED

CASING
Not Applicable
Type PVC
Gauge Sch.40
Diameter 2 inch
Well Screen Size 0.020 in
Filter Pack No. 2/12 Silica

SEAL/BORING BACKFILL
☐ Neat Cement
☒ Cement & Bentonite
☐ Sand-Cement
☐ Bentonite
☐ Other
Borehole diameter 8 in.

Drilling Method
☒ Auger
☐ Direct Push
☐ Other
☐ Air Rotary
☐ Sonic
☐ Percussion

PROPOSED CONSTRUCTION
Estimated Groundwater Depth: 30 ft.
Estimated Depth of Boring: 40 ft.
Concrete Seal: 0 to 3
Annular Seal: 3 to 24
Filter Pack: 24 to 40
Perforation: 25 to 40

NOTE: Attach a well construction diagram

I agree to comply with the requirements of the current Site Assessment and Mitigation Manual, and with all ordinances and laws of the County of San Diego and the State of California pertaining to well/boring construction and destruction.

DRILLER'S SIGNATURE [signature] DATE 8/21/2018

Within 60 days of completion, I will furnish the Monitoring Well Permit Desk (858) 505-6688 with a complete well/boring log. I will certify the design and construction or destruction of the well/borings in accordance with the permit application.

PG/RCE/CEG SIGNATURE [signature] DATE 8/21/2018

F. SITE INFORMATION - A Property Owner Consent agreement is required for all applications, except for onsite, open LOP/SAM site assessment cases, Caltrans properties and military properties. Submit a separate sheet for additional parcels.

1. ASSESSOR'S PARCEL NUMBER 618-010-26-02 and 618-101-31-00

Site Name Pressley Family Trust Property

Site Address 676, 676B and 680 Moss Street City Chula Vista Zip 91911

PROPERTY OWNER Pressley Family Trust

Phone (858) 459-6222 Ext. _____ Fax _____

Mailing Address 7617 Pepita Way City La Jolla State CA Zip 92037

NUMBER OF WELLS 5 **TYPE OF WELLS** 2 in. Diam. x 40 ft. Groundwater Monitoring Wells

2. ASSESSOR'S PARCEL NUMBER _____

Site Address _____ City _____ Zip _____

PROPERTY OWNER _____

Phone _____ Ext. _____ Fax _____

Mailing Address _____ City _____ State _____ Zip _____

NUMBER OF WELLS _____ **TYPE OF WELLS** _____

G. QUESTIONNAIRE: Please answer all applicable questions completely *and submit any required supportive documentation*.

1. What is the purpose of the well/boring investigation?

☐ a. Part of an ongoing site assessment case in which a government regulator is the lead agency. If yes, indicate which government regulator is the lead agency and the case number.

_____ DEH _____ RWQCB _____ DTSC

☒ b. Part of a Phase I investigation for property ownership transfer.

☐ c. Geotechnical investigation for proposed construction or land stabilization.

☐ d. Other: _____

2. If wells are to be destroyed, provide a description of method of destruction _____

_____

_____

3. Are you proposing a variation from current SAM Manual Requirements for the construction or destruction of borings, Vadose and/or Groundwater Monitoring Wells? If yes, specify these variations and include a well construction diagram and all required supporting documentation. Refer to the SAM Manual Appendix B for monitoring well guidelines. Yes ☐ No ☒

_____

_____

_____

H. FEES

ACTIVITY	FEE SCHEDULE	AMOUNT	
Permit for Well Installations Only *(Groundwater Monitoring Wells, Vapor Extraction Wells)*	$351.00 for the first monitoring well	**$351.00**	$351
	$224.00 for each additional well installation	4 **x** **$224.00**	$896
Permit for Borings Only *(CPT's, Hydropunch, Geoprobes, Temporary Well Points, etc.)*	$235.00 for the first boring	**$235.00**	_____
	$62.00 for each additional boring	___ **x** **$ 62.00**	_____
Permit for Well Destructions Only	$235.00 for the first destruction	**$235.00**	_____
	$143.00 for each additional destruction	___ **x** **$143.00**	_____
Permit for any Combination of Well Installations, Borings, & Destructions *(Except Enhanced Leak Detection & Soil Vapor Survey)*	First Activity: $351.00 (if monitoring wells will be installed) OR $235.00 (for borings and destructions only)	**$351.00** **OR** **$235.00**	_____ _____
	$224.00 for each additional well	___ **x** **$224.00**	_____
	$62.00 for each additional boring	___ **x** **$ 62.00**	_____
	$143.00 for each additional well destruction	___ **x** **$143.00**	_____
Permit for Soil Vapor Survey *(Vadose Monitoring Wells)*	$388.00 (flat fee per site)	**$388.00**	X
Permit for Enhanced Leak Detection	$368.00 (flat fee per site)	**$368.00**	_____
	TOTAL COST OF PERMIT		**$** 896.00

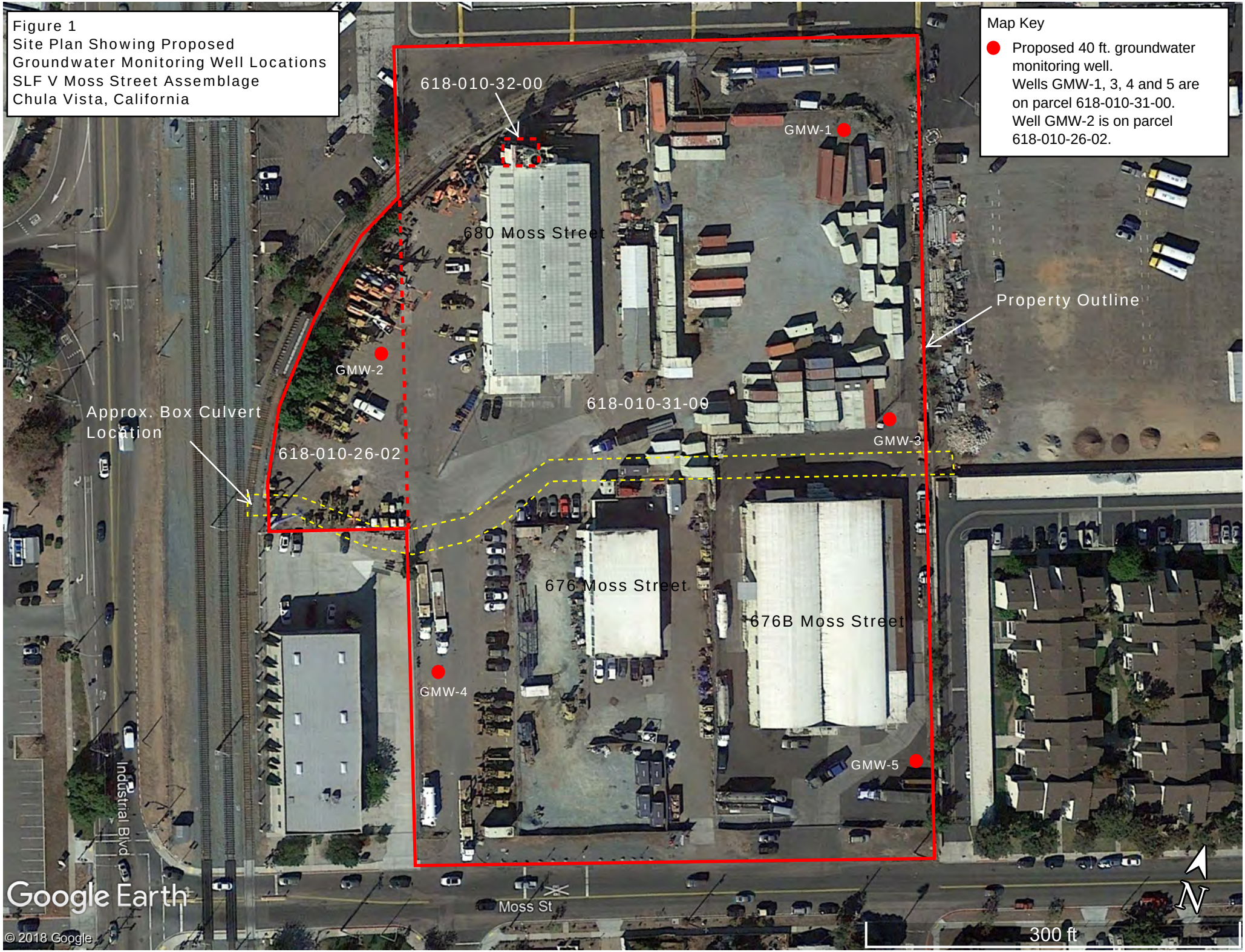
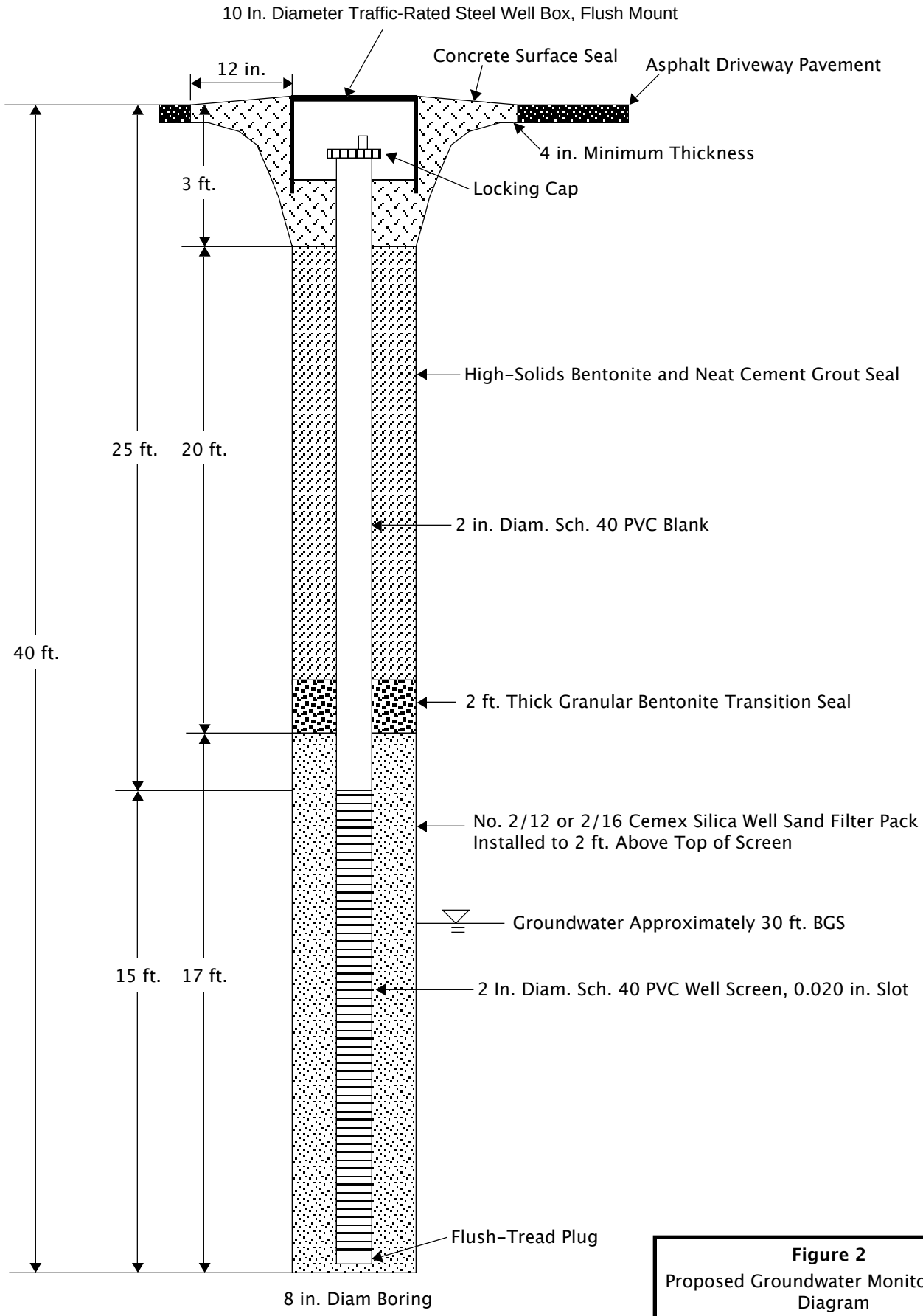


Figure 1
Site Plan Showing Proposed
Groundwater Monitoring Well Locations
SLF V Moss Street Assemblage
Chula Vista, California
Map Key
Proposed 40 ft. groundwater monitoring well.
Wells GMW-1, 3, 4 and 5 are on parcel 618-010-31-00.
Well GMW-2 is on parcel 618-010-26-02.
618-010-32-00
GMW-1
680 Moss Street
Property Outline
GMW-2
618-010-31-00
Approx. Box Culvert Location
GMW-3
618-010-26-02
676 Moss Street
676B Moss Street
GMW-4
GMW-5
Industrial Blvd
Moss St
Google Earth
© 2018 Google
N
300 ft



Scale as Shown

Figure 2
Proposed Groundwater Monitoring Well Diagram
Moss Street Assemblage Site
Chula Vista, California

Environmental Management Strategies, Inc.

County of San Diego

ELISE ROTHCHILD
DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
(858)505-6688
www.sdcdeh.org

AMY HARBERT
ASSISTANT DIRECTOR

PROPERTY OWNER CONSENT

Proposed locations for subsurface work:

Property Address: 676, 676B and 680 Moss Street, Chula Vista, CA 91911

Assessor's Parcel Number (APN): 618-010-26-02, 618-010-32-00 and 618-010-31-00

I, Peter Quinn, owner of the property/properties listed above, give my permission to _____ (consulting company, contractor) to conduct the following work at the locations stated above.

☒ Install 5 monitoring wells ☐ Destroy _____ monitoring wells ☐ Drill _____ soil borings

I understand that Michael Marello (registered professional) of Environmental Management Strategies, Inc. (consulting company) and an authorized signer for _____ (drilling company) have submitted a signed application to the Department of Environmental Health in which they have agreed to complete the above-stated work according the requirements of the current SAM Manual, all ordinances and laws of the County of San Diego and the State of California pertaining to well/boring construction and destruction. I have arranged with the Responsible Party, the person who causes to have monitoring wells/borings installed or existing wells destroyed on this property, to ensure proper closure of the monitoring wells/borings.

Property Owner Signature: _____ Date: 08/21/2008

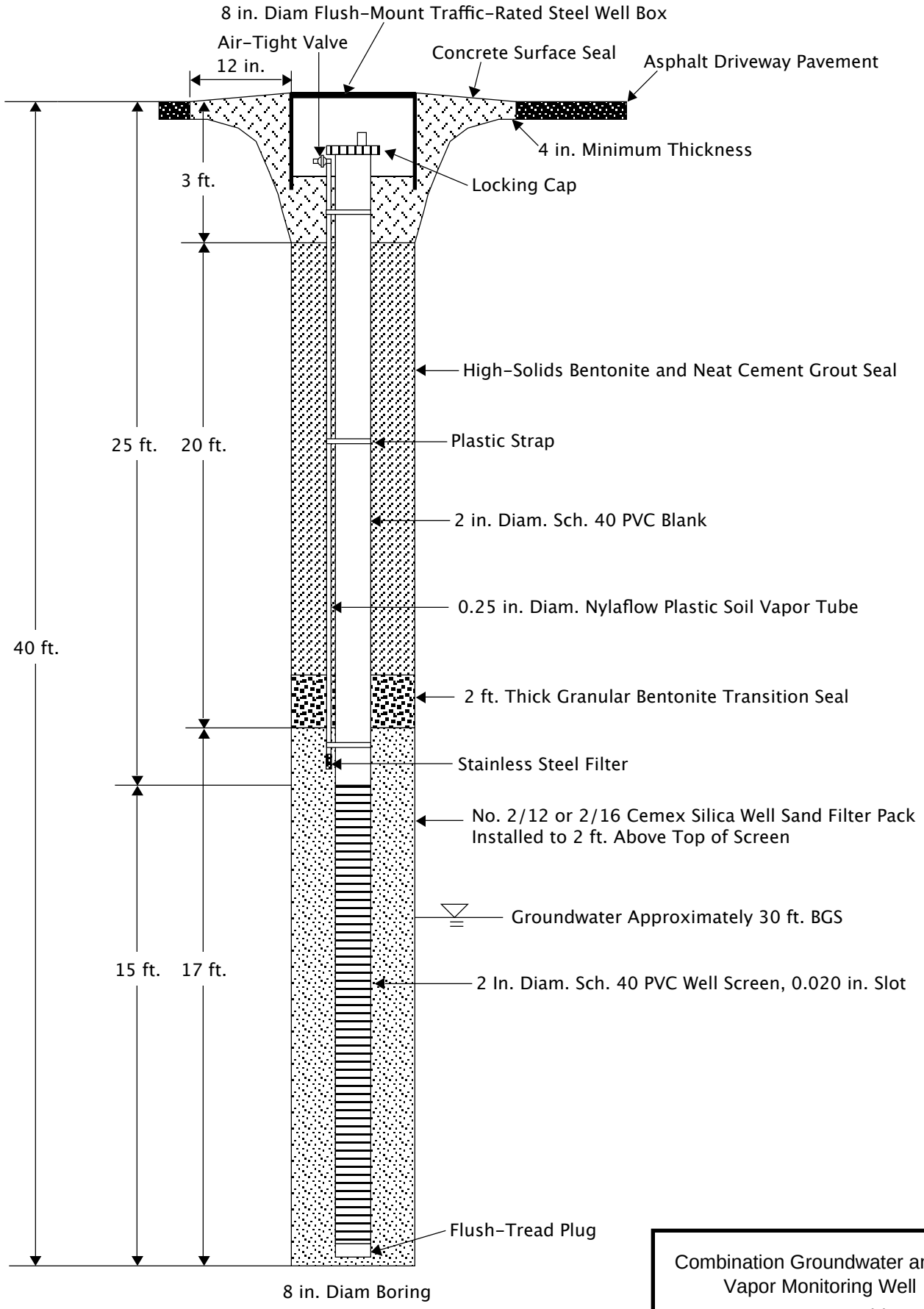
Print Name: Peter Quinn for the Pressley Family Trust Title: _____

Company: _____

Mailing Address: 7617 Papita Way, La Jolla, CA 92037

Appendix B

Soil Boring Logs and Well Construction Diagrams



Combination Groundwater and Soil Vapor Monitoring Well

Moss Street Assemblage Site
Chula Vista, California

Environmental Management Strategies, Inc.

Scale as Shown

LOG OF BORING GMW-1

EMS
ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.
Finacially Based, Environmental Solutions

Date Started	: 08/30/18	Drilling Company	: Baja Exploration
Date Completed	: 08/30/18	Northing Coord.	: NA
Hole Diameter	: 8-inch	Easting Coord.	: NA
Drilling Method	: CME-95	Survey By	: NA
Sampling Method	: 1.5 in. Split Barrel	Logged By	: Michael Marello, P.G.

SLF V Moss Street
676 - 680 Moss Street
Chula Vista, California

Groundwater Monitoring Well Installation

EMS Project No. EMS571

Depth in Feet	Blow Count	USCS	GRAPHIC	DESCRIPTION	Sample Number	PID Reading
0				Asphalt surface ~ 4"		
				Hand Auger to 5 feet No obstacles Soil vapor probe set at 25 feet Start soil sampling at 20 feet		
5						
10						
15						
20	23 27 43			Silt, some clay (ML), brown (10YR, 4/3), moist, no odor	GMW-1-20	0.2
25	18 22 28	ML		Silt, some clay, trace sand (ML), brown (10YR, 4/3), moist, no odor	GMW-1-25	0.2
30	13 18 36			Silt, some clay, trace sand (ML), brown (10YR, 4/3), very moist to wet, no odor	GMW-1-30	0.1
35						
40				End of Boring		

LOG OF BORING GMW-2

EMS
ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.
Finacially Based, Environmental Solutions

Date Started	: 08/29/18	Drilling Company	: Baja Exploration
Date Completed	: 08/29/18	Northing Coord.	: NA
Hole Diameter	: 8-inch	Easting Coord.	: NA
Drilling Method	: CME-95	Survey By	: NA
Sampling Method	: 1.5 in. Split Barrel	Logged By	: Michael Marello, P.G.

SLF V Moss Street
676 - 680 Moss Street
Chula Vista, California

Groundwater Monitoring Well Installation

EMS Project No. EMS571

Depth in Feet	Blow Count	USCS	GRAPHIC	DESCRIPTION	Sample Number	PID Reading
0				Asphalt surface ~ 4"		
				Hand Auger to 5 feet No obstacles Soil vapor probe set at 25 feet Start soil sampling at 20 feet		
5						
10						
15						
20	25 37 45	ML		Silt, some clay (ML), olive brown (2.5YR, 4/4), moist, no odor	GMW-2-20	0.1
25	22 26 35			Silt, some clay, trace sand (ML), dark brown (7.5YR, 3/4), moist, no odor	GMW-2-25	0.1
30	28 32 33	SC		Well graded, sand with clay, some silt (SC), brown (10YR, 4/3), water saturated	GMW-2-30	0.4
35						
40				End of Boring		

09-13-2018 \\Estserver\projects\EMS PROJECTS\EMS571 - Shopoff Chula Vista\Boring Logs\Boring GMW-2.bor

LOG OF BORING GMW-3

EMS
ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.
Finacially Based, Environmental Solutions

Date Started	: 08/30/18	Drilling Company	: Baja Exploration
Date Completed	: 08/30/18	Northing Coord.	: NA
Hole Diameter	: 8-inch	Easting Coord.	: NA
Drilling Method	: CME-95	Survey By	: NA
Sampling Method	: 1.5 in. Split Barrel	Logged By	: Michael Marello, P.G.

SLF V Moss Street
676 - 680 Moss Street
Chula Vista, California

Groundwater Monitoring Well Installation

EMS Project No. EMS571

Depth in Feet	Blow Count	USCS	GRAPHIC	DESCRIPTION	Sample Number	PID Reading
0				Asphalt surface ~ 4"		
				Hand Auger to 5 feet No obstacles Soil vapor probe set at 25 feet Start soil sampling at 20 feet		
5						
10						
15						
20	20 30 45			Silt, some clay (ML), olive brown (2.5YR, 4/3), moist, no odor	GMW-3-20	0.1
25	20 25 30	ML		Silt, some clay (ML), brown (7.5YR, 4/3), moist, no odor	GMW-3-25	0.2
				Silt, trace clay and fine sand (ML), dark grayish brown (10YR, 4/2), moist to very moist, no odor		
30	15 18 25				GMW-3-30	0.4
35						
40				End of Boring		

09-13-2018 \\Estserver\projects\EMS PROJECTS\EMS571 - Shopoff Chula Vista\Boring Logs\Boring GMW-3.bor

LOG OF BORING GMW-4

EMS
ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.
Finacially Based, Environmental Solutions

Date Started	: 08/29/18	Drilling Company	: Baja Exploration
Date Completed	: 08/29/18	Northing Coord.	: NA
Hole Diameter	: 8-inch	Easting Coord.	: NA
Drilling Method	: CME-95	Survey By	: NA
Sampling Method	: 1.5 in. Split Barrel	Logged By	: Michael Marello, P.G.

SLF V Moss Street
676 - 680 Moss Street
Chula Vista, California

Groundwater Monitoring Well Installation

EMS Project No. EMS571

Depth in Feet	Blow Count	USCS	GRAPHIC	DESCRIPTION	Sample Number	PID Reading
0				Asphalt surface ~ 4"		
				Hand Auger to 5 feet No obstacles Soil vapor probe set at 25 feet Start soil sampling at 20 feet		
5						
10						
15						
20	22 30 +50	CL		Clay with silt, trace sand (CL), dark brown (7YR, 3/4), very stiff, low plasticity, moist, no odor	GMW-4-20	0.1
25	45 50/3	SP		Fine to medium sand, trace sitl and clay (SP), brown (7.5YR, 4/3), dense, no odor very moist at 25 feet	GMW-4-25	0.2
30	18 50/5	SP		Fine to medium sand (SP), dark yellowish brown (7.5YR, 4/4), dense, no odor, water saturated at 30 feet	GMW-4-30	0.3
35						
40				End of Boring		

09-13-2018 \\Estserver\projects\EMS PROJECTS\EMS571 - Shopoff Chula Vista\Boring Logs\Boring GMW-4.bor

LOG OF BORING GMW-5

EMS
ENVIRONMENTAL MANAGEMENT STRATEGIES, INC.
Finacially Based, Environmental Solutions

Date Started	: 08/30/18	Drilling Company	: Baja Exploration
Date Completed	: 08/30/18	Northing Coord.	: NA
Hole Diameter	: 8-inch	Easting Coord.	: NA
Drilling Method	: CME-95	Survey By	: NA
Sampling Method	: 1.5 in. Split Barrel	Logged By	: Michael Marello, P.G.

SLF V Moss Street
676 - 680 Moss Street
Chula Vista, California

Groundwater Monitoring Well Installation

EMS Project No. EMS571

Depth in Feet	Blow Count	USCS	GRAPHIC	DESCRIPTION	Sample Number	PID Reading
0				Asphalt surface ~ 4"		
				Hand Auger to 5 feet		
5						
10						
15						
20	20 26 40	ML		Silt, some clay (ML), olive brown (2.5Y, 4/3), moist, no odor	GMW-5-20	
25	15 17 25			Silt, some clay (ML), brown (10YR, 4/3), moist, no odor	GMW-5-25	
		ML/SM				
30	20 22 36			Silt with fine sand, trace clay (ML-SM), very moist to wet no odor	GMW-5-30	
35						
40				End of Boring		

09-13-2018 \\Estserver\projects\EMS PROJECTS\EMS571 - Shopoff Chula Vista\Boring Logs\Boring GMW-5.bor

Appendix C

Laboratory Reports for Soil

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

07 September 2018

Michael Marello
Environmental Management Strategies, Inc.
8 Goodyear, Suite 125
Irvine, CA 92618

RE: Shopoff Land Fund V, Chula Vista, CA

Enclosed are the results of analyses for samples received by the laboratory on 08/31/18 10:18. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi
Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GMW-1-20ft	T182712-01	Soil	08/30/18 10:42	08/31/18 10:18
GMW-1-25ft	T182712-02	Soil	08/30/18 10:49	08/31/18 10:18
GMW-1-30ft	T182712-03	Soil	08/30/18 10:54	08/31/18 10:18
GMW-2-20ft	T182712-04	Soil	08/29/18 12:52	08/31/18 10:18
GMW-2-25ft	T182712-05	Soil	08/29/18 12:59	08/31/18 10:18
GMW-2-30ft	T182712-06	Soil	08/29/18 13:05	08/31/18 10:18
GMW-3-20ft	T182712-07	Soil	08/30/18 07:51	08/31/18 10:18
GMW-3-25ft	T182712-08	Soil	08/30/18 07:57	08/31/18 10:18
GMW-3-30ft	T182712-09	Soil	08/30/18 08:03	08/31/18 10:18
GMW-4-20ft	T182712-10	Soil	08/29/18 08:23	08/31/18 10:18
GMW-4-25ft	T182712-11	Soil	08/29/18 08:30	08/31/18 10:18
GMW-4-30ft	T182712-12	Soil	08/29/18 08:38	08/31/18 10:18
GMW-5-20ft	T182712-13	Soil	08/30/18 15:20	08/31/18 10:18
GMW-5-25ft	T182712-14	Soil	08/30/18 15:30	08/31/18 10:18
GMW-5-30ft	T182712-15	Soil	08/30/18 15:37	08/31/18 10:18
Drum Composite 1	T182712-16	Soil	08/29/18 08:30	08/31/18 10:18
Drum Composite 2	T182712-17	Soil	08/30/18 08:00	08/31/18 10:18
Drum Composite 3	T182712-18	Soil	08/30/18 11:00	08/31/18 10:18

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Mike Jaroudi, Project Manager

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Providing Quality Analytical Services Nationwide

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

DETECTIONS SUMMARY

Sample ID: GMW-1-20ft **Laboratory ID:** T182712-01

No Results Detected

Sample ID: GMW-1-25ft **Laboratory ID:** T182712-02

No Results Detected

Sample ID: GMW-1-30ft **Laboratory ID:** T182712-03

No Results Detected

Sample ID: GMW-2-20ft **Laboratory ID:** T182712-04

No Results Detected

Sample ID: GMW-2-25ft **Laboratory ID:** T182712-05

No Results Detected

Sample ID: GMW-2-30ft **Laboratory ID:** T182712-06

No Results Detected

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

Sample ID: GMW-3-20ft **Laboratory ID:** T182712-07

No Results Detected

Sample ID: GMW-3-25ft **Laboratory ID:** T182712-08

No Results Detected

Sample ID: GMW-3-30ft **Laboratory ID:** T182712-09

No Results Detected

Sample ID: GMW-4-20ft **Laboratory ID:** T182712-10

No Results Detected

Sample ID: GMW-4-25ft **Laboratory ID:** T182712-11

No Results Detected

Sample ID: GMW-4-30ft **Laboratory ID:** T182712-12

No Results Detected

Sample ID: GMW-5-20ft **Laboratory ID:** T182712-13

No Results Detected

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

Sample ID: GMW-5-25ft **Laboratory ID:** T182712-14

No Results Detected

Sample ID: GMW-5-30ft **Laboratory ID:** T182712-15

No Results Detected

Sample ID: Drum Composite 1 **Laboratory ID:** T182712-16

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**60**	1.0	mg/kg	EPA 6010b	
Chromium	**18**	2.0	mg/kg	EPA 6010b	
Cobalt	**2.1**	2.0	mg/kg	EPA 6010b	
Copper	**5.4**	1.0	mg/kg	EPA 6010b	
Vanadium	**38**	5.0	mg/kg	EPA 6010b	
Zinc	**16**	1.0	mg/kg	EPA 6010b	

Sample ID: Drum Composite 2 **Laboratory ID:** T182712-17

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**120**	1.0	mg/kg	EPA 6010b	
Chromium	**14**	2.0	mg/kg	EPA 6010b	
Cobalt	**4.7**	2.0	mg/kg	EPA 6010b	
Copper	**19**	1.0	mg/kg	EPA 6010b	
Nickel	**3.2**	2.0	mg/kg	EPA 6010b	
Vanadium	**48**	5.0	mg/kg	EPA 6010b	
Zinc	**27**	1.0	mg/kg	EPA 6010b	

Sample ID: Drum Composite 3 **Laboratory ID:** T182712-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium	**82**	1.0	mg/kg	EPA 6010b	
Chromium	**13**	2.0	mg/kg	EPA 6010b	

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project:	Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number:	EMS 571	**Reported:**
Irvine CA, 92618	Project Manager:	Michael Marello	09/07/18 10:28

Sample ID: Drum Composite 3 **Laboratory ID:** T182712-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Cobalt	**4.6**	2.0	mg/kg	EPA 6010b	
Copper	**9.2**	1.0	mg/kg	EPA 6010b	
Nickel	**2.8**	2.0	mg/kg	EPA 6010b	
Vanadium	**49**	5.0	mg/kg	EPA 6010b	
Zinc	**28**	1.0	mg/kg	EPA 6010b	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-1-20ft

T182712-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/06/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*107 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.3	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.3	"	"	"	"	"	"	
Bromodichloromethane	ND	4.3	"	"	"	"	"	"	
Bromoform	ND	4.3	"	"	"	"	"	"	
Bromomethane	ND	4.3	"	"	"	"	"	"	
n-Butylbenzene	ND	4.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.3	"	"	"	"	"	"	
Chlorobenzene	ND	4.3	"	"	"	"	"	"	
Chloroethane	ND	4.3	"	"	"	"	"	"	
Chloroform	ND	4.3	"	"	"	"	"	"	
Chloromethane	ND	4.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.3	"	"	"	"	"	"	
Dibromochloromethane	ND	4.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.6	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.3	"	"	"	"	"	"	
Dibromomethane	ND	4.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.3	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-1-20ft

T182712-01 (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	4.3	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
cis-1,2-Dichloroethene	ND	4.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.3	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.3	"	"	"	"	"	"	
Isopropylbenzene	ND	4.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.3	"	"	"	"	"	"	
Methylene chloride	ND	4.3	"	"	"	"	"	"	
Naphthalene	ND	4.3	"	"	"	"	"	"	
n-Propylbenzene	ND	4.3	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	
Tetrachloroethene	ND	4.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.3	"	"	"	"	"	"	
Trichloroethene	ND	4.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	
Vinyl chloride	ND	4.3	"	"	"	"	"	"	
Benzene	ND	4.3	"	"	"	"	"	"	
Toluene	ND	4.3	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-1-20ft

T182712-01 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Ethylbenzene	ND	4.3	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
m,p-Xylene	ND	8.6	"	"	"	"	"	"	
o-Xylene	ND	4.3	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	17	"	"	"	"	"	"	
Tert-butyl alcohol	ND	43	"	"	"	"	"	"	
Di-isopropyl ether	ND	17	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*76.1-127*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*		*85.9-114*	"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*		*77.8-142*	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-1-25ft

T182712-02 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/06/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*100 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.3	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.3	"	"	"	"	"	"	
Bromodichloromethane	ND	4.3	"	"	"	"	"	"	
Bromoform	ND	4.3	"	"	"	"	"	"	
Bromomethane	ND	4.3	"	"	"	"	"	"	
n-Butylbenzene	ND	4.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.3	"	"	"	"	"	"	
Chlorobenzene	ND	4.3	"	"	"	"	"	"	
Chloroethane	ND	4.3	"	"	"	"	"	"	
Chloroform	ND	4.3	"	"	"	"	"	"	
Chloromethane	ND	4.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.3	"	"	"	"	"	"	
Dibromochloromethane	ND	4.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.7	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.3	"	"	"	"	"	"	
Dibromomethane	ND	4.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.3	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-1-25ft

T182712-02 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.3	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.3	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.3	"	"	"	"	"	"	
Isopropylbenzene	ND	4.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.3	"	"	"	"	"	"	
Methylene chloride	ND	4.3	"	"	"	"	"	"	
Naphthalene	ND	4.3	"	"	"	"	"	"	
n-Propylbenzene	ND	4.3	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	
Tetrachloroethene	ND	4.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.3	"	"	"	"	"	"	
Trichloroethene	ND	4.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	
Vinyl chloride	ND	4.3	"	"	"	"	"	"	
Benzene	ND	4.3	"	"	"	"	"	"	
Toluene	ND	4.3	"	"	"	"	"	"	
Ethylbenzene	ND	4.3	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-1-25ft

T182712-02 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	8.7	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	4.3	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	17	"	"	"	"	"	"	
Tert-butyl alcohol	ND	43	"	"	"	"	"	"	
Di-isopropyl ether	ND	17	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Surrogate: Toluene-d8		*113 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.8 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*	*77.8-142*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-1-30ft

T182712-03 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/06/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*107 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	3.9	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	3.9	"	"	"	"	"	"	
Bromodichloromethane	ND	3.9	"	"	"	"	"	"	
Bromoform	ND	3.9	"	"	"	"	"	"	
Bromomethane	ND	3.9	"	"	"	"	"	"	
n-Butylbenzene	ND	3.9	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.9	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.9	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.9	"	"	"	"	"	"	
Chlorobenzene	ND	3.9	"	"	"	"	"	"	
Chloroethane	ND	3.9	"	"	"	"	"	"	
Chloroform	ND	3.9	"	"	"	"	"	"	
Chloromethane	ND	3.9	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.9	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.9	"	"	"	"	"	"	
Dibromochloromethane	ND	3.9	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.8	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.9	"	"	"	"	"	"	
Dibromomethane	ND	3.9	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.9	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.9	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.9	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.9	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-1-30ft

T182712-03 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	3.9	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	3.9	"	"	"	"	"	"	
1,2-Dichloropropane	ND	3.9	"	"	"	"	"	"	
1,3-Dichloropropane	ND	3.9	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.9	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.9	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.9	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.9	"	"	"	"	"	"	
Isopropylbenzene	ND	3.9	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.9	"	"	"	"	"	"	
Methylene chloride	ND	3.9	"	"	"	"	"	"	
Naphthalene	ND	3.9	"	"	"	"	"	"	
n-Propylbenzene	ND	3.9	"	"	"	"	"	"	
Styrene	ND	3.9	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.9	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.9	"	"	"	"	"	"	
Tetrachloroethene	ND	3.9	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.9	"	"	"	"	"	"	
Trichloroethene	ND	3.9	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.9	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.9	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.9	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.9	"	"	"	"	"	"	
Vinyl chloride	ND	3.9	"	"	"	"	"	"	
Benzene	ND	3.9	"	"	"	"	"	"	
Toluene	ND	3.9	"	"	"	"	"	"	
Ethylbenzene	ND	3.9	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-1-30ft

T182712-03 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	7.8	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	3.9	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	16	"	"	"	"	"	"	
Tert-butyl alcohol	ND	39	"	"	"	"	"	"	
Di-isopropyl ether	ND	16	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Surrogate: Toluene-d8		*107 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*	*77.8-142*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-2-20ft

T182712-04 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/06/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*101 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.3	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	M-02
Bromochloromethane	ND	4.3	"	"	"	"	"	"	M-02
Bromodichloromethane	ND	4.3	"	"	"	"	"	"	M-02
Bromoform	ND	4.3	"	"	"	"	"	"	M-02
Bromomethane	ND	4.3	"	"	"	"	"	"	M-02
n-Butylbenzene	ND	4.3	"	"	"	"	"	"	M-02
sec-Butylbenzene	ND	4.3	"	"	"	"	"	"	M-02
tert-Butylbenzene	ND	4.3	"	"	"	"	"	"	M-02
Carbon tetrachloride	ND	4.3	"	"	"	"	"	"	M-02
Chlorobenzene	ND	4.3	"	"	"	"	"	"	M-02
Chloroethane	ND	4.3	"	"	"	"	"	"	M-02
Chloroform	ND	4.3	"	"	"	"	"	"	M-02
Chloromethane	ND	4.3	"	"	"	"	"	"	M-02
2-Chlorotoluene	ND	4.3	"	"	"	"	"	"	M-02
4-Chlorotoluene	ND	4.3	"	"	"	"	"	"	M-02
Dibromochloromethane	ND	4.3	"	"	"	"	"	"	M-02
1,2-Dibromo-3-chloropropane	ND	8.7	"	"	"	"	"	"	M-02
1,2-Dibromoethane (EDB)	ND	4.3	"	"	"	"	"	"	M-02
Dibromomethane	ND	4.3	"	"	"	"	"	"	M-02
1,2-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	M-02
1,3-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	M-02
1,4-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	M-02
Dichlorodifluoromethane	ND	4.3	"	"	"	"	"	"	M-02
1,1-Dichloroethane	ND	4.3	"	"	"	"	"	"	M-02
1,2-Dichloroethane	ND	4.3	"	"	"	"	"	"	M-02
1,1-Dichloroethene	ND	4.3	"	"	"	"	"	"	M-02

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Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-2-20ft

T182712-04 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.3	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	M-02
trans-1,2-Dichloroethene	ND	4.3	"	"	"	"	"	"	M-02
1,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	M-02
1,3-Dichloropropane	ND	4.3	"	"	"	"	"	"	M-02
2,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	M-02
1,1-Dichloropropene	ND	4.3	"	"	"	"	"	"	M-02
cis-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	M-02
trans-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	M-02
Hexachlorobutadiene	ND	4.3	"	"	"	"	"	"	M-02
Isopropylbenzene	ND	4.3	"	"	"	"	"	"	M-02
p-Isopropyltoluene	ND	4.3	"	"	"	"	"	"	M-02
Methylene chloride	ND	4.3	"	"	"	"	"	"	M-02
Naphthalene	ND	4.3	"	"	"	"	"	"	M-02
n-Propylbenzene	ND	4.3	"	"	"	"	"	"	M-02
Styrene	ND	4.3	"	"	"	"	"	"	M-02
1,1,2,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	M-02
1,1,1,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	M-02
Tetrachloroethene	ND	4.3	"	"	"	"	"	"	M-02
1,2,3-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	M-02
1,2,4-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	M-02
1,1,2-Trichloroethane	ND	4.3	"	"	"	"	"	"	M-02
1,1,1-Trichloroethane	ND	4.3	"	"	"	"	"	"	M-02
Trichloroethene	ND	4.3	"	"	"	"	"	"	M-02
Trichlorofluoromethane	ND	4.3	"	"	"	"	"	"	M-02
1,2,3-Trichloropropane	ND	4.3	"	"	"	"	"	"	M-02
1,3,5-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	M-02
1,2,4-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	M-02
Vinyl chloride	ND	4.3	"	"	"	"	"	"	M-02
Benzene	ND	4.3	"	"	"	"	"	"	M-02
Toluene	ND	4.3	"	"	"	"	"	"	M-02
Ethylbenzene	ND	4.3	"	"	"	"	"	"	M-02

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-2-20ft

T182712-04 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	8.7	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	M-02
o-Xylene	ND	4.3	"	"	"	"	"	"	M-02
Tert-amyl methyl ether	ND	17	"	"	"	"	"	"	M-02
Tert-butyl alcohol	ND	43	"	"	"	"	"	"	M-02
Di-isopropyl ether	ND	17	"	"	"	"	"	"	M-02
Ethyl tert-butyl ether	ND	17	"	"	"	"	"	"	M-02
Methyl tert-butyl ether	ND	17	"	"	"	"	"	"	M-02
Surrogate: Toluene-d8		*112 %*	*76.1-127*		*"*	*"*	*"*	*"*	*M-02*
Surrogate: 4-Bromofluorobenzene		*98.7 %*	*85.9-114*		*"*	*"*	*"*	*"*	*M-02*
Surrogate: Dibromofluoromethane		*112 %*	*77.8-142*		*"*	*"*	*"*	*"*	*M-02*

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-2-25ft

T182712-05 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/06/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*98.7 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.1	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.1	"	"	"	"	"	"	
Bromodichloromethane	ND	4.1	"	"	"	"	"	"	
Bromoform	ND	4.1	"	"	"	"	"	"	
Bromomethane	ND	4.1	"	"	"	"	"	"	
n-Butylbenzene	ND	4.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.1	"	"	"	"	"	"	
Chlorobenzene	ND	4.1	"	"	"	"	"	"	
Chloroethane	ND	4.1	"	"	"	"	"	"	
Chloroform	ND	4.1	"	"	"	"	"	"	
Chloromethane	ND	4.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
Dibromochloromethane	ND	4.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.2	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.1	"	"	"	"	"	"	
Dibromomethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.1	"	"	"	"	"	"	

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-2-25ft

T182712-05 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.1	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.1	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.1	"	"	"	"	"	"	
Isopropylbenzene	ND	4.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.1	"	"	"	"	"	"	
Methylene chloride	ND	4.1	"	"	"	"	"	"	
Naphthalene	ND	4.1	"	"	"	"	"	"	
n-Propylbenzene	ND	4.1	"	"	"	"	"	"	
Styrene	ND	4.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
Tetrachloroethene	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.1	"	"	"	"	"	"	
Trichloroethene	ND	4.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
Vinyl chloride	ND	4.1	"	"	"	"	"	"	
Benzene	ND	4.1	"	"	"	"	"	"	
Toluene	ND	4.1	"	"	"	"	"	"	
Ethylbenzene	ND	4.1	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-2-25ft

T182712-05 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	8.2	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	4.1	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	16	"	"	"	"	"	"	
Tert-butyl alcohol	ND	41	"	"	"	"	"	"	
Di-isopropyl ether	ND	16	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Surrogate: Toluene-d8		*98.9 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*101 %*	*77.8-142*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-2-30ft

T182712-06 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/06/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*97.4 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.6	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.6	"	"	"	"	"	"	
Bromodichloromethane	ND	4.6	"	"	"	"	"	"	
Bromoform	ND	4.6	"	"	"	"	"	"	
Bromomethane	ND	4.6	"	"	"	"	"	"	
n-Butylbenzene	ND	4.6	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.6	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.6	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.6	"	"	"	"	"	"	
Chlorobenzene	ND	4.6	"	"	"	"	"	"	
Chloroethane	ND	4.6	"	"	"	"	"	"	
Chloroform	ND	4.6	"	"	"	"	"	"	
Chloromethane	ND	4.6	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.6	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.6	"	"	"	"	"	"	
Dibromochloromethane	ND	4.6	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.6	"	"	"	"	"	"	
Dibromomethane	ND	4.6	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.6	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.6	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-2-30ft

T182712-06 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.6	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.6	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.6	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.6	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.6	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.6	"	"	"	"	"	"	
Isopropylbenzene	ND	4.6	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.6	"	"	"	"	"	"	
Methylene chloride	ND	4.6	"	"	"	"	"	"	
Naphthalene	ND	4.6	"	"	"	"	"	"	
n-Propylbenzene	ND	4.6	"	"	"	"	"	"	
Styrene	ND	4.6	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.6	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.6	"	"	"	"	"	"	
Tetrachloroethene	ND	4.6	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.6	"	"	"	"	"	"	
Trichloroethene	ND	4.6	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.6	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.6	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.6	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.6	"	"	"	"	"	"	
Vinyl chloride	ND	4.6	"	"	"	"	"	"	
Benzene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	4.6	"	"	"	"	"	"	
Ethylbenzene	ND	4.6	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-2-30ft

T182712-06 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	9.1	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	4.6	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	18	"	"	"	"	"	"	
Tert-butyl alcohol	ND	46	"	"	"	"	"	"	
Di-isopropyl ether	ND	18	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	18	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	18	"	"	"	"	"	"	
Surrogate: Toluene-d8		*106 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*102 %*	*77.8-142*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-3-20ft

T182712-07 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*92.6 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.2	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.2	"	"	"	"	"	"	
Bromodichloromethane	ND	4.2	"	"	"	"	"	"	
Bromoform	ND	4.2	"	"	"	"	"	"	
Bromomethane	ND	4.2	"	"	"	"	"	"	
n-Butylbenzene	ND	4.2	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.2	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.2	"	"	"	"	"	"	
Chlorobenzene	ND	4.2	"	"	"	"	"	"	
Chloroethane	ND	4.2	"	"	"	"	"	"	
Chloroform	ND	4.2	"	"	"	"	"	"	
Chloromethane	ND	4.2	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.2	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.2	"	"	"	"	"	"	
Dibromochloromethane	ND	4.2	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.3	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.2	"	"	"	"	"	"	
Dibromomethane	ND	4.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.2	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.2	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.2	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-3-20ft

T182712-07 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.2	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.2	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.2	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.2	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.2	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.2	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.2	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.2	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.2	"	"	"	"	"	"	
Isopropylbenzene	ND	4.2	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.2	"	"	"	"	"	"	
Methylene chloride	ND	4.2	"	"	"	"	"	"	
Naphthalene	ND	4.2	"	"	"	"	"	"	
n-Propylbenzene	ND	4.2	"	"	"	"	"	"	
Styrene	ND	4.2	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.2	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.2	"	"	"	"	"	"	
Tetrachloroethene	ND	4.2	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.2	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.2	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.2	"	"	"	"	"	"	
Trichloroethene	ND	4.2	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.2	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.2	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.2	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.2	"	"	"	"	"	"	
Vinyl chloride	ND	4.2	"	"	"	"	"	"	
Benzene	ND	4.2	"	"	"	"	"	"	
Toluene	ND	4.2	"	"	"	"	"	"	
Ethylbenzene	ND	4.2	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-3-20ft

T182712-07 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	8.3	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	4.2	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	17	"	"	"	"	"	"	
Tert-butyl alcohol	ND	42	"	"	"	"	"	"	
Di-isopropyl ether	ND	17	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Surrogate: Toluene-d8		*109 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*	*77.8-142*		"	"	"	"	

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-3-25ft

T182712-08 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*94.4 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.1	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.1	"	"	"	"	"	"	
Bromodichloromethane	ND	4.1	"	"	"	"	"	"	
Bromoform	ND	4.1	"	"	"	"	"	"	
Bromomethane	ND	4.1	"	"	"	"	"	"	
n-Butylbenzene	ND	4.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.1	"	"	"	"	"	"	
Chlorobenzene	ND	4.1	"	"	"	"	"	"	
Chloroethane	ND	4.1	"	"	"	"	"	"	
Chloroform	ND	4.1	"	"	"	"	"	"	
Chloromethane	ND	4.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
Dibromochloromethane	ND	4.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.2	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.1	"	"	"	"	"	"	
Dibromomethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.1	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-3-25ft

T182712-08 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.1	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.1	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.1	"	"	"	"	"	"	
Isopropylbenzene	ND	4.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.1	"	"	"	"	"	"	
Methylene chloride	ND	4.1	"	"	"	"	"	"	
Naphthalene	ND	4.1	"	"	"	"	"	"	
n-Propylbenzene	ND	4.1	"	"	"	"	"	"	
Styrene	ND	4.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
Tetrachloroethene	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.1	"	"	"	"	"	"	
Trichloroethene	ND	4.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
Vinyl chloride	ND	4.1	"	"	"	"	"	"	
Benzene	ND	4.1	"	"	"	"	"	"	
Toluene	ND	4.1	"	"	"	"	"	"	
Ethylbenzene	ND	4.1	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-3-25ft

T182712-08 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	8.2	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	4.1	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	16	"	"	"	"	"	"	
Tert-butyl alcohol	ND	41	"	"	"	"	"	"	
Di-isopropyl ether	ND	16	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Surrogate: Toluene-d8		*113 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.3 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*	*77.8-142*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-3-30ft

T182712-09 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*92.5 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.0	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.0	"	"	"	"	"	"	
Bromodichloromethane	ND	4.0	"	"	"	"	"	"	
Bromoform	ND	4.0	"	"	"	"	"	"	
Bromomethane	ND	4.0	"	"	"	"	"	"	
n-Butylbenzene	ND	4.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.0	"	"	"	"	"	"	
Chloroethane	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.0	"	"	"	"	"	"	
Chloromethane	ND	4.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.0	"	"	"	"	"	"	
Dibromochloromethane	ND	4.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.0	"	"	"	"	"	"	
Dibromomethane	ND	4.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-3-30ft

T182712-09 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.0	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.0	"	"	"	"	"	"	
Isopropylbenzene	ND	4.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.0	"	"	"	"	"	"	
Methylene chloride	ND	4.0	"	"	"	"	"	"	
Naphthalene	ND	4.0	"	"	"	"	"	"	
n-Propylbenzene	ND	4.0	"	"	"	"	"	"	
Styrene	ND	4.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.0	"	"	"	"	"	"	
Tetrachloroethene	ND	4.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.0	"	"	"	"	"	"	
Trichloroethene	ND	4.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.0	"	"	"	"	"	"	
Vinyl chloride	ND	4.0	"	"	"	"	"	"	
Benzene	ND	4.0	"	"	"	"	"	"	
Toluene	ND	4.0	"	"	"	"	"	"	
Ethylbenzene	ND	4.0	"	"	"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-3-30ft

T182712-09 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	8.1	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	4.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	16	"	"	"	"	"	"	
Tert-butyl alcohol	ND	40	"	"	"	"	"	"	
Di-isopropyl ether	ND	16	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Surrogate: Toluene-d8		*111 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*	*77.8-142*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-4-20ft

T182712-10 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*87.3 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.4	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.4	"	"	"	"	"	"	
Bromodichloromethane	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	4.4	"	"	"	"	"	"	
Bromomethane	ND	4.4	"	"	"	"	"	"	
n-Butylbenzene	ND	4.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.4	"	"	"	"	"	"	
Chlorobenzene	ND	4.4	"	"	"	"	"	"	
Chloroethane	ND	4.4	"	"	"	"	"	"	
Chloroform	ND	4.4	"	"	"	"	"	"	
Chloromethane	ND	4.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.4	"	"	"	"	"	"	
Dibromochloromethane	ND	4.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.4	"	"	"	"	"	"	
Dibromomethane	ND	4.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.4	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-4-20ft

T182712-10 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.4	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.4	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.4	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.4	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.4	"	"	"	"	"	"	
Isopropylbenzene	ND	4.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.4	"	"	"	"	"	"	
Methylene chloride	ND	4.4	"	"	"	"	"	"	
Naphthalene	ND	4.4	"	"	"	"	"	"	
n-Propylbenzene	ND	4.4	"	"	"	"	"	"	
Styrene	ND	4.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.4	"	"	"	"	"	"	
Tetrachloroethene	ND	4.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.4	"	"	"	"	"	"	
Trichloroethene	ND	4.4	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.4	"	"	"	"	"	"	
Vinyl chloride	ND	4.4	"	"	"	"	"	"	
Benzene	ND	4.4	"	"	"	"	"	"	
Toluene	ND	4.4	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-4-20ft

T182712-10 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	8.9	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	18	"	"	"	"	"	"	
Tert-butyl alcohol	ND	44	"	"	"	"	"	"	
Di-isopropyl ether	ND	18	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	18	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	18	"	"	"	"	"	"	
Surrogate: Toluene-d8		*109 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*107 %*	*77.8-142*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-4-25ft

T182712-11 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*94.9 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.7	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.7	"	"	"	"	"	"	
Bromodichloromethane	ND	4.7	"	"	"	"	"	"	
Bromoform	ND	4.7	"	"	"	"	"	"	
Bromomethane	ND	4.7	"	"	"	"	"	"	
n-Butylbenzene	ND	4.7	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.7	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.7	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.7	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Chloroethane	ND	4.7	"	"	"	"	"	"	
Chloroform	ND	4.7	"	"	"	"	"	"	
Chloromethane	ND	4.7	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.7	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.7	"	"	"	"	"	"	
Dibromochloromethane	ND	4.7	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.3	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.7	"	"	"	"	"	"	
Dibromomethane	ND	4.7	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.7	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.7	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.7	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.7	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.7	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-4-25ft

T182712-11 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.7	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.7	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.7	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.7	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.7	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.7	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.7	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.7	"	"	"	"	"	"	
Isopropylbenzene	ND	4.7	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.7	"	"	"	"	"	"	
Methylene chloride	ND	4.7	"	"	"	"	"	"	
Naphthalene	ND	4.7	"	"	"	"	"	"	
n-Propylbenzene	ND	4.7	"	"	"	"	"	"	
Styrene	ND	4.7	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.7	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.7	"	"	"	"	"	"	
Tetrachloroethene	ND	4.7	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.7	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.7	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.7	"	"	"	"	"	"	
Trichloroethene	ND	4.7	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.7	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.7	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.7	"	"	"	"	"	"	
Vinyl chloride	ND	4.7	"	"	"	"	"	"	
Benzene	ND	4.7	"	"	"	"	"	"	
Toluene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.7	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-4-25ft

T182712-11 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	9.3	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	4.7	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	19	"	"	"	"	"	"	
Tert-butyl alcohol	ND	47	"	"	"	"	"	"	
Di-isopropyl ether	ND	19	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	19	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	19	"	"	"	"	"	"	
Surrogate: Toluene-d8		*105 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.2 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*110 %*	*77.8-142*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-4-30ft

T182712-12 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*86.5 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.6	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.6	"	"	"	"	"	"	
Bromodichloromethane	ND	4.6	"	"	"	"	"	"	
Bromoform	ND	4.6	"	"	"	"	"	"	
Bromomethane	ND	4.6	"	"	"	"	"	"	
n-Butylbenzene	ND	4.6	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.6	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.6	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.6	"	"	"	"	"	"	
Chlorobenzene	ND	4.6	"	"	"	"	"	"	
Chloroethane	ND	4.6	"	"	"	"	"	"	
Chloroform	ND	4.6	"	"	"	"	"	"	
Chloromethane	ND	4.6	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.6	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.6	"	"	"	"	"	"	
Dibromochloromethane	ND	4.6	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.6	"	"	"	"	"	"	
Dibromomethane	ND	4.6	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.6	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.6	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.6	"	"	"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-4-30ft

T182712-12 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.6	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.6	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.6	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.6	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.6	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.6	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.6	"	"	"	"	"	"	
Isopropylbenzene	ND	4.6	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.6	"	"	"	"	"	"	
Methylene chloride	ND	4.6	"	"	"	"	"	"	
Naphthalene	ND	4.6	"	"	"	"	"	"	
n-Propylbenzene	ND	4.6	"	"	"	"	"	"	
Styrene	ND	4.6	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.6	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.6	"	"	"	"	"	"	
Tetrachloroethene	ND	4.6	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.6	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.6	"	"	"	"	"	"	
Trichloroethene	ND	4.6	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.6	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.6	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.6	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.6	"	"	"	"	"	"	
Vinyl chloride	ND	4.6	"	"	"	"	"	"	
Benzene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	4.6	"	"	"	"	"	"	
Ethylbenzene	ND	4.6	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-4-30ft

T182712-12 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	9.1	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	4.6	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	18	"	"	"	"	"	"	
Tert-butyl alcohol	ND	46	"	"	"	"	"	"	
Di-isopropyl ether	ND	18	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	18	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	18	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*	*77.8-142*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-5-20ft

T182712-13 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*85.6 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	6.0	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	6.0	"	"	"	"	"	"	
Bromodichloromethane	ND	6.0	"	"	"	"	"	"	
Bromoform	ND	6.0	"	"	"	"	"	"	
Bromomethane	ND	6.0	"	"	"	"	"	"	
n-Butylbenzene	ND	6.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	6.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	6.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.0	"	"	"	"	"	"	
Chlorobenzene	ND	6.0	"	"	"	"	"	"	
Chloroethane	ND	6.0	"	"	"	"	"	"	
Chloroform	ND	6.0	"	"	"	"	"	"	
Chloromethane	ND	6.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	6.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	6.0	"	"	"	"	"	"	
Dibromochloromethane	ND	6.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	6.0	"	"	"	"	"	"	
Dibromomethane	ND	6.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	6.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	6.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	6.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	6.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	6.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	6.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-5-20ft

T182712-13 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	6.0	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	6.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	6.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	6.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	6.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	6.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	6.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	6.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	6.0	"	"	"	"	"	"	
Isopropylbenzene	ND	6.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	6.0	"	"	"	"	"	"	
Methylene chloride	ND	6.0	"	"	"	"	"	"	
Naphthalene	ND	6.0	"	"	"	"	"	"	
n-Propylbenzene	ND	6.0	"	"	"	"	"	"	
Styrene	ND	6.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	6.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	6.0	"	"	"	"	"	"	
Tetrachloroethene	ND	6.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	6.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	6.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	6.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	6.0	"	"	"	"	"	"	
Trichloroethene	ND	6.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	6.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	6.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	6.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	6.0	"	"	"	"	"	"	
Vinyl chloride	ND	6.0	"	"	"	"	"	"	
Benzene	ND	6.0	"	"	"	"	"	"	
Toluene	ND	6.0	"	"	"	"	"	"	
Ethylbenzene	ND	6.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-5-20ft

T182712-13 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	12	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	6.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	24	"	"	"	"	"	"	
Tert-butyl alcohol	ND	60	"	"	"	"	"	"	
Di-isopropyl ether	ND	24	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	24	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	24	"	"	"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.2 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*	*77.8-142*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project:	Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number:	EMS 571	**Reported:**
Irvine CA, 92618	Project Manager:	Michael Marello	09/07/18 10:28

GMW-5-25ft

T182712-14 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*83.0 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	4.1	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	4.1	"	"	"	"	"	"	
Bromodichloromethane	ND	4.1	"	"	"	"	"	"	
Bromoform	ND	4.1	"	"	"	"	"	"	
Bromomethane	ND	4.1	"	"	"	"	"	"	
n-Butylbenzene	ND	4.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.1	"	"	"	"	"	"	
Chlorobenzene	ND	4.1	"	"	"	"	"	"	
Chloroethane	ND	4.1	"	"	"	"	"	"	
Chloroform	ND	4.1	"	"	"	"	"	"	
Chloromethane	ND	4.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
Dibromochloromethane	ND	4.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.1	"	"	"	"	"	"	
Dibromomethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.1	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-5-25ft

T182712-14 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	4.1	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.1	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.1	"	"	"	"	"	"	
Isopropylbenzene	ND	4.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.1	"	"	"	"	"	"	
Methylene chloride	ND	4.1	"	"	"	"	"	"	
Naphthalene	ND	4.1	"	"	"	"	"	"	
n-Propylbenzene	ND	4.1	"	"	"	"	"	"	
Styrene	ND	4.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
Tetrachloroethene	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.1	"	"	"	"	"	"	
Trichloroethene	ND	4.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
Vinyl chloride	ND	4.1	"	"	"	"	"	"	
Benzene	ND	4.1	"	"	"	"	"	"	
Toluene	ND	4.1	"	"	"	"	"	"	
Ethylbenzene	ND	4.1	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-5-25ft

T182712-14 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	8.1	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	4.1	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	16	"	"	"	"	"	"	
Tert-butyl alcohol	ND	41	"	"	"	"	"	"	
Di-isopropyl ether	ND	16	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.2 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*	*77.8-142*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number:	EMS 571	**Reported:**
Irvine CA, 92618	Project Manager:	Michael Marello	09/07/18 10:28

GMW-5-30ft

T182712-15 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Extractable Petroleum Hydrocarbons by 8015B									
C6-C12 (GRO)	ND	10	mg/kg	1	8090603	09/06/18	09/07/18	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		*84.4 %*	*65-135*		*"*	*"*	*"*	*"*	
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	5.0	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	

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GMW-5-30ft

T182712-15 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,2-Dichloroethene	ND	5.0	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

GMW-5-30ft

T182712-15 (Soil)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
m,p-Xylene	ND	9.9	ug/kg	1	8083105	08/31/18	09/01/18	EPA 8260B/5035	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*76.1-127*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.2 %*	*85.9-114*		"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*	*77.8-142*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number:	EMS 571	**Reported:**
Irvine CA, 92618	Project Manager:	Michael Marello	09/07/18 10:28

Drum Composite 1

T182712-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8083117	08/31/18	09/04/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**60**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**18**	2.0	"	"	"	"	"	"	
Cobalt	**2.1**	2.0	"	"	"	"	"	"	
Copper	**5.4**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	ND	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**38**	5.0	"	"	"	"	"	"	
Zinc	**16**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8083116	08/31/18	09/04/18	EPA 7471A Soil	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

Drum Composite 2

T182712-17 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8083117	08/31/18	09/04/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**120**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**14**	2.0	"	"	"	"	"	"	
Cobalt	**4.7**	2.0	"	"	"	"	"	"	
Copper	**19**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**3.2**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**48**	5.0	"	"	"	"	"	"	
Zinc	**27**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8083116	08/31/18	09/04/18	EPA 7471A Soil	

SunStar Laboratories, Inc.

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Mike Jaroudi, Project Manager

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Providing Quality Analytical Services Nationwide

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949.297.5027 Fax

Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

Drum Composite 3

T182712-18 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	8083117	08/31/18	09/04/18	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	**82**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	**13**	2.0	"	"	"	"	"	"	
Cobalt	**4.6**	2.0	"	"	"	"	"	"	
Copper	**9.2**	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	**2.8**	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	**49**	5.0	"	"	"	"	"	"	
Zinc	**28**	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	8083116	08/31/18	09/04/18	EPA 7471A Soil	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

Extractable Petroleum Hydrocarbons by 8015B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090603 - EPA 3550B GC										
Blank (8090603-BLK1)				Prepared & Analyzed: 09/06/18						
C6-C12 (GRO)	ND	10	mg/kg							
C13-C28 (DRO)	ND	10	"							
C29-C40 (MORO)	ND	10	"							
Surrogate: p-Terphenyl	*98.2*		*"*	*100*		*98.2*	*65-135*			
LCS (8090603-BS1)				Prepared & Analyzed: 09/06/18						
C13-C28 (DRO)	420	10	mg/kg	500		83.5	75-125			
Surrogate: p-Terphenyl	*88.8*		*"*	*100*		*88.8*	*65-135*			
LCS Dup (8090603-BSD1)				Prepared & Analyzed: 09/06/18						
C13-C28 (DRO)	410	10	mg/kg	500		82.9	75-125	0.745	20	
Surrogate: p-Terphenyl	*68.0*		*"*	*100*		*68.0*	*65-135*			

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8083117 - EPA 3050B										
Blank (8083117-BLK1)				Prepared: 08/31/18 Analyzed: 09/04/18						
Antimony	ND	3.0	mg/kg							
Silver	ND	2.0	"							
Arsenic	ND	5.0	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	2.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Lead	ND	3.0	"							
Molybdenum	ND	5.0	"							
Nickel	ND	2.0	"							
Selenium	ND	5.0	"							
Thallium	ND	2.0	"							
Vanadium	ND	5.0	"							
Zinc	ND	1.0	"							
LCS (8083117-BS1)				Prepared: 08/31/18 Analyzed: 09/04/18						
Arsenic	109	5.0	mg/kg	100		109	75-125			
Barium	105	1.0	"	100		105	75-125			
Cadmium	103	2.0	"	100		103	75-125			
Chromium	104	2.0	"	100		104	75-125			
Lead	108	3.0	"	100		108	75-125			
Matrix Spike (8083117-MS1)		**Source: T182705-01**		Prepared: 08/31/18 Analyzed: 09/04/18						
Arsenic	82.1	5.0	mg/kg	98.0	ND	83.7	75-125			
Barium	167	1.0	"	98.0	87.4	81.3	75-125			
Cadmium	82.8	2.0	"	98.0	ND	84.5	75-125			
Chromium	92.2	2.0	"	98.0	8.60	85.2	75-125			
Lead	87.6	3.0	"	98.0	ND	89.4	75-125			

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8083117 - EPA 3050B										
Matrix Spike Dup (8083117-MSD1)		**Source: T182705-01**		Prepared: 08/31/18 Analyzed: 09/04/18						
Arsenic	79.4	5.0	mg/kg	98.0	ND	80.9	75-125	3.34	20	
Barium	165	1.0	"	98.0	87.4	79.2	75-125	1.23	20	
Cadmium	83.4	2.0	"	98.0	ND	85.1	75-125	0.691	20	
Chromium	94.4	2.0	"	98.0	8.60	87.5	75-125	2.34	20	
Lead	87.5	3.0	"	98.0	ND	89.2	75-125	0.174	20	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8083116 - EPA 7471A Soil										
Blank (8083116-BLK1)				Prepared: 08/31/18 Analyzed: 09/04/18						
Mercury	ND	0.10	mg/kg							
LCS (8083116-BS1)				Prepared: 08/31/18 Analyzed: 09/04/18						
Mercury	0.364	0.10	mg/kg	0.403		90.2	80-120			
Matrix Spike (8083116-MS1)		**Source: T182705-01**		Prepared: 08/31/18 Analyzed: 09/04/18						
Mercury	0.416	0.10	mg/kg	0.410	0.0277	94.8	75-125			
Matrix Spike Dup (8083116-MSD1)		**Source: T182705-01**		Prepared: 08/31/18 Analyzed: 09/04/18						
Mercury	0.382	0.10	mg/kg	0.403	0.0277	88.0	75-125	8.45	20	

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

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 8083105 - EPA 5035 GCMS										
Blank (8083105-BLK1)				Prepared & Analyzed: 08/31/18						
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	9.9	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							
1,2-Dichloroethane	ND	5.0	"							
1,1-Dichloroethene	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,3-Dichloropropane	ND	5.0	"							
2,2-Dichloropropane	ND	5.0	"							
1,1-Dichloropropene	ND	5.0	"							
cis-1,3-Dichloropropene	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
Isopropylbenzene	ND	5.0	"							

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

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 8083105 - EPA 5035 GCMS										
Blank (8083105-BLK1)				Prepared & Analyzed: 08/31/18						
p-Isopropyltoluene	ND	5.0	ug/kg							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	9.9	"							
o-Xylene	ND	5.0	"							
Tert-amyl methyl ether	ND	20	"							
Tert-butyl alcohol	ND	50	"							
Di-isopropyl ether	ND	20	"							
Ethyl tert-butyl ether	ND	20	"							
Methyl tert-butyl ether	ND	20	"							
Surrogate: Toluene-d8	*38.9*		*"*	*39.7*		*98.1*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*36.3*		*"*	*39.7*		*91.4*	*85.9-114*			
Surrogate: Dibromofluoromethane	*42.7*		*"*	*39.7*		*108*	*77.8-142*			

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Environmental Management Strategies, Inc.	Project: Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/07/18 10:28

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 8083105 - EPA 5035 GCMS										
LCS (8083105-BS1)				Prepared & Analyzed: 08/31/18						
Chlorobenzene	77.8	5.0	ug/kg	99.2		78.4	75-125			
1,1-Dichloroethene	91.2	5.0	"	99.2		92.0	75-125			
Trichloroethene	85.0	5.0	"	99.2		85.7	75-125			
Benzene	86.2	5.0	"	99.2		86.9	75-125			
Toluene	89.2	5.0	"	99.2		89.9	75-125			
Surrogate: Toluene-d8	*40.5*		*"*	*39.7*		*102*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*42.1*		*"*	*39.7*		*106*	*85.9-114*			
Surrogate: Dibromofluoromethane	*39.7*		*"*	*39.7*		*100*	*77.8-142*			
LCS Dup (8083105-BSD1)				Prepared & Analyzed: 08/31/18						
Chlorobenzene	80.2	5.0	ug/kg	99.2		80.9	75-125	3.11	20	
1,1-Dichloroethene	98.5	5.0	"	99.2		99.3	75-125	7.63	20	
Trichloroethene	91.3	5.0	"	99.2		92.0	75-125	7.11	20	
Benzene	94.5	5.0	"	99.2		95.3	75-125	9.25	20	
Toluene	82.7	5.0	"	99.2		83.3	75-125	7.60	20	
Surrogate: Toluene-d8	*39.8*		*"*	*39.7*		*100*	*76.1-127*			
Surrogate: 4-Bromofluorobenzene	*44.0*		*"*	*39.7*		*111*	*85.9-114*			
Surrogate: Dibromofluoromethane	*39.4*		*"*	*39.7*		*99.2*	*77.8-142*			

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Environmental Management Strategies, Inc.	Project:	Shopoff Land Fund V, Chula Vista, CA	
8 Goodyear, Suite 125	Project Number:	EMS 571	**Reported:**
Irvine CA, 92618	Project Manager:	Michael Marello	09/07/18 10:28

Notes and Definitions

M-02	Multiple analysis yielded poor internal standard and/or surrogate recoveries due to matrix effect. Results reported are from the most complete recovery of internal standards, however, recoveries were not within the acceptable limits of the method.
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

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949-297-5020

Chain of Custody Record

SunStar Laboratories — Celebrating 20 Years!

Client: Environmental Management Stategies, Inc.
Address: 8 Goodyear, Suite 125, Irvine, Ca 92618
Phone: 949-679-9500 Fax: 949-679-9501
Project Manager: Mike Marello mike.marello@goemsinc.com

Date: 8/31/18 Page: 1 Of 2
Project Name: Shopoff Land Fund V, Chula Vista, CA
Collector: Mike Marello Client Project #: EMS 571
Batch #: 182712 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals					Laboratory ID #	Comments/Preservative	Total # of containers
GMW-1-20ft	8/30/18	10:42	Soil	VOA/SS Tube		X						X						01		4
GMW-1-25ft	↓	10:49	↓	↓		X						X						02		4
GMW-1-30ft	↓	10:54	↓	↓		X						X						03		4
GMW-2-20ft.	8/29/18	12:52	↓	↓		X						X						04		4
GMW-2-25ft.	↓	12:59	↓	↓		X						X						05		4
GMW-2-30ft.	↓	13:05	↓	↓		X						X						06		4
GMW-3-20ft.	8/30/18	7:51	↓	↓		X						X						07		4
GMW-3-25ft.	↓	7:57	↓	↓		X						X						08		4
GMW-3-30ft.	↓	8:03	↓	↓		X						X						09		4
GMW-4-20ft.	8/29/18	8:23	↓	↓		X						X						10		4
GMW-4-25ft.	↓	8:30	↓	↓		X						X						11		4
GMW-4-30ft.	↓	8:38	↓	↓		X						X						12		4
GMW-5-20ft.	8/30/18	15:20	↓	↓		X						X						13		4
GMW-5-25ft.	↓	15:30	↓	↓		X						X						14		4
GMW-5-30ft.	↓	15:37	↓	↓		X						X						15		4

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	8/31/18 10:18	[signature]	8-31-18 10:18
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers	
Chain of Custody seals Y/N/NA	
Seals intact? Y/N/NA	
Received good condition/cold	5.2

Notes

Turn around time: Normal 5 Day

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

SunStar Laboratories, Inc.
25712 Commercentre Dr
Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

SunStar Laboratories — Celebrating 20 Years!

Client: Environmental Management Stategies, Inc.
Address: 8 Goodyear, Suite 125, Irvine, Ca 92618
Phone: 949-679-9500 Fax: 949-679-9501
Project Manager: Mike Marello mike.marello@goemsinc.com

Date: 8/31/18 Page: 2 Of 2
Project Name: Shopoff Land Fund V, Chula Vista, CA
Collector: Mike Marello Client Project #: EMS 571
Batch #: 718271 2 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals					Laboratory ID #	Comments/Preservative	Total # of containers
Drum Composite 1	8/29/18	8:30	Soil	SS Tube									X					16		
Drum Composite 2	8/30/18	8:00	↓	↓									X					17		
Drum Composite 3	8/30/18	11:00	↓	↓									X					18		

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	8/31/18 10:18	[signature]	8-31-18 10:18
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 5.2

Turn around time: Normal 5 Day

Notes

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

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: 718272

Client Name: Env. Management Strategies

Project: Shopoff Land Fund V, Chula Vista, CA

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

If Courier, Received by:

Date/Time Courier Received:

Lab Received by: Sunny

Date/Time Lab Received: 8.31.18 / 10:18

Total number of coolers received: 1

Temperature:	Cooler #1 4.0	°C +/- the CF (1.2°C) = 5.2		°C corrected temperature
Temperature:	Cooler #2	°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature:	Cooler #3	°C +/- the CF (1.2°C) =		°C corrected temperature
Temperature criteria = ≤ 6°C (no frozen containers)		Within criteria?	☒ **Yes**	☐ **No**
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	SL ☒ Yes	☒ No*	
Sample labels match Chain of Custody IDs	SL ☒ 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	SL ☒ **Yes**	☒ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: SL 8.31.18

Comments:

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

SunStar Laboratories

Celebrating 20 Years!

SAMPLE NON-CONFORMANCE SHEET

Batch/Work Order # 7182712

- **COOLERS**
  - ☐ Not Received (received COC only)
  - ☐ Leaking/Damaged
  - ☐ Other:
- **CUSTODY SEALS**
  - ☐ None
  - ☐ Not Intact
- **TEMPERATURE (Temp criteria = ≤ 6°C)**
  - ☐ Cooler/Sample Temp(s)
  - ☐ Temperature Blank(s)
- **CHAIN OF CUSTODY (COC)**
  - ☐ Not relinquished by client; No date/time relinquished
  - ☐ Incomplete information provided
  - ☐ COC not received – notify PM
- **CONTAINERS**
  - ☒ Leaking ☐ Broken
  - ☐ Extra ☐ Missing
- **LABELS**
  - ☒ Not the same sample ID / info as on the COC
  - ☐ Incomplete Information
  - ☐ Markings/Info illegible
- **SAMPLES**
  - ☐ Samples **NOT RECEIVED** but listed on COC
  - ☐ Samples received but **NOT LISTED** on COC
  - ☐ Logged based on Label Information and not COC
  - ☐ Logged according to Work Plan and not COC
  - ☐ Logged in, **ON HOLD** until further notice
  - ☐ Insufficient quantities for analysis
  - ☐ Improper container used
  - ☐ Mislabeled as to tests, preservatives, etc.
  - ☐ Holding time expired – list sample ID and test
  - ☐ Not preserved/Improper preservative used
  - ☐ Without Labels, no information on containers
  - ☐ Other

Comments: SAMPLE CONTAINER FOR (GMW-3-30) WAS LABELED AS (GMW-3-25). SODIUM BISULFATE VIAL FOR (GMW-2-25) HAD ITS SEPTA LOOSE.

Sample fractioning only if broken container compromises other samples or if out of temp reading impacts more than one cooler

Fraction													Preser.
VOA													

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Appendix D

Laboratory Report for Soil Vapor

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WORK ORDER NUMBER: 18-09-0088

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Environmental Management Strategies, Inc.

Client Project Name: SLF V Chula Vista

Attention: Mike Marello
8 Goodyear, Suite 125
Irvine, CA 92618-3745

Approved for release on 09/12/2018 by:
Don Burley
Project Manager

ResultLink

Email your PM

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: SLF V Chula Vista
Work Order Number: 18-09-0088

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8 Chain-of-Custody/Sample Receipt Form. 26

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Work Order Narrative

Work Order: 18-09-0088 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/04/18. They were assigned to Work Order 18-09-0088.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.

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Sample Summary

Client:	Environmental Management Strategies, Inc. 8 Goodyear, Suite 125 Irvine, CA 92618-3745	Work Order:	18-09-0088
		Project Name:	SLF V Chula Vista
		PO Number:	EMS 571
		Date/Time Received:	09/04/18 17:32
		Number of Containers:	3
Attn:	Mike Marello		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
GMW-1-SV	18-09-0088-1	09/04/18 08:32	1	Air
GMW-2-SV	18-09-0088-2	09/04/18 13:08	1	Air
GMW-3-SV	18-09-0088-3	09/04/18 09:55	1	Air

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	09/04/18
8 Goodyear, Suite 125		Work Order:	18-09-0088
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: SLF V Chula Vista			Page 1 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-1-SV	**18-09-0088-1-A**	**09/04/18 08:32**	**Air**	**GC/MS OOO**	**N/A**	**09/07/18 04:55**	**180906L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	13	4.8	1.00	
Benzene	3.7	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	15	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	21	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	5.6	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.8	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	2.5	2.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	09/04/18
8 Goodyear, Suite 125	Work Order:	18-09-0088
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: SLF V Chula Vista		Page 2 of 12

Parameter	Result	RL	DF	Qualifiers
4-Ethyltoluene	ND	4.9	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	350	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	7.5	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	8.7	1.00	
p/m-Xylene	ND	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-134	
1,2-Dichloroethane-d4	91	67-133	
Toluene-d8	97	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	09/04/18
8 Goodyear, Suite 125		Work Order:	18-09-0088
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: SLF V Chula Vista			Page 3 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-2-SV	**18-09-0088-2-A**	**09/04/18 13:08**	**Air**	**GC/MS OOO**	**N/A**	**09/09/18 06:14**	**180908L02**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	29	1.97	
Acetone	44	9.4	1.97	
Benzene	5.2	3.1	1.97	
Benzyl Chloride	ND	20	1.97	
Bromodichloromethane	ND	6.6	1.97	
Bromoform	ND	10	1.97	
Bromomethane	ND	3.8	1.97	
2-Butanone	26	8.7	1.97	
n-Butylbenzene	ND	54	1.97	
sec-Butylbenzene	ND	54	1.97	
tert-Butylbenzene	ND	54	1.97	
Carbon Disulfide	ND	12	1.97	
Carbon Tetrachloride	ND	6.2	1.97	
Chlorobenzene	ND	4.5	1.97	
Chloroethane	ND	2.6	1.97	
Chloroform	ND	4.8	1.97	
Chloromethane	ND	4.1	1.97	
Dibromochloromethane	ND	8.4	1.97	
1,2-Dibromo-3-Chloropropane	ND	9.5	1.97	
1,2-Dibromoethane	ND	7.6	1.97	
1,2-Dichlorobenzene	ND	5.9	1.97	
1,3-Dichlorobenzene	ND	5.9	1.97	
1,4-Dichlorobenzene	ND	5.9	1.97	
Dichlorodifluoromethane	ND	4.9	1.97	
1,1-Dichloroethane	5.0	4.0	1.97	
1,2-Dichloroethane	ND	4.0	1.97	
1,1-Dichloroethene	ND	3.9	1.97	
c-1,2-Dichloroethene	ND	3.9	1.97	
t-1,2-Dichloroethene	ND	3.9	1.97	
1,2-Dichloropropane	ND	4.6	1.97	
c-1,3-Dichloropropene	ND	4.5	1.97	
t-1,3-Dichloropropene	ND	8.9	1.97	
Dichlorotetrafluoroethane	ND	28	1.97	
1,1-Difluoroethane	ND	11	1.97	
Ethylbenzene	17	4.3	1.97	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	09/04/18
8 Goodyear, Suite 125	Work Order:	18-09-0088
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: SLF V Chula Vista		Page 4 of 12

Parameter	Result	RL	DF	Qualifiers
4-Ethyltoluene	ND	9.7	1.97	
Hexachloro-1,3-Butadiene	ND	32	1.97	
2-Hexanone	ND	12	1.97	
Isopropanol	ND	24	1.97	
Methyl-t-Butyl Ether (MTBE)	ND	14	1.97	
Methylene Chloride	ND	34	1.97	
4-Methyl-2-Pentanone	ND	12	1.97	
Styrene	ND	13	1.97	
1,1,2,2-Tetrachloroethane	ND	14	1.97	
Tetrachloroethene	ND	6.7	1.97	
Toluene	15	3.7	1.97	
1,1,1-Trichloroethane	ND	5.4	1.97	
1,1,2-Trichloroethane	ND	5.4	1.97	
Trichloroethene	ND	5.3	1.97	
Trichlorofluoromethane	ND	11	1.97	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	23	1.97	
1,2,4-Trimethylbenzene	ND	15	1.97	
1,3,5-Trimethylbenzene	ND	9.7	1.97	
Vinyl Acetate	ND	14	1.97	
Vinyl Chloride	ND	2.5	1.97	
o-Xylene	ND	17	1.97	
p/m-Xylene	ND	34	1.97	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-134	
1,2-Dichloroethane-d4	89	67-133	
Toluene-d8	97	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	09/04/18
8 Goodyear, Suite 125		Work Order:	18-09-0088
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: SLF V Chula Vista			Page 5 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-3-SV	**18-09-0088-3-A**	**09/04/18 09:55**	**Air**	**GC/MS OOO**	**N/A**	**09/07/18 23:05**	**180907L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	29	4.8	1.00	
Benzene	4.7	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	9.4	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	6.5	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	2.6	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.8	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	3.3	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	3.1	2.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	09/04/18
8 Goodyear, Suite 125		Work Order:	18-09-0088
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: SLF V Chula Vista			Page 6 of 12

Parameter	Result	RL	DF	Qualifiers
4-Ethyltoluene	ND	4.9	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	300	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	13	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	8.7	1.00	
p/m-Xylene	ND	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	68-134	
1,2-Dichloroethane-d4	87	67-133	
Toluene-d8	95	70-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
GMW-3-SV	**18-09-0088-3-A**	**09/04/18 09:55**	**Air**	**GC/MS OOO**	**N/A**	**09/07/18 06:28**	**180906L01**

Parameter	Result	RL	DF	Qualifiers
Isopropanol	590	120	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	90	68-134	
1,2-Dichloroethane-d4	90	67-133	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	09/04/18
8 Goodyear, Suite 125		Work Order:	18-09-0088
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: SLF V Chula Vista			Page 7 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-20654**	**N/A**	**Air**	**GC/MS OOO**	**N/A**	**09/06/18 16:18**	**180906L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	ND	4.8	1.00	
Benzene	ND	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	ND	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.8	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	ND	2.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	09/04/18
8 Goodyear, Suite 125	Work Order:	18-09-0088
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: SLF V Chula Vista		Page 8 of 12

Parameter	Result	RL	DF	Qualifiers
4-Ethyltoluene	ND	4.9	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	8.7	1.00	
p/m-Xylene	ND	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	88	68-134	
1,2-Dichloroethane-d4	88	67-133	
Toluene-d8	98	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	09/04/18
8 Goodyear, Suite 125		Work Order:	18-09-0088
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: SLF V Chula Vista			Page 9 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-20683**	**N/A**	**Air**	**GC/MS OOO**	**N/A**	**09/07/18 18:39**	**180907L01**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	ND	4.8	1.00	
Benzene	ND	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	ND	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.8	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	ND	2.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	09/04/18
8 Goodyear, Suite 125	Work Order:	18-09-0088
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: SLF V Chula Vista		Page 10 of 12

Parameter	Result	RL	DF	Qualifiers
4-Ethyltoluene	ND	4.9	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	8.7	1.00	
p/m-Xylene	ND	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	89	68-134	
1,2-Dichloroethane-d4	91	67-133	
Toluene-d8	97	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.		Date Received:	09/04/18
8 Goodyear, Suite 125		Work Order:	18-09-0088
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: SLF V Chula Vista			Page 11 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-021-20684**	**N/A**	**Air**	**GC/MS OOO**	**N/A**	**09/09/18 03:31**	**180908L02**

Parameter	Result	RL	DF	Qualifiers
1,2,4-Trichlorobenzene	ND	15	1.00	
Acetone	ND	4.8	1.00	
Benzene	ND	1.6	1.00	
Benzyl Chloride	ND	10	1.00	
Bromodichloromethane	ND	3.4	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	1.9	1.00	
2-Butanone	ND	4.4	1.00	
n-Butylbenzene	ND	27	1.00	
sec-Butylbenzene	ND	27	1.00	
tert-Butylbenzene	ND	27	1.00	
Carbon Disulfide	ND	6.2	1.00	
Carbon Tetrachloride	ND	3.1	1.00	
Chlorobenzene	ND	2.3	1.00	
Chloroethane	ND	1.3	1.00	
Chloroform	ND	2.4	1.00	
Chloromethane	ND	2.1	1.00	
Dibromochloromethane	ND	4.3	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.8	1.00	
1,2-Dibromoethane	ND	3.8	1.00	
1,2-Dichlorobenzene	ND	3.0	1.00	
1,3-Dichlorobenzene	ND	3.0	1.00	
1,4-Dichlorobenzene	ND	3.0	1.00	
Dichlorodifluoromethane	ND	2.5	1.00	
1,1-Dichloroethane	ND	2.0	1.00	
1,2-Dichloroethane	ND	2.0	1.00	
1,1-Dichloroethene	ND	2.0	1.00	
c-1,2-Dichloroethene	ND	2.0	1.00	
t-1,2-Dichloroethene	ND	2.0	1.00	
1,2-Dichloropropane	ND	2.3	1.00	
c-1,3-Dichloropropene	ND	2.3	1.00	
t-1,3-Dichloropropene	ND	4.5	1.00	
Dichlorotetrafluoroethane	ND	14	1.00	
1,1-Difluoroethane	ND	5.4	1.00	
Ethylbenzene	ND	2.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Environmental Management Strategies, Inc.	Date Received:	09/04/18
8 Goodyear, Suite 125	Work Order:	18-09-0088
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
	Units:	ug/m3
Project: SLF V Chula Vista		Page 12 of 12

Parameter	Result	RL	DF	Qualifiers
4-Ethyltoluene	ND	4.9	1.00	
Hexachloro-1,3-Butadiene	ND	16	1.00	
2-Hexanone	ND	6.1	1.00	
Isopropanol	ND	12	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1.00	
Methylene Chloride	ND	17	1.00	
4-Methyl-2-Pentanone	ND	6.1	1.00	
Styrene	ND	6.4	1.00	
1,1,2,2-Tetrachloroethane	ND	6.9	1.00	
Tetrachloroethene	ND	3.4	1.00	
Toluene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	2.7	1.00	
1,1,2-Trichloroethane	ND	2.7	1.00	
Trichloroethene	ND	2.7	1.00	
Trichlorofluoromethane	ND	5.6	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1.00	
1,2,4-Trimethylbenzene	ND	7.4	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	7.0	1.00	
Vinyl Chloride	ND	1.3	1.00	
o-Xylene	ND	8.7	1.00	
p/m-Xylene	ND	17	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	91	68-134	
1,2-Dichloroethane-d4	97	67-133	
Toluene-d8	97	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	09/04/18
8 Goodyear, Suite 125	Work Order:	18-09-0088
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: SLF V Chula Vista		Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-20654	**LCS**	**Air**	**GC/MS OOO**	**N/A**	**09/06/18 12:50**	**180906L01**
095-01-021-20654	**LCSD**	**Air**	**GC/MS OOO**	**N/A**	**09/06/18 13:44**	**180906L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
1,2,4-Trichlorobenzene	185.5	212.8	115	209.5	113	31-151	11-171	2	0-30	
Acetone	59.39	53.28	90	52.77	89	67-133	56-144	1	0-30	
Benzene	79.87	79.74	100	78.42	98	70-130	60-140	2	0-30	
Benzyl Chloride	129.4	137.1	106	134.8	104	38-158	18-178	2	0-30	
Bromodichloromethane	167.5	165.8	99	164.4	98	70-130	60-140	1	0-30	
Bromoform	258.4	271.5	105	268.8	104	63-147	49-161	1	0-30	
Bromomethane	97.08	86.75	89	86.38	89	70-139	58-150	0	0-30	
2-Butanone	73.73	69.62	94	68.93	93	66-132	55-143	1	0-30	
n-Butylbenzene	137.2	141.0	103	138.3	101	50-150	33-167	2	0-30	
sec-Butylbenzene	137.2	135.5	99	133.5	97	50-150	33-167	1	0-30	
tert-Butylbenzene	137.2	136.3	99	134.8	98	50-150	33-167	1	0-30	
Carbon Disulfide	77.85	74.66	96	73.95	95	68-146	55-159	1	0-30	
Carbon Tetrachloride	157.3	157.3	100	156.0	99	70-136	59-147	1	0-30	
Chlorobenzene	115.1	124.2	108	121.6	106	70-130	60-140	2	0-30	
Chloroethane	65.96	59.84	91	59.58	90	65-149	51-163	0	0-30	
Chloroform	122.1	120.0	98	119.6	98	70-130	60-140	0	0-30	
Chloromethane	51.63	41.44	80	41.07	80	69-141	57-153	1	0-30	
Dibromochloromethane	213.0	222.5	104	220.6	104	70-138	59-149	1	0-30	
1,2-Dibromo-3-Chloropropane	241.6	268.9	111	266.5	110	60-140	47-153	1	0-35	
1,2-Dibromoethane	192.1	210.0	109	207.0	108	70-133	60-144	1	0-30	
1,2-Dichlorobenzene	150.3	164.4	109	162.0	108	48-138	33-153	1	0-30	
1,3-Dichlorobenzene	150.3	169.1	112	166.7	111	56-134	43-147	1	0-30	
1,4-Dichlorobenzene	150.3	165.6	110	162.6	108	52-136	38-150	2	0-30	
Dichlorodifluoromethane	123.6	111.5	90	122.6	99	67-139	55-151	9	0-30	
1,1-Dichloroethane	101.2	99.35	98	98.55	97	70-130	60-140	1	0-30	
1,2-Dichloroethane	101.2	96.54	95	95.65	95	70-132	60-142	1	0-30	
1,1-Dichloroethene	99.12	94.10	95	93.67	94	70-135	59-146	0	0-30	
c-1,2-Dichloroethene	99.12	105.8	107	103.9	105	70-130	60-140	2	0-30	
t-1,2-Dichloroethene	99.12	103.5	104	101.9	103	70-130	60-140	2	0-30	
1,2-Dichloropropane	115.5	115.7	100	113.5	98	70-130	60-140	2	0-30	
c-1,3-Dichloropropene	113.5	127.7	113	124.8	110	70-130	60-140	2	0-30	
t-1,3-Dichloropropene	113.5	132.3	117	130.2	115	70-147	57-160	2	0-30	
Dichlorotetrafluoroethane	174.8	158.4	91	158.1	90	51-135	37-149	0	0-30	
1,1-Difluoroethane	67.54	56.67	84	56.12	83	70-131	60-141	1	0-30	
Ethylbenzene	108.6	115.4	106	114.1	105	70-130	60-140	1	0-30	
4-Ethyltoluene	122.9	134.1	109	131.7	107	68-130	58-140	2	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.		Date Received:	09/04/18
8 Goodyear, Suite 125		Work Order:	18-09-0088
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
Project: SLF V Chula Vista			Page 2 of 6

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Hexachloro-1,3-Butadiene	266.6	300.2	113	297.0	111	44-146	27-163	1	0-30	
2-Hexanone	102.4	113.6	111	112.4	110	70-136	59-147	1	0-30	
Isopropanol	61.45	49.96	81	49.63	81	57-135	44-148	1	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	93.13	103	91.93	102	68-130	58-140	1	0-30	
Methylene Chloride	86.84	87.28	101	86.47	100	69-130	59-140	1	0-30	
4-Methyl-2-Pentanone	102.4	107.0	104	105.3	103	70-130	60-140	2	0-30	
Styrene	106.5	113.3	106	111.3	105	65-131	54-142	2	0-30	
1,1,2,2-Tetrachloroethane	171.6	168.2	98	165.6	96	63-130	52-141	2	0-30	
Tetrachloroethene	169.6	185.2	109	182.7	108	70-130	60-140	1	0-30	
Toluene	94.21	96.24	102	95.19	101	70-130	60-140	1	0-30	
1,1,1-Trichloroethane	136.4	135.9	100	134.9	99	70-130	60-140	1	0-30	
1,1,2-Trichloroethane	136.4	144.1	106	143.0	105	70-130	60-140	1	0-30	
Trichloroethene	134.3	141.6	105	140.2	104	70-130	60-140	1	0-30	
Trichlorofluoromethane	140.5	121.5	87	120.8	86	63-141	50-154	1	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	191.6	189.9	99	188.3	98	70-136	59-147	1	0-30	
1,2,4-Trimethylbenzene	122.9	127.0	103	126.0	103	60-132	48-144	1	0-30	
1,3,5-Trimethylbenzene	122.9	130.1	106	127.9	104	62-130	51-141	2	0-30	
Vinyl Acetate	88.03	83.23	95	83.38	95	58-130	46-142	0	0-30	
Vinyl Chloride	63.91	57.18	89	56.85	89	70-134	59-145	1	0-30	
o-Xylene	108.6	108.1	100	106.1	98	69-130	59-140	2	0-30	
p/m-Xylene	217.1	220.7	102	218.9	101	70-132	60-142	1	0-30	

Total number of LCS compounds: 57
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	09/04/18
8 Goodyear, Suite 125	Work Order:	18-09-0088
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: SLF V Chula Vista		Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-20683	**LCS**	**Air**	**GC/MS OOO**	**N/A**	**09/07/18 12:20**	**180907L01**
095-01-021-20683	**LCSD**	**Air**	**GC/MS OOO**	**N/A**	**09/07/18 13:14**	**180907L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
1,2,4-Trichlorobenzene	185.5	212.6	115	209.8	113	31-151	11-171	1	0-30	
Acetone	59.39	54.72	92	53.74	90	67-133	56-144	2	0-30	
Benzene	79.87	77.13	97	77.82	97	70-130	60-140	1	0-30	
Benzyl Chloride	129.4	131.6	102	129.0	100	38-158	18-178	2	0-30	
Bromodichloromethane	167.5	162.6	97	163.9	98	70-130	60-140	1	0-30	
Bromoform	258.4	266.8	103	265.5	103	63-147	49-161	0	0-30	
Bromomethane	97.08	87.43	90	85.50	88	70-139	58-150	2	0-30	
2-Butanone	73.73	70.61	96	69.15	94	66-132	55-143	2	0-30	
n-Butylbenzene	137.2	138.0	101	138.1	101	50-150	33-167	0	0-30	
sec-Butylbenzene	137.2	130.7	95	130.2	95	50-150	33-167	0	0-30	
tert-Butylbenzene	137.2	132.8	97	130.7	95	50-150	33-167	2	0-30	
Carbon Disulfide	77.85	75.71	97	74.04	95	68-146	55-159	2	0-30	
Carbon Tetrachloride	157.3	153.9	98	156.3	99	70-136	59-147	2	0-30	
Chlorobenzene	115.1	120.5	105	120.0	104	70-130	60-140	0	0-30	
Chloroethane	65.96	60.67	92	59.23	90	65-149	51-163	2	0-30	
Chloroform	122.1	119.5	98	117.7	96	70-130	60-140	2	0-30	
Chloromethane	51.63	47.96	93	42.36	82	69-141	57-153	12	0-30	
Dibromochloromethane	213.0	219.0	103	218.2	102	70-138	59-149	0	0-30	
1,2-Dibromo-3-Chloropropane	241.6	262.5	109	261.9	108	60-140	47-153	0	0-35	
1,2-Dibromoethane	192.1	206.8	108	205.7	107	70-133	60-144	1	0-30	
1,2-Dichlorobenzene	150.3	159.2	106	159.0	106	48-138	33-153	0	0-30	
1,3-Dichlorobenzene	150.3	163.6	109	161.7	108	56-134	43-147	1	0-30	
1,4-Dichlorobenzene	150.3	160.0	106	158.7	106	52-136	38-150	1	0-30	
Dichlorodifluoromethane	123.6	127.2	103	117.5	95	67-139	55-151	8	0-30	
1,1-Dichloroethane	101.2	99.10	98	98.07	97	70-130	60-140	1	0-30	
1,2-Dichloroethane	101.2	96.86	96	95.33	94	70-132	60-142	2	0-30	
1,1-Dichloroethene	99.12	95.67	97	93.86	95	70-135	59-146	2	0-30	
c-1,2-Dichloroethene	99.12	103.9	105	102.3	103	70-130	60-140	2	0-30	
t-1,2-Dichloroethene	99.12	103.3	104	100.8	102	70-130	60-140	2	0-30	
1,2-Dichloropropane	115.5	115.0	100	116.0	100	70-130	60-140	1	0-30	
c-1,3-Dichloropropene	113.5	124.8	110	125.5	111	70-130	60-140	1	0-30	
t-1,3-Dichloropropene	113.5	129.5	114	129.8	114	70-147	57-160	0	0-30	
Dichlorotetrafluoroethane	174.8	160.3	92	158.1	90	51-135	37-149	1	0-30	
1,1-Difluoroethane	67.54	65.51	97	56.05	83	70-131	60-141	16	0-30	
Ethylbenzene	108.6	112.7	104	112.6	104	70-130	60-140	0	0-30	
4-Ethyltoluene	122.9	130.8	106	130.2	106	68-130	58-140	0	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.		Date Received:	09/04/18
8 Goodyear, Suite 125		Work Order:	18-09-0088
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
Project: SLF V Chula Vista			Page 4 of 6

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Hexachloro-1,3-Butadiene	266.6	302.0	113	296.0	111	44-146	27-163	2	0-30	
2-Hexanone	102.4	113.4	111	112.8	110	70-136	59-147	1	0-30	
Isopropanol	61.45	51.59	84	51.09	83	57-135	44-148	1	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	90.08	100	89.24	99	68-130	58-140	1	0-30	
Methylene Chloride	86.84	87.79	101	86.30	99	69-130	59-140	2	0-30	
4-Methyl-2-Pentanone	102.4	105.6	103	106.2	104	70-130	60-140	1	0-30	
Styrene	106.5	110.2	104	108.7	102	65-131	54-142	1	0-30	
1,1,2,2-Tetrachloroethane	171.6	166.1	97	164.7	96	63-130	52-141	1	0-30	
Tetrachloroethene	169.6	181.9	107	181.0	107	70-130	60-140	1	0-30	
Toluene	94.21	94.19	100	93.93	100	70-130	60-140	0	0-30	
1,1,1-Trichloroethane	136.4	134.4	98	132.5	97	70-130	60-140	1	0-30	
1,1,2-Trichloroethane	136.4	141.9	104	143.2	105	70-130	60-140	1	0-30	
Trichloroethene	134.3	138.9	103	139.9	104	70-130	60-140	1	0-30	
Trichlorofluoromethane	140.5	124.3	89	121.7	87	63-141	50-154	2	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	191.6	190.4	99	186.3	97	70-136	59-147	2	0-30	
1,2,4-Trimethylbenzene	122.9	124.2	101	122.7	100	60-132	48-144	1	0-30	
1,3,5-Trimethylbenzene	122.9	126.0	103	125.8	102	62-130	51-141	0	0-30	
Vinyl Acetate	88.03	84.63	96	83.00	94	58-130	46-142	2	0-30	
Vinyl Chloride	63.91	57.93	91	57.40	90	70-134	59-145	1	0-30	
o-Xylene	108.6	105.6	97	105.1	97	69-130	59-140	0	0-30	
p/m-Xylene	217.1	216.3	100	217.2	100	70-132	60-142	0	0-30	

Total number of LCS compounds: 57
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.	Date Received:	09/04/18
8 Goodyear, Suite 125	Work Order:	18-09-0088
Irvine, CA 92618-3745	Preparation:	N/A
	Method:	EPA TO-15
Project: SLF V Chula Vista		Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-20684	**LCS**	**Air**	**GC/MS OOO**	**N/A**	**09/08/18 18:37**	**180908L02**
095-01-021-20684	**LCSD**	**Air**	**GC/MS OOO**	**N/A**	**09/08/18 19:30**	**180908L02**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
1,2,4-Trichlorobenzene	185.5	237.2	128	230.7	124	31-151	11-171	3	0-30	
Acetone	59.39	51.33	86	53.11	89	67-133	56-144	3	0-30	
Benzene	79.87	76.68	96	77.97	98	70-130	60-140	2	0-30	
Benzyl Chloride	129.4	139.7	108	138.0	107	38-158	18-178	1	0-30	
Bromodichloromethane	167.5	170.6	102	172.8	103	70-130	60-140	1	0-30	
Bromoform	258.4	287.3	111	288.5	112	63-147	49-161	0	0-30	
Bromomethane	97.08	88.46	91	90.44	93	70-139	58-150	2	0-30	
2-Butanone	73.73	63.95	87	64.66	88	66-132	55-143	1	0-30	
n-Butylbenzene	137.2	141.4	103	140.1	102	50-150	33-167	1	0-30	
sec-Butylbenzene	137.2	135.9	99	135.2	99	50-150	33-167	1	0-30	
tert-Butylbenzene	137.2	138.1	101	137.7	100	50-150	33-167	0	0-30	
Carbon Disulfide	77.85	71.41	92	72.41	93	68-146	55-159	1	0-30	
Carbon Tetrachloride	157.3	169.0	107	169.0	107	70-136	59-147	0	0-30	
Chlorobenzene	115.1	123.3	107	122.9	107	70-130	60-140	0	0-30	
Chloroethane	65.96	58.44	89	60.10	91	65-149	51-163	3	0-30	
Chloroform	122.1	117.8	96	120.2	98	70-130	60-140	2	0-30	
Chloromethane	51.63	39.02	76	40.13	78	69-141	57-153	3	0-30	
Dibromochloromethane	213.0	231.2	109	231.2	109	70-138	59-149	0	0-30	
1,2-Dibromo-3-Chloropropane	241.6	287.3	119	283.2	117	60-140	47-153	1	0-35	
1,2-Dibromoethane	192.1	213.0	111	213.6	111	70-133	60-144	0	0-30	
1,2-Dichlorobenzene	150.3	170.2	113	168.7	112	48-138	33-153	1	0-30	
1,3-Dichlorobenzene	150.3	173.2	115	171.6	114	56-134	43-147	1	0-30	
1,4-Dichlorobenzene	150.3	171.0	114	170.1	113	52-136	38-150	1	0-30	
Dichlorodifluoromethane	123.6	110.6	89	112.8	91	67-139	55-151	2	0-30	
1,1-Dichloroethane	101.2	95.11	94	96.36	95	70-130	60-140	1	0-30	
1,2-Dichloroethane	101.2	96.92	96	98.64	97	70-132	60-142	2	0-30	
1,1-Dichloroethene	99.12	90.98	92	93.05	94	70-135	59-146	2	0-30	
c-1,2-Dichloroethene	99.12	101.6	102	102.8	104	70-130	60-140	1	0-30	
t-1,2-Dichloroethene	99.12	99.84	101	101.7	103	70-130	60-140	2	0-30	
1,2-Dichloropropane	115.5	110.5	96	112.0	97	70-130	60-140	1	0-30	
c-1,3-Dichloropropene	113.5	127.5	112	127.5	112	70-130	60-140	0	0-30	
t-1,3-Dichloropropene	113.5	135.2	119	135.0	119	70-147	57-160	0	0-30	
Dichlorotetrafluoroethane	174.8	164.0	94	168.2	96	51-135	37-149	3	0-30	
1,1-Difluoroethane	67.54	53.26	79	54.20	80	70-131	60-141	2	0-30	
Ethylbenzene	108.6	114.8	106	114.2	105	70-130	60-140	1	0-30	
4-Ethyltoluene	122.9	135.0	110	134.6	110	68-130	58-140	0	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Environmental Management Strategies, Inc.		Date Received:	09/04/18
8 Goodyear, Suite 125		Work Order:	18-09-0088
Irvine, CA 92618-3745		Preparation:	N/A
		Method:	EPA TO-15
Project: SLF V Chula Vista			Page 6 of 6

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Hexachloro-1,3-Butadiene	266.6	341.1	128	328.6	123	44-146	27-163	4	0-30	
2-Hexanone	102.4	107.4	105	107.5	105	70-136	59-147	0	0-30	
Isopropanol	61.45	48.82	79	50.48	82	57-135	44-148	3	0-30	
Methyl-t-Butyl Ether (MTBE)	90.13	91.39	101	92.36	102	68-130	58-140	1	0-30	
Methylene Chloride	86.84	84.79	98	86.26	99	69-130	59-140	2	0-30	
4-Methyl-2-Pentanone	102.4	101.2	99	102.5	100	70-130	60-140	1	0-30	
Styrene	106.5	111.7	105	112.2	105	65-131	54-142	0	0-30	
1,1,2,2-Tetrachloroethane	171.6	161.3	94	162.4	95	63-130	52-141	1	0-30	
Tetrachloroethene	169.6	191.2	113	192.6	114	70-130	60-140	1	0-30	
Toluene	94.21	93.92	100	93.94	100	70-130	60-140	0	0-30	
1,1,1-Trichloroethane	136.4	139.4	102	141.3	104	70-130	60-140	1	0-30	
1,1,2-Trichloroethane	136.4	142.3	104	143.7	105	70-130	60-140	1	0-30	
Trichloroethene	134.3	141.7	105	143.9	107	70-130	60-140	2	0-30	
Trichlorofluoromethane	140.5	133.2	95	135.2	96	63-141	50-154	2	0-30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	191.6	185.8	97	189.0	99	70-136	59-147	2	0-30	
1,2,4-Trimethylbenzene	122.9	127.9	104	127.7	104	60-132	48-144	0	0-30	
1,3,5-Trimethylbenzene	122.9	131.1	107	131.2	107	62-130	51-141	0	0-30	
Vinyl Acetate	88.03	77.80	88	79.09	90	58-130	46-142	2	0-30	
Vinyl Chloride	63.91	56.22	88	57.60	90	70-134	59-145	2	0-30	
o-Xylene	108.6	107.3	99	107.9	99	69-130	59-140	1	0-30	
p/m-Xylene	217.1	218.8	101	220.1	101	70-132	60-142	1	0-30	

Total number of LCS compounds: 57
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Summa Canister Vacuum Summary

Work Order: 18-09-0088

Sample Name	Vacuum Out	Vacuum In	Equipment	Description
GMW-1-SV	-29.50 in Hg	-3.00 in Hg	LC085	Summa Canister 1L
GMW-2-SV	-29.50 in Hg	-1.00 in Hg	LC1162	Summa Canister 1L
GMW-3-SV	-29.50 in Hg	-0.50 in Hg	LC626	Summa Canister 1L

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Sample Analysis Summary Report

Work Order: 18-09-0088

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA TO-15	N/A	326	GC/MS OOO	2
EPA TO-15	N/A	460	GC/MS OOO	2
EPA TO-15	N/A	1145	GC/MS OOO	2

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Glossary of Terms and Qualifiers

Work Order: 18-09-0088 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

AIR CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY: 18-09-0088

DATE: 9/4/18
PAGE: 1 OF 1

LABORATORY CLIENT: Environmental Management Strategies
ADDRESS: 8 Goodyear, Suite 125
CITY: Irvine STATE: CA ZIP: 92618
TEL:
E-MAIL: Mike.Marello@emsins.com

CLIENT PROJECT NAME / NO.: SLF V Chula Vista
P.O. NO.: EMS 571
PROJECT CONTACT: Mike Marello
LAB CONTACT OR QUOTE NO.: Don Burley
PROJECT ADDRESS: 676-680 Moss St
SAMPLER(S): (PRINT) Mike Marello
CITY: Chula Vista STATE: CA ZIP:

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ STANDARD

EDD: ☐ COELT EDF ☐ OTHER
UNITS: ug/m³

SPECIAL INSTRUCTIONS:
Full Scan TO-15 list plus isopropanol (2 propanol)

REQUESTED ANALYSES: EPA TO-15 Full List + Isopropanol

LAB USE ONLY	SAMPLE ID	FIELD ID / POINT OF COLLECTION	MATRIX: Indoor (I) Soil Vap. (SV) Ambient (A)	SAMPLING EQUIPMENT: Media ID	Canister Size 6L or 1L	Flow Controller ID	START SAMPLING INFORMATION: Date	Time (24 hr clock)	Canister Pressure (in Hg)	STOP SAMPLING INFORMATION: Date	Time (24 hr clock)	Canister Pressure (in Hg)	EPA TO-15 Full List + Isopropanol			
1	GMW-1-SV		SV	2C085	1L	A107	9/4/18	8:27	-30	9/4/18	8:32	-2	X			
2	GMW-2-SV		↓	2C1162	↓	A317	↓	13:00	-30	↓	13:08	-2	X			
3	GMW-3-SV		↓	2C626	↓	A445	↓	9:48	-30	↓	9:55	-2	X			
	~~GMW-4-SV~~ (B)															
	~~GMW-5~~ (B)															

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature]	9-4-18	4:00 pm
[signature]	[signature] EL	9/4/18	17:32

2014-07-01 Revision

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WORK ORDER NUMBER: 18-09-0088

SAMPLE RECEIPT CHECKLIST

COOLER 0 OF 0

CLIENT: EMS

DATE: 09/04/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: -0.5°C); Temperature (w/o CF): _____°C (w/ CF): _____°C; ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☑ Air ☐ Filter Checked by: UDZL

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present (BOX) ☐ N/A Checked by: UDZL

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: HMW

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na₂** ☐ 100PJ ☐ 100PJ**na₂** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGB**s** (pH__2) ☐ 250PB ☐ 250PB**n** (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGB**na₂** ☐ 1AGB**s** (pH__2) ☐ 1AGB**s** (O&G) ☐ 1PB ☐ 1PB**na** (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (___) ☐ EnCores® (___) ☐ TerraCores® (___) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☑ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na₂** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: HMW

Reviewed by: UDZL

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Appendix E

Groundwater Purge and Sampling Logs

PURGED GROUNDWATER FIELD PARAMETERS

Site: SLF-V Chula Vista

Address: 676-680 Moss St.

Date: 9/4/18

EST Project No: EMS 571

EST Pernsonnel: M. Marello

Well Identification: GMW-1

Well Diameter: 2 in.

Well Head Condition: Good

Well Box Condition: Good

Total Depth (Feet BTOC): 36.80

Depth-to-Water (Feet BTOC): 30.19

Floating Product: Yes ( ) No (X)

Floating Product Thickness (Inches): NA

1 Casing Volume (Gallons): 1.1

Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)

Minimum Purge (Gallons): 3.2

2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees C or F)	Water pH --------	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
	Commence Pumping (X) or Bailing ( ) Groundwater (Check One)					Ground Gas Bad. Flow
08:40	1	23.31	6.10	5,680	>1000	2 VS submersible
08:43	2	23.36	6.55	5,810	>1000	
08:50	3	23.66	6.73	5,660	>1000	Flow stopped
08:52	4	23.68	6.74	5,680	>1000	(Dry) at ~2.5 gal
						Allow ~5 min
						recharge
Sample						2 x VOA

PURGED GROUNDWATER FIELD PARAMETERS

Site: SLFV Chula Vista

Address: 676-680 Moss St.

Date: 9/4/18

EST Project No: FMS 571

EST Pernsonnel: M. Marella

Well Identification: GMW-2

Well Diameter: 2 in

Well Head Condition: Good

Well Box Condition: Good

Total Depth (Feet BTOC): 35.30

Depth-to-Water (Feet BTOC): 27.60

Floating Product: Yes ( ) No (X)

Floating Product Thickness (Inches): NA

1 Casing Volume (Gallons): 1.2

Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)

Minimum Purge (Gallons): 3.7

2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees (C) or F)	Water pH --------	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
	Commence Pumping (X) or Bailing ( ) Groundwater (Check One)					
13:16	1	23.64	7.02	4,840	>1000	
13:19	2	23.28	7.14	5,080	>1000	
13:21	3	23.30	7.25	4,940	705	
13:24	4	23.36	7.26	4,900	335	
13:25						Sample
						4 x VOA
						Collect
						GMW-2 DUP

13 Drums Soil
2 Drums Water

PURGED GROUNDWATER FIELD PARAMETERS

Site: SLF V Chula Vista

Address: 676-680 Moss St.

Date: 9/4/18

EST Project No: EMS 571

EST Pernsonnel: M. Marello

Well Identification: GMW-3

Well Diameter: 2 in.

Well Head Condition: Good

Well Box Condition: Good

Total Depth (Feet BTOC): 39.80

Depth-to-Water (Feet BTOC): 29.70

Floating Product: Yes ( ) No (X)

Floating Product Thickness (Inches): NA

1 Casing Volume (Gallons): 1.6

Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)

Minimum Purge (Gallons): 4.8

2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees (C) or F)	Water pH --------	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
	Commence Pumping (X) or Bailing ( ) Groundwater (Check One)					
10:04	1	21.65	6.86	6,850	>1000	
10:07	2	21.70	7.00	6,980	>1000	
10:09	3	20.91	6.92	6,960	>1000	
10:12	4	20.90	6.92	6,950	>1000	
10:14	5	20.98	6.82	6,920	968	
10:15						Sample 2x VOA

PURGED GROUNDWATER FIELD PARAMETERS

Site: SLFV Chula Vista

Address: 676-680 Moss St.

Date: 9/4/18

EST Project No: FMS 571

EST Pernsonnel: M. Marello

Well Identification: GMW-4

Well Diameter: 2 in.

Well Head Condition: Good

Well Box Condition: Good

Total Depth (Feet BTOC): 37.80

Depth-to-Water (Feet BTOC): 26.44

Floating Product: Yes ( ) No (X)

Floating Product Thickness (Inches): NA

1 Casing Volume (Gallons): 1.8

Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)

Minimum Purge (Gallons): 5.5

2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees (C) or F)	Water pH --------	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
	Commence Pumping (X) or Bailing ( ) Groundwater (Check One)					Ground for Redi-Flow
11:50	1	22.68	6.92	2390	>1000	2 in VS Submersible
11:53	2	22.49	6.88	2130	>1000	
11:56	3	22.36	6.88	2270	>1000	
11:58	4	22.43	6.95	2270	>1000	
12:00	5	22.33	6.94	2222	>1000	
12:02						Sample 2 x VOA

PURGED GROUNDWATER FIELD PARAMETERS

Site: SLFV Chula Vista

Address: 676-680 Moss St.

Date: 9/4/18

EST Project No: FMS 571

EST Pernsonnel: M. Marello

Well Identification: GMW-5

Well Diameter: 2 in

Well Head Condition: Good

Well Box Condition: Good

Total Depth (Feet BTOC): 39.90

Depth-to-Water (Feet BTOC): 30.78

Floating Product: Yes ( ) No (X)

Floating Product Thickness (Inches): NA

1 Casing Volume (Gallons): 1.50

Calculation: "X" Gallons/Ft. x (TD - DTW) = 1 Well Casing Volume (Gallons)

Minimum Purge (Gallons): 4.4

2-Inch Diam. Well "X" = 0.16 4-inch Diam Well "X" = 0.65

Time	Purge Volume (Gallons)	Water Temperature (Degrees C or F)	Water pH --------	Electrical Conductivity (umho/cm)	Water Turbidity (NTUs)	Notes and Comments
	Commence Pumping ( ) or Bailing ( ) Groundwater (Check One)					
10:54	1	22.85	7.03	4,740	>1000	
10:57	2	22.99	7.16	4,840	>1000	
11:01	3	23.10	7.11	4,260	>1000	
11:05	4	23.11	7.05	4,150	>1000	
11:07	5	23.12	6.98	4,010	381	
11:08						Sample 2xVOA

Appendix F

Laboratory Report for Groundwater

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
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10 September 2018

Michael Marello
Environmental Management Strategies, Inc.
8 Goodyear, Suite 125
Irvine, CA 92618

RE: SLF V - Chula Vista

Enclosed are the results of analyses for samples received by the laboratory on 09/04/18 15:54. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi
Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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949.297.5027 Fax

Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GMW-1	T182740-01	Water	09/04/18 09:00	09/04/18 15:54
GMW-2	T182740-02	Water	09/04/18 13:25	09/04/18 15:54
GMW-2 DUP	T182740-03	Water	09/04/18 13:25	09/04/18 15:54
GMW-3	T182740-04	Water	09/04/18 10:15	09/04/18 15:54
GMW-4	T182740-05	Water	09/04/18 12:02	09/04/18 15:54
GMW-5	T182740-06	Water	09/04/18 11:08	09/04/18 15:54
EB-1	T182740-07	Water	09/04/18 09:40	09/04/18 15:54

SunStar Laboratories, Inc.

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

DETECTIONS SUMMARY

Sample ID: GMW-1 **Laboratory ID:** T182740-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**9.7**	1.0	ug/l	EPA 8260B	

Sample ID: GMW-2 **Laboratory ID:** T182740-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**9.7**	1.0	ug/l	EPA 8260B	

Sample ID: GMW-2 DUP **Laboratory ID:** T182740-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**7.2**	1.0	ug/l	EPA 8260B	

Sample ID: GMW-3 **Laboratory ID:** T182740-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**11**	1.0	ug/l	EPA 8260B	

Sample ID: GMW-4 **Laboratory ID:** T182740-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**12**	1.0	ug/l	EPA 8260B	

Sample ID: GMW-5 **Laboratory ID:** T182740-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**9.6**	1.0	ug/l	EPA 8260B	

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8 Goodyear, Suite 125	Project Number:	EMS 571	**Reported:**
Irvine CA, 92618	Project Manager:	Michael Marello	09/10/18 13:35

Sample ID: EB-1 **Laboratory ID:** T182740-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Bromodichloromethane	**3.0**	1.0	ug/l	EPA 8260B	
Chloroform	**8.4**	1.0	ug/l	EPA 8260B	
Chloromethane	**8.9**	1.0	ug/l	EPA 8260B	
Dibromochloromethane	**1.4**	1.0	ug/l	EPA 8260B	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-1

T182740-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8090419	09/06/18	09/08/18	EPA 8260B	
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	**9.7**	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
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	"	"	"	"	"	"	

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Mike Jaroudi, Project Manager

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-1

T182740-01 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8090419	09/06/18	09/08/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	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	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-1

T182740-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
C6-C12 (GRO)	ND	50	ug/l	1	8090419	09/06/18	09/08/18	EPA 8260B	
Surrogate: 4-Bromofluorobenzene		*101 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*102 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*	*92.6-108*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-2

T182740-02 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	1.0	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
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	**9.7**	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
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	"	"	"	"	"	"	

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-2

T182740-02 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	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	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-2

T182740-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
C6-C12 (GRO)	ND	50	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
Surrogate: 4-Bromofluorobenzene		*98.2 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*98.4 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*99.7 %*	*92.6-108*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-2 DUP

T182740-03 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
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	**7.2**	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
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	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-2 DUP

T182740-03 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	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	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-2 DUP

T182740-03 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C6-C12 (GRO)	ND	50	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
Surrogate: 4-Bromofluorobenzene		*98.0 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*99.1 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*98.8 %*	*92.6-108*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-3

T182740-04 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	1.0	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
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	**11**	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
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	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-3

T182740-04 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	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	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-3

T182740-04 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
C6-C12 (GRO)	ND	50	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
Surrogate: 4-Bromofluorobenzene		*99.2 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*100 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*99.7 %*	*92.6-108*		"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-4

T182740-05 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
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	**12**	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
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	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-4

T182740-05 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	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	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	

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Environmental Management Strategies, Inc.	Project:	SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number:	EMS 571	**Reported:**
Irvine CA, 92618	Project Manager:	Michael Marello	09/10/18 13:35

GMW-4

T182740-05 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
C6-C12 (GRO)	ND	50	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
Surrogate: 4-Bromofluorobenzene		*99.3 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*99.5 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*100 %*	*92.6-108*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-5

T182740-06 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bromobenzene	ND	1.0	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
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	**9.6**	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
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	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-5

T182740-06 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	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	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

GMW-5

T182740-06 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
C6-C12 (GRO)	ND	50	ug/l	1	8090419	09/06/18	09/07/18	EPA 8260B	
Surrogate: 4-Bromofluorobenzene		*97.8 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*98.8 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*	*92.6-108*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

EB-1

T182740-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
Bromobenzene	ND	1.0	ug/l	1	8090419	09/06/18	09/06/18	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	**3.0**	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	**8.4**	1.0	"	"	"	"	"	"	
Chloromethane	**8.9**	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	**1.4**	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
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	"	"	"	"	"	"	

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

EB-1

T182740-07 (Water)

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	8090419	09/06/18	09/06/18	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	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	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	

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Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

EB-1

T182740-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Volatile Organic Compounds by EPA Method 8260B									
C6-C12 (GRO)	ND	50	ug/l	1	8090419	09/06/18	09/06/18	EPA 8260B	
Surrogate: 4-Bromofluorobenzene		*99.8 %*	*84.2-108*		"	"	"	"	
Surrogate: Dibromofluoromethane		*98.4 %*	*71.5-128*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*92.6-108*		"	"	"	"	

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

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 8090419 - EPA 5030 GCMS										
Blank (8090419-BLK1)				Prepared: 09/04/18 Analyzed: 09/06/18						
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	5.0	"							
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	"							

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8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

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 8090419 - EPA 5030 GCMS										
Blank (8090419-BLK1)				Prepared: 09/04/18 Analyzed: 09/06/18						
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	1.0	"							
Naphthalene	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	1.0	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	*19.9*		*"*	*20.0*		*99.3*	*84.2-108*			
Surrogate: Dibromofluoromethane	*19.4*		*"*	*20.0*		*96.8*	*71.5-128*			
Surrogate: Toluene-d8	*20.0*		*"*	*20.0*		*99.8*	*92.6-108*			
LCS (8090419-BS1)				Prepared: 09/04/18 Analyzed: 09/07/18						
Chlorobenzene	19.1	1.0	ug/l	20.0		95.6	79.3-117			
1,1-Dichloroethene	17.6	1.0	"	20.0		88.0	68.3-130			
Trichloroethene	18.8	1.0	"	20.0		94.0	82.4-119			
Benzene	19.4	0.50	"	20.0		96.8	79.9-118			
Toluene	18.7	0.50	"	20.0		93.7	78.7-116			
Surrogate: 4-Bromofluorobenzene	*20.0*		*"*	*20.0*		*100*	*84.2-108*			
Surrogate: Dibromofluoromethane	*19.8*		*"*	*20.0*		*99.2*	*71.5-128*			
Surrogate: Toluene-d8	*20.0*		*"*	*20.0*		*100*	*92.6-108*			

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.

Mike Jaroudi, Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

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 8090419 - EPA 5030 GCMS										
LCS Dup (8090419-BSD1)				Prepared: 09/04/18 Analyzed: 09/07/18						
Chlorobenzene	20.7	1.0	ug/l	20.0		103	79.3-117	7.79	20	
1,1-Dichloroethene	18.7	1.0	"	20.0		93.6	68.3-130	6.28	20	
Trichloroethene	21.0	1.0	"	20.0		105	82.4-119	10.9	20	
Benzene	21.0	0.50	"	20.0		105	79.9-118	8.27	20	
Toluene	20.3	0.50	"	20.0		102	78.7-116	8.19	20	
Surrogate: 4-Bromofluorobenzene	*19.8*		*"*	*20.0*		*99.0*	*84.2-108*			
Surrogate: Dibromofluoromethane	*19.7*		*"*	*20.0*		*98.6*	*71.5-128*			
Surrogate: Toluene-d8	*19.8*		*"*	*20.0*		*98.8*	*92.6-108*			

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Mike Jaroudi, Project Manager

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Environmental Management Strategies, Inc.	Project: SLF V - Chula Vista	
8 Goodyear, Suite 125	Project Number: EMS 571	**Reported:**
Irvine CA, 92618	Project Manager: Michael Marello	09/10/18 13:35

Notes and Definitions

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.

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.

Mike Jaroudi, Project Manager

SunStar Laboratories

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

Chain of Custody Record

Client: Environmental Management Strategies
Address: 8 Goodyear, Ste 125, Irvine CA 92618
Phone: 949-679-9500 Fax:
Project Manager: M. Morello

Date: 9/4/18 Page: 1 Of 1
Project Name: SLF V Chula Vista
Collector: Mike Morello Client Project #: EMS 571
Batch #: T182740 EDF #:

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY + GRO	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
01	GMW-1	9/4/18	~~13~~9:00	H_2O	VOA		X														2
02	GMW-2		13:25				X														2
03	GMW-2 DUP		13:25				X														2
04	GMW-3		10:15				X														2
05	GMW-4		12:02				X														2
06	GMW-5		11:08				X														2
							X														
07	EB-1	9/4/18	9:40	H_2O			X														2

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	9/4/18 15:54	[signature]	9/4/18 15:54
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold 5.3

Turn around time: 5 Day

Notes

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

COC 182703

SunStar Laboratories — Celebrating 20 Years!

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: 1182740

Client Name: Env. Management Strategies

Project: SLF V - Chula Vista

Delivered by: [X] Client [ ] SunStar Courier [ ] GSO [ ] FedEx [ ] Other

If Courier, Received by:

Date/Time Courier Received:

Lab Received by: Sunny

Date/Time Lab Received: 9.4.18 / 15:54

Total number of coolers received: 0

Temperature:	Cooler #1 4.1	°C +/- the CF (1.2°C)	= 5.3	°C corrected temperature
Temperature:	Cooler #2	°C +/- the CF (1.2°C)	=	°C corrected temperature
Temperature:	Cooler #3	°C +/- the CF (1.2°C)	=	°C corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers) Within criteria? [X] **Yes** [ ] **No**

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

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: SL 9.4.18

Comments:

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

Appendix G

IDW Transportation Manifests

Manifest

SOIL SAFE OF CA – TPST
Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment:	Responsible for Payment:	Transport Truck #:	Facility #:	Approval Number:	Load #
/ /			A07	49369	

Generator and/or Consultant

Generator's Name and Billing Address: SHOPOFF LAND FUND V ATTN: MATT BRADY 2 PARK PLAZA, SUITE 700 IRVINE, CA 92614	Generator's Phone #: 949-417-1396 Person to Contact: FAX#:	Customer Account Number
Consultant's Name and Billing Address:	Consultant's Phone #: Person to Contact: FAX#:	Customer Account Number
Generation Site (Transport from): *(name & address)* SHOPOFF LAND FUND V - MOSS STREET, CHULA VISTA ASSEMBLAGE 676-680 MOSS STREET CHULA VISTA, CA 91911	Site Phone #: Person to Contact: FAX#:	
Designated Facility (Transport to): *(name & address)* SOIL SAFE 12328 HIBISCUS AVENUE ADELANTO, CA 92301	Facility Phone #: (800) 862-8001 Person to Contact: JOE PROVANSAL FAX#: (760) 246-8004	
Transporter Name and Mailing Address: BELSHIRE 26971 TOWNE CENTRE DRIVE FOOTHILL RANCH, CA 92610 BESI: 297756	Transporter's Phone #: 949-460-5200 Person to Contact: LARRY MOOTHART FAX#: 949-460-5210	CAR000183913 450847 Customer Account Number

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ❑ Organic ❑ Clay ❑ Other ❑	0 - 10% ❑ 10 - 20% ❑ 20% - over ❑	Gas ❑ Diesel ❑ Other ❑	13 DM	Soil			
Sand ❑ Organic ❑ Clay ❑ Other ❑	0 - 10% ❑ 10 - 20% ❑ 20% - over ❑	Gas ❑ Diesel ❑ Other ❑					

List any exception to items listed above: Scale Ticket #

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils descried in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator ❑ Consultant ❑ Mike Marella

Signature and date: Month 9 Day 11 Year 18

Transporter

Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: Jose Ferrera

Signature and date: Month 09 Day 11 Year 18

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: J. PROVANSAL

Signature and date:

Please print or type.

GENERATOR/CONSULTANTS COPY

NO. 744517

NON-HAZARDOUS WASTE DATA FORM

BESI # 297756

GENERATOR

Generator's Name and Mailing Address
SHOPOFF LAND FUND V
ATTN: MATT BRADY
2 PARK PLAZA, SUITE 700
IRVINE, CA 92614

Generator's Site Address (if different than mailing address)
SHOPOFF LAND FUND V -
MOSS STREET, CHULA VISTA ASSEMBLAGE
676-680 MOSS STREET
CHULA VISTA, CA 91911

Generator's Phone: 949-417-1396

Container type removed from site:

☐ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity 02

Container type transported to receiving facility:

☐ Drums ☒ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck

☐ Other _____

Quantity _____ Volume _____

WASTE DESCRIPTION NON-HAZARDOUS WASTE LIQUIDS

GENERATING PROCESS DECON WATER

	COMPONENTS OF WASTE	PPM	%		COMPONENTS OF WASTE	PPM	%
1.	WATER		95-100%	3.	SOLIDS		0-5%
2.	TPH		< 1%	4.			

Waste Profile _____ PROPERTIES: pH 4-10 ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: _____

Generator Printed/Typed Name: Mike Marello
Signature: [signature]
Month 9 Day 11 Year 18

The Generator certifies that the waste as described is 100% non-hazardous

TRANSPORTER

Transporter 1 Company Name: BELSHIRE
Phone#: 949-460-5200

Transporter 1 Printed/Typed Name: Jose Fernan
Signature: [signature]
Month 09 Day 11 Year 18

Transporter Acknowledgment of Receipt of Materials

Transporter 2 Company Name: NIETO & SONS TRUCKING, INC.
Phone#: 714-990-6855

Transporter 2 Printed/Typed Name
Signature
Month Day Year

Transporter Acknowledgment of Receipt of Materials

RECEIVING FACILITY

Designated Facility Name and Site Address
DEMENNO KERDOON
2000 N. ALAMEDA ST.
COMPTON, CA 90222

Phone#: 310-537-7100

Printed/Typed Name
Signature
Month Day Year

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.