## Appendix D

Phase I Environmental Site Assessment & Supplemental Subsurface Investigation



A Report Prepared for:

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Attention: Mr. Blake Peters

PHASE I ENVIRONMENTAL SITE ASSESSMENT 750 WEST SAN CARLOS STREET SAN JOSE, CALIFORNIA

SEPTEMBER 1, 2017

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1440.006.01.003

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#### 1.0 INTRODUCTION

#### 1.1 Purpose and Scope of Work

This report presents the results of a Phase I Environmental Site Assessment (ESA) of the property located at 750 West San Carlos Street, San Jose, California (the site or subject property). The property is comprised of a single land parcel located near the intersection of Dupont Street and West San Carlos Street in San Jose, California. The site location is presented as Plate 1. PES Environmental, Inc. (PES) was retained by Bay + Area Property Developers (BAPD) to compile and evaluate available information to assess for Recognized Environmental Conditions (RECs) associated with the site. PES understands that BAPD is considering acquisition of the site and, if acquired, intends to develop it with multi-family residences. We further understand this Phase I ESA is a component of BAPD's pre-acquisition environmental due diligence.

The Phase I ESA was performed pursuant to our proposal (Reference No. 1440.006.01.P02) dated August 11, 2017, respectively, and in general accordance with ASTM International (ASTM) guidelines for Phase I Environmental Site Assessments (ASTM E 1527-13). These practice guidelines comply with the U.S. Environmental Protection Agency's (EPA) All Appropriate Inquiries (AAI) rule adopted in November 2005 and amended December 30, 2013. The following tasks were conducted during this ESA:

- Federal, State and local agency databases were reviewed to identify nearby sites which have reported the use, storage, and/or release of hazardous materials;
- Regulatory agency records regarding the site and adjacent properties were reviewed;
- Historical aerial photographs of the site and surrounding area were reviewed to evaluate prior land uses;
- Historical research was conducted and historical information for the site was reviewed;
- An environmental database search was obtained and reviewed, which included search radii as required by AAI;
- Individuals with knowledge of the site were interviewed;
- An inspection of the site and a reconnaissance of surrounding properties were conducted to assess the potential for contamination of the site from onsite or offsite sources. The site inspection was conducted by an environmental professional with qualifying experience under AAI; and
- This report presenting the results of the Phase I ESA investigation was prepared.

A Recognized Environmental Condition, or REC, is defined in the ASTM International guidelines (ASTM E 1527-13) as 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. A controlled REC (CREC) is a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, activity/use limitations, institutional controls, or engineering controls). A historical REC (HREC) is a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

De minimis conditions are defined by ASTM as conditions that generally do not present a threat to human health or the environment, and that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies. A de minimis condition is not a REC or a CREC.

#### 1.2 Special Terms and Conditions

The Phase I ESA was performed in general accordance with ASTM 1527-13.

#### 1.3 Limitations and Exceptions

This Phase I ESA was performed in accordance with practices and procedures generally accepted in the consulting engineering field at the time they were performed. The findings, opinions, conclusions, and recommendations expressed herein are applicable as of the date the services were provided. Our professional judgment to assess the potential for contamination is based on limited data; no warranty is given or implied.

The Phase I ESA was prepared at the request of BAPD as part of its due diligence for acquisition of the property and may be relied on only by BAPD and the BAPD affiliate(s) formed to acquire the property, if any. No other party may rely on this report without the express written permission of BAPD and PES.

#### 2.0 USER PROVIDED INFORMATION

#### 2.1 Title Records

Title records were not provided to PES for the preparation of this Phase I ESA.

## 2.2 Environmental Liens or Activity and Use Limitations

Environmental liens or activity or use limitations were not provided to PES and PES is not aware of any such liens or use limitations on the subject property.

## 2.3 Specialized Knowledge

BAPD has not provided any user-provided specialized knowledge. PES does not possess any specialized knowledge regarding the subject property.

#### 2.4 User Questionnaire

As part of this Phase I ESA, a copy of a User Questionnaire, as recommended in ASTM E 1527-13, was submitted to Mr. Blake Peters of BAPD. This questionnaire, completed by the party who will rely on the ESA, facilitates the transfer of known site information to the environmental professional and promotes qualification of the relying party for one of the *Landowner Liability Protections (LLPs)*<sup>1</sup> offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"). A copy of the User Questionnaire is provided in Appendix A.

## 2.5 Commonly Known or Reasonably Ascertainable Information

Any commonly known or reasonably ascertainable information provided to PES during the preparation of this Phase I ESA is presented within this report.

#### 2.6 Valuation Reduction for Environmental Issues

BAPD indicated on the completed User Questionnaire that the purchase price for the subject property reasonably reflects the fair market value.

## 2.7 Owner, Property Manager, and Occupant Information

PES submitted a Site Use Questionnaire to BAPD for transmittal to the current property owner. As of the date of this report, no completed copy of the Site User Questionnaire has been returned to PES.

## 2.8 Reason for Performing Phase I

PES understands the Phase I ESA was performed as a component of BAPD's pre-acquisition due diligence.

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Landowner Liability Protections, or LLPs, is the term used to describe the three types of potential defenses to Superfund Liability in US EPA's Interim Guidance Regarding Criteria Landowners Must Meet in Order to Qualify for Bona Fide Prospective Purchaser, Contiguous Property Owner, or Innocent Landowner Limitations on CERCLA Liability ("Common Elements" Guide) issued on March 6, 2003.

#### 3.0 SITE DESCRIPTION

## 3.1 Location and Site Access

The subject property is located near the southwest corner of the intersection of West San Carlos Street and Dupont Street in the City of San Jose, County of Santa Clara, California (Plate 1). The site is accessed from West San Carlos Street.

The subject property address is 750 West San Carlos Street. Several historical tenants of the subject property have used the addresses of 752 and 754 West San Carlos Street. There are no other known former addresses for the site.

## 3.2 Site and Vicinity Characteristics

The site is located in an area with mixed commercial and residential uses. The site is bounded to the north by West San Carlos Street, to the south by commuter railroad tracks, to the east by a mixed-use property, and to the west by commercial/residential buildings.

The subject property encompasses approximately 0.46 acres of land and consists of a single legal parcel identified by Santa Clara County Assessor's Parcel Number (APN) 264-15-003.

#### 3.3 Physical Setting

According to the United States Geological Survey (USGS) San Jose West, California Quadrangle 7.5-minute series topographic map produced in 2012, the site vicinity is situated at an elevation of approximately 105 feet above mean sea level. The ground surface is relatively flat, but gently slopes locally to the northeast.

## 3.4 Regional Geology and Hydrogeology

Based on the results of an investigation performed on the subject property (PES, 2016), subsurface soil beneath the site consists of approximately two feet of sandy silt containing fragments of brick and wood indicative of artificial fill, underlain by low-plasticity clay grading to silt at a depth of approximately 6 feet below ground surface (bgs). Gravelly sand was encountered from approximately 8 feet bgs to approximately 10.25 feet bgs (the maximum depth explored).

Results from previous investigations performed on the adjacent site to the east (740 West San Carlos Street) indicate that the soil beneath the fill material generally consists of interbedded deposits of fine-grained and coarse-grained material to the maximum depth explored of 32 feet bgs (PES, 2017). In general, the fine-grained material consists of clay, sandy clay, and sandy silt and the coarse-grained material consists of clayey sand with or without gravel, poorly-graded sand, well-graded sand with or without gravel, silty sand, and poorly-graded gravel and silty gravel.

Groundwater has been encountered at 740 West San Carlos Street between approximately 20 to 28 feet bgs (PES, 2017). Groundwater flow in the vicinity of the subject property is predominately toward the north/northeast. The closest water body to the subject property is Los Gatos Creek, located approximately 500 feet east of the site.

#### 3.5 Wetlands

As shown in the EDR database report, there are no National Wetlands Inventory (NWI) identified wetlands on, or in close proximity to, the subject property.

## 3.6 Descriptions of Existing On-site Structures and Improvements

### 3.6.1 Structures and Current Use

The subject property is occupied by a single-story commercial building with a mezzanine constructed prior to 1950; the remaining portions of the site are occupied by a yard area and a driveway. The subject property is currently occupied by Good New Wood Salvation, a wood salvage recycling business.

#### 3.6.2 Other Improvements

Electricity and natural gas are provided by Pacific Gas & Electric (PG&E). Water and sewer services are provided by City of San Jose.

## 3.7 Current Uses of Adjoining Properties

PES conducted a reconnaissance of the surrounding area to assess whether neighboring properties pose potential environmental concerns to the subject property. Adjacent land uses are identified on Plate 2. Nearby properties are used for various commercial and residential purposes, as described below.

#### Properties to the North

The site is bounded to the north by West San Carlos Street. Across West San Carlos Street are commercial buildings.

#### Properties to the East

The site is bounded to the east by a mixed-use property (740 West San Carlos Street). Further east are commuter railroad tracks.

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## Properties to the South

The site is bounded to the south by commuter railroad tracks. Across the railroad tracks is a multi-family residential development.

## Properties to the West

The site is bounded to the west by a multi-family residential and commercial development (under construction at the date of this report). Further west is Sunol Street.

## 3.8 Past Uses of Property and Adjoining Properties

Historical site use information was obtained through a review of aerial photographs, historical topographic maps, Sanborn Fire Insurance Maps, and city address directories.

#### 3.8.1 Historical Sources

Site use information was obtained through a review of the following list of historical sources. The results of the review of these sources are summarized below:

- Aerial Photographs: Aerial photographs obtained from Environmental Data Resources, Inc. (EDR) of Shelton, Connecticut were reviewed for the following years: 1939, 1948, 1950, 1956, 1963, 1968, 1974, 1982, 1993, 1998, 2005, 2006, 2009, 2010, and 2012. Copies of these photographs are presented in Appendix B;
- Sanborn Fire Insurance Maps: Sanborn Fire Insurance Maps obtained from EDR were reviewed for the following years: 1884, 1915, 1950, 1956, and 1966. Copies of the maps are presented in Appendix C;
- Topographic Maps: Various topographic maps of the subject property vicinity were compiled by EDR. The following maps were included in the compilation: USGS San Jose Quadrangle 15-minute series topographic maps produced in 1889, 1897, and 1899; and San Jose West Quadrangle 7.5-minute series topographic maps produced in 1953, 1961, 1968, 1973, 1980, and 2012, were reviewed by PES. Copies of the maps are presented in Appendix D;
- City Directories: A search of city directories was performed by EDR for the years from 1922 through 2013 in approximately 5-year intervals. Copies of the directory listings are presented in Appendix E;
- Santa Clara County Department of Environmental Health: Records from Santa Clara County Department Environmental Health (SCCDEH) were requested by PES to evaluate the historical uses of the subject property. No records for the subject property addresses were available from SCCDEH;

- San Jose Fire Department: Records from San Jose Fire Department (SJFD) were requested by PES to evaluate the historical uses of the subject property. SJFD had no records for the subject property addresses;
- San Jose Building Department: Records from San Jose Building Department (SJBD)
  were reviewed by PES on August 16, 2017 to evaluate the historical uses of the subject
  property. These consisted of permit applications and plans for tenant improvements
  dated between 1940 and 2017; and
- Previous Environmental Reports: Historical data from previous environmental reports (see Section 4.0) has been incorporated into the summary below.

#### 3.8.2 Historical Review Summary

## Subject Property

The following provides historical use information for the subject property based on available historical resources listed in the previous section.

#### 750 West San Carlos Street

The subject property was vacant in 1884. A Sanborn map from 1915 shows a lumber company present at the subject property. According to the city directory search conducted by EDR, between 1930 and 1955, several canning and dried fruit businesses (identified as 750 West San Carlos Street), a grocery and liquor business (identified as 752 West San Carlos Street), and several lumber companies (identified as 754 West San Carlos Street) were present at the subject property. Foster and Kleiser, a billboard company (also identified by the address 754 West San Carlos Street), also occupied the site from at least 1940 to at least 1957. The existing subject property building appears to have been constructed sometime prior to 1950. During the 1960s and 1970s, tenants at the site included building and masonry contractors, an accountant, a roofing contractor, a property management company, and a furniture and upholstery shop. City Canvas, an awning manufacturer, occupied the site from at least 1985 until recently (i.e., approximately 2016).

## Subject Property Vicinity

From at least 1915, the subject property vicinity has been developed, with railroad tracks present at the southern subject property boundary. The property east of the subject property (740 West San Carlos Street) has been utilized for commercial purposes since at least 1915. A Sanborn map from 1915 shows two fuel oil tanks and "4 crude oil tanks" present at the property east of the subject property. A Sanborn map from 1956 shows structures labelled "wood tanks" and "fuel oil tank" present at the property east of the subject property. Across the railroad tracks (south of the subject property), the area was commercially developed, primarily by fruit canneries, until the 1950s when the area was used primarily as warehouses. By 2009, the existing multi-family residential development to the south was present. From at

least 1915 to at least the 1980s, the property west of the site was in use as a planing mill and for lumber storage. That property is currently under construction as a commercial/residential property. The area north of the site across West San Carlos Street has been mixed residential and commercial since at least 1915.

## 4.0 RESULTS FROM PREVIOUS ENVIRONMENTAL SITE INVESTIGATIONS

#### 4.1 2015 Phase I ESA

PES conducted a Phase I ESA for the subject property and the adjacent 740 West San Carlos Street property in May 2015 (PES, 2015). At the time the previous Phase I ESA was conducted, the subject property was occupied by City Canvas, an awning fabrication business. Hazardous materials observed at the site were limited to welding gases and aerosol paints. No concerns were identified with hazardous material use and storage at the 750 West San Carlos Street site. No regulatory agency records concerning hazardous material use or storage at the subject property were identified. A copy of the report is provided in Appendix F.

The 2015 Phase I ESA did not identify any recognized environmental conditions (RECs) for the subject property.

## 4.2 2016 Limited Soil Vapor Investigation

Based on environmental concerns associated with the 740 West San Carlos Street property and other properties in the vicinity of the subject property, a limited investigation scope of work was developed to address vapor encroachment concerns for the subject property (PES, 2016). The investigation was intended to assess soil vapor conditions at the site in order to assess for the potential presence of volatile organic compounds (VOCs; in particular, aromatic hydrocarbons commonly associated with releases of petroleum hydrocarbons) and total volatile hydrocarbons (TVH) at levels that could present a concern to future site occupants. A copy of the report is provided in Appendix F.

The limited soil vapor investigation consisted of collecting soil vapor samples for analysis at depths of 5 and 10 feet bgs at two locations (SG-1 and SG-2) at the site, for a total of four soil vapor samples (approximate locations of SG-1 and SG-2 are shown on Plate 2).

Aromatic hydrocarbons, specifically benzene, toluene, ethylbenzene, and/or xylenes (collectively, BTEX compounds), were detected in soil vapor samples collected at both 5 and 10 feet bgs at each of the two soil vapor sampling locations at the site. While the source(s) of the BTEX compounds are not known, the results are consistent with residual levels of petroleum hydrocarbon contamination, possibly attributable to historical subsurface releases at off-site properties. However, based on detections of BTEX compounds at concentrations well below applicable screening levels for vapor intrusion concerns, these constituents do not appear to present an unacceptable risk to human health or the environment.

PES concluded that the results of the limited soil vapor investigation indicate: (1) VOCs and volatile hydrocarbons were not present in soil vapor at levels which presented a vapor intrusion concern for the existing or future development at the site; and (2) no further environmental assessment appeared warranted.

#### 5.0 RECORDS REVIEW

### 5.1 Environmental Liens

Based on review of an environmental database provided by EDR, there are no listed Federal Superfund (NPL) liens or State deed restrictions associated with the subject property.

#### 5.2 Standard Environmental Record Sources

The discussion presented in this section is based on available information provided by government agencies and various databases. A database report dated August 15, 2017 contained listings of sites located within a 1-mile radius, which were selected in accordance with ASTM E 1527-13 standards. This information is obtained from computerized databases of Federal, State, and local records. Descriptions of the lists reviewed are presented below. The EDR database report is included as Appendix G.

The ASTM Standard Environmental Record Source regulatory agency databases for the following sites were searched and reported in the EDR report:

- U.S. EPA National Priorities List (NPL) sites, proposed NPL sites, and Delisted NPL sites within 1-mile of the subject property;
- U.S. EPA Comprehensive Environmental Response Compensation, and Liability Information System (CERCLIS) sites and CERCLIS No Further Remedial Action Planned (NFRAP) sites - within ¼-mile of the subject property;
- U.S. EPA RCRA Corrective Action Report (CORRACTS) facilities within ¼-mile of the site;
- U.S. EPA Resource Conservation and Recovery Act (RCRA), Treatment, Storage, or Disposal (TSD) facilities - within ½-mile of the subject property);
- U.S. EPA RCRA Small Quantity and Large Quantity Generators of hazardous waste (SQG and LQG) - within ¼-mile of the subject property;
- U.S. EPA Engineering Control sites and Institutional Control sites within ½-mile of the subject property;

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- U.S. EPA Emergency Response Notification System (ERNS) sites -the subject property;
- California Department of Toxic Substances Control (DTSC) State response sites within 1-mile of the subject property;
  - California Integrated Waste Management Board (IWMB) Solid Waste Information System (SWIS) solid waste disposal and landfill sites – within ½-mile of the subject property;
  - California State Water Resources Control Board (SWRCB) Leaking Underground Storage Tank Listing (LUST) sites – within ½-mile of the subject property;
  - U.S. EPA LUST sites on Tribal Lands within ½-mile of the subject property;
  - SWRCB -UST sites within ¼-mile of the site:
  - U.S. EPA UST sites on Tribal Lands within ½-mile of the subject property;
  - DTSC EnviroStor Database including known contamination, deed-restricted, and Brownfield sites - within 1-mile of the subject property; and
  - DTSC Voluntary Cleanup Program (VCP) within ½-mile of the site.

In addition, various non-ASTM, supplemental local, State, and Federal regulatory databases were searched (e.g., AST, Coal Gasification Plants, and Waste Discharge System databases) and summarized in the EDR report. The findings of the review of the EDR report are presented below.

## 5.2.1 Subject Property Records

## Database Listings

The subject property is not listed on any of the environmental databases searched.

## Regulatory Agency Records

PES searched the following agency websites for environmental records related to the subject property and properties of interest in the surrounding area:

 California State Water Resources Control Board's (CSWRCB) GeoTracker website located at http://geotracker\_swreb.ca.gov/;

- Department of Toxic Substances Control's (DTSC) EnviroStor website located at http://www.cavirostor.dtsc,ca.gov/public/default.asp; and
- Santa Clara County Department of Environmental Health (SCCDEH) website located at http://dustop.sccgov.org/.

The subject property was not listed on the referenced websites.

Additionally, PES requested records from SCCDEH and SJFD. No records were available.

#### 5.2.2 Surrounding Area

Numerous sites in the subject property vicinity are listed on one or more of the environmental databases provided in the EDR Radius Map Report (Appendix G). Agency records were reviewed for selected sites in the vicinity of the subject property. These sites included:

- 740 West San Carlos Street is located adjacent and east (hydraulically cross to downgradient) of the subject property. A geophysical survey was conducted in February 2015 to evaluate the subsurface for the presence of a 6,000-gallon fuel UST suspected to be located in the northeast portion of the property (PES, 2017). The geophysical survey identified four metallic anomalies and exploration test pits excavated to examine the four metallic anomalies revealed the likely presence of a UST constructed of redwood. A subsurface investigation in May 2015 revealed elevated concentrations of petroleum hydrocarbons in the vicinity of the suspected UST and free product in a boring advanced near a previously removed 5,000-gallon gasoline UST;
- An 18,800-gallon redwood-constructed fuel oil UST was removed from the Site in August and September 2015. Observations of soil conditions on the sidewalls and bottom of the UST excavation revealed that impacted soil (i.e., stained and/or discolored soil) is still present in the vicinity of the former UST. During the removal of the fuel conveyance pipeline, a vertical metal pipe, which was connected to the fuel conveyance pipeline, was found west of the removed UST. On September 30, 2016, the area in the vicinity of the vertical metal pipe toward the west was further evaluated. Based on the finding of the potholing activities it appears that a second redwood-constructed UST is present at the property;
- In November 2016 and February 2017, additional subsurface investigation identified, based on visual observations made during soil sampling and logging, free product present in: (1) 11 borings advanced in the UST Area; and (2) borings B23 and B24, advanced approximately 65 and 32 feet east of the subject property, respectively. The following constituents were detected above the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) Groundwater Tier 1 Environmental Screening Level (ESL) in groundwater collected from B23 and B24: total petroleum hydrocarbons quantified as gasoline (TPHg) (at a maximum concentration of 2,500 micrograms per liter [μg/L] in B23), total petroleum

hydrocarbons quantified as diesel and motor oil (TPHd and TPHmo, respectively) (at concentrations of  $160,000~\mu g/L$  in borings B23 and B24), and benzene (in B23 at a concentration of  $49~\mu g/L$ ). BTEX, tetrachloroethene (PCE), trichloroethene (TCE), vinyl chloride and several other VOCs were detected in soil gas probes SG3 and SG4, advanced approximately 34 and 33 feet east of the subject property. However, vinyl chloride was the only contaminant detected in SG3 and SG4 above the RWQCB Soil Gas Tier 1 ESL. This property is currently listed as an open case on the GeoTracker website. A copy of the investigation report (PES, 2017), which is available on the GeoTracker website, is included in Appendix F; and

A Corrective Action Plan (CAP has been prepared for the 740 West San Carlos site.
 The CAP has been approved by the SCCDEH. The remedy in the CAP includes:
 (1) removal of the second wooden UST; (2) removal of petroleum hydrocarbon-affected soil; (3) installation and sampling of groundwater monitoring wells; (4) removal of separate-phase hydrocarbons, if present; and (5) sampling and analysis of groundwater at locations east of 740 West San Carlos Street.

The remaining properties listed in the databases are not expected to present significant environmental conditions to the subject property based on one or more of the following:

(1) the listed site has received case closure by an appropriate regulatory agency; (2) the listed site is either cross-gradient or down-gradient of the subject property with respect to the groundwater flow direction; (3) the listed site is a soils-only affected case; and (4) the listed site is located at too great a distance to represent a significant environmental condition with respect to the subject property.

#### 6.0 SITE INSPECTION

Inspection of the subject property was conducted on August 16, 2017, by Mr. James Phillips of PES. Accessible areas of the site building were inspected. Site photographs are provided on Plates 3 through 10.

The subject property is currently occupied by Good News Wood Salvation, a wood salvage recycling business. The yard and driveway areas of the subject property are utilized primarily for storage and wood salvage activities; the site building is primarily used for storage.

A partially full 55-gallon drum (containing what appeared to be water), an empty 55-gallon drum, and an empty gasoline container were present in the driveway area west of the subject property building (Plate 4, Photo 1). A partially full 55-gallon drum and a small-quantity (i.e. less than 5-gallon) container of what appeared to be automatic transmission fluid (ATF) were present on the northern side of the subject property (Plate 5, Photo 1). No staining or indications of a release were observed in the vicinity of the ATF. A compressed acetylene tank was observed in the northwestern corner of the subject property. The driveway and yard areas, located on the western and southern portions of the site, respectively, contained primarily salvaged wood, tools, and miscellaneous trash and debris (Plate 5, Photo 1 and

Plate 6, Photo 1). A large dumpster, containing primarily trash and wood debris, and a portable restroom were also observed on the southern portion of the subject property.

The subject property building is primarily utilized for storage of salvaged wood, tools, and miscellaneous trash and debris (Plate 6, Photo 2 and Plate 7, Photo 1). Two areas, including several rooms in the northern portion of the building and the mezzanine level in the southern portion of the subject property building were not accessible due to the presence of large amounts of miscellaneous trash and debris (Plate, Photo 2). Three fork lifts were present in the subject property building (Plate 8, Photo 1); these appeared to be propane-powered, however, according to an employee of Good News Wood Salvation, one or more of these forklifts are currently being converted to diesel-powered (i.e., biodiesel).

The southern portion of the subject property contained one gasoline-powered generator, five lead-acid automobile batteries, a 5-gallon bucket of tractor hydraulic fluid, several small-quantity (i.e., 5 gallons or less) containers of standard automobile maintenance fluids (i.e., motor oil, coolant, ATF, etc.) and paints (Plate 8, Photo 2). Two containers (an open plastic reservoir and an open 5-gallon bucket) containing what appeared to be used motor oil were observed in the same area. Numerous compressed gas (i.e., acetylene, propane, etc.) containers were observed in the subject property building (Plate 9, Photo 1). Two 5-gallon buckets of tractor hydraulic fluid and several small-quantity (i.e., 5 gallons or less) containers of standard automobile maintenance fluids (i.e., motor oil, coolant, ATF, etc.) were observed in the southwestern corner of the subject property building (Plate 9, Photo 2). Numerous containers of compressed propane gas (i.e., for use with stoves) were observed in the southern portion of the subject property building. Some *de minimis* staining was observed on the concrete floor in the vicinity of the batteries, tractor hydraulic fluid, standard automobile maintenance fluids, and used motor oil.

#### 6.1 Chemicals/Hazardous Substances Containers

Hazardous materials use and storage is discussed above in Section 6.0.

#### 6.2 Underground and Aboveground Storage Tanks

No evidence of USTs or ASTs was observed at the site.

#### 6.3 Back-Up Generators

A gasoline-powered generator was observed in the southwestern portion of the subject property building. No staining or indications of a release were observed in the vicinity of the generator.

#### 6.4 Elevators

No elevators are present at the site.

#### 6.5 Hydraulic Equipment

No hydraulic equipment was observed at the subject property. As discussed in Section 6.0, three 5-gallon buckets of tractor hydraulic fluid were observed in the southern portion of the subject property building.

#### 6.6 Indications of Polychlorinated Biphenyls (PCBs)

No transformers or other possible sources of PCBs were observed on site. However, fluorescent light ballasts may contain PCBs.

#### 6.7 Other Conditions

#### 6.7.1 Asbestos

An assessment of asbestos-containing materials (ACM) was not conducted as part of this Phase I ESA. Standards set by the Occupational Safety and Health Administration (OSHA) require building owners to presume that thermal system insulation (TSI) and surfacing ACM found in buildings constructed before 1981, and floor tile installed in buildings through 1981, are asbestos containing, unless demonstrated to be less than 1 percent asbestos through sampling. The rule does not permit an assumption to be made that a material does not contain asbestos in buildings constructed after 1980. However, since the late 1970s to early 1980s, asbestos has been removed or substituted for in all but a small number of construction products. For example, asbestos is still used, although at low concentrations, in various mastics and roofing materials.

Based on available historical information, the commercial structure located on the subject property was built prior to 1970 and therefore may contain ACM. PES was not provided with documentation concerning ACM abatement and removal.

#### 6.7.2 Radon

The California Radon Database includes radon information from testing conducted at facilities within the subject property zip code (95126). The database includes 62 test results within the subject property zip code. One of the test results exceeded the US EPA's recommended action level of 4 picocuries per liter (pCi/l) in the first-floor area.

The survey indicates that there is a low probability for radon intrusion at the subject property area to be above the US EPA action level.

#### 6.7.3 Solid Waste

No concerns were identified with solid waste storage at the subject property.

#### 6.7.4 Lead in Paint

A lead based paint (LBP) survey was not conducted as part of this Phase I ESA. The Consumer Products Safety Commission limited lead content in residential paint to 0.06 percent (600 parts per million) in 1978. The use of paint containing greater than 0.06 percent lead was also prohibited in areas where consumers have direct access to painted surfaces.

Based on available historical information, the commercial structure located on the subject property was built prior to 1970 and therefore may contain LBP. PES was not provided with documentation concerning LBP abatement and removal.

#### 6.7.5 Vapor Intrusion Screening

As discussed above in Section 4.0, analysis of soil vapor samples collected at the subject property in 2016 identified the presence of BTEX at concentrations well below the applicable screening levels for vapor intrusion concerns. As discussed previously in Section 5.2.2, several subsurface investigations at the adjacent property to the east (740 West San Carlos Street) have identified the presence of petroleum hydrocarbons and associated constituents (including VOCs) in soil, soil gas, and groundwater. Borings B23 and B24, advanced approximately 65 and 32 feet east of the subject property, respectively, identified free product in groundwater. Based on the documented contamination in soil, soil gas, and groundwater, the proximity to the subject property, and the results of the 2016 soil vapor investigation conducted primarily on the western and central portions of the subject property, there is the potential for vapor intrusion concerns associated with 740 West San Carlos Street property to be present on the eastern portion of the subject property.

#### 7.0 FINDINGS AND CONCLUSIONS

#### 7.1 Summary of Findings

The subject property is located near the southwest corner of the intersection of West San Carlos Street and Dupont Street in the City of San Jose, County of Santa Clara, California. The subject property is currently identified by the address 750 West San Carlos Street and is located in an area with mixed commercial and residential uses. The subject property encompasses approximately 0.46 acres of land and consists of a single legal parcel identified by Santa Clara County Assessor's Parcel Number (APN) 264-15-003. The site is bounded to the north by West San Carlos Street, to the south by commuter railroad tracks, to the east by a mixed-use property, and to the west by commercial/residential buildings.

Based on a review of historical resources, the subject property was vacant in 1884. A Sanborn map from 1915 shows a lumber company present at the subject property. Between 1930 and 1955, several canning and dried fruit businesses (identified as 750 West San Carlos Street), a grocery and liquor business (identified as 752 West San Carlos Street), and several lumber

companies (identified as 754 West San Carlos Street) were present at the subject property. Foster and Kleiser, a billboard company (also identified by 754 West San Carlos Street), also occupied the site from at least 1940 to at least 1957. The existing subject property building appears to have been constructed sometime prior to 1950. During the 1960s and 1970s, tenants at the site included building and masonry contractors, an accountant, a roofing contractor, a property management company, a furniture and upholstery shop, and an awning manufacturer.

The subject property was occupied by Good News Wood Salvation, a wood salvage recycling business, at the time of the site inspection. Hazardous materials observed at the site were limited to lead-acid automobile batteries and various containers of gasoline, tractor hydraulic fluid, standard automobile maintenance fluids (i.e., motor oil, ATF, coolant, etc.), used motor oil, and paints. Some *de minimis* staining was observed at the subject property during the site inspection (Section 6.0). No regulatory agency records concerning hazardous material use or storage at the subject property were available.

Analysis of soil vapor samples collected at the subject property in 2016 identified the presence of BTEX at concentrations well below the applicable screening levels for vapor intrusion concerns. Several subsurface investigations at the adjacent property to the east (740 West San Carlos Street) have identified the presence of petroleum hydrocarbons (including free product) and associated constituents in soil, soil gas, and groundwater.

#### 7.2 Conclusions

PES has performed a *Phase I Environmental Site Assessment*, in conformance with the scope and limitations of ASTM Practice E 1527-13, of the property located at 750 West San Carlos Street in San Jose, California. Any exceptions to, or deletions from, this practice are described in Section 1.3 of this report. This assessment revealed no recognized environmental conditions (RECs) in connection with the subject property.

PES observed the following noteworthy observations during the performance of the Phase I ESA:

• Analysis of soil vapor samples collected at the subject property in 2016 identified the presence of BTEX at concentrations well below the applicable screening levels for vapor intrusion concerns. However, several subsurface investigations at the adjacent property to the east (740 West San Carlos) have identified the presence of petroleum hydrocarbons and associated constituents in soil, soil gas, and groundwater. Borings advanced approximately 65 (B23) and 32 (B24) feet east of the subject property, respectively, identified free product in groundwater. Based on the documented contamination in soil, soil gas, and groundwater, the proximity to the subject property, and the results of the 2016 soil vapor investigation conducted on the western and central portions of the subject property, there is the potential for vapor intrusion concerns to be present on the eastern portion of the subject property;

- Based on the date of construction of the subject property buildings, materials in the
  buildings may contain asbestos. As such, prior to any significant renovation and/or
  demolition of the site building, testing for asbestos content of the building materials to
  be disturbed should be performed, so that ACM, if present, can be properly managed.
  An asbestos O&M plan should be developed for the building, if/as necessary, based on
  testing performed for the subject property; and
- Based on the construction date of the site building, the potential exists for lead-based
  paint to be present at the site. Prior to significant renovation or demolition activities,
  a lead paint survey should be conducted so that these materials, if present, can be
  properly managed.

#### 8.0 DATA GAPS

The following data gaps that may have affected our ability to identify RECs associated with the subject property were identified during the performance of this Phase I ESA:

- PES requested records from SCCDEH for several offsite properties. As of the date of
  this report, these records have not been made available to PES for review. PES will
  review these records when they become available and will notify BAPD in writing of
  any significant changes in the conclusions of this report;
- Several rooms in the northern portion of the building and the mezzanine level in the southern portion of the subject property building were inaccessible due to the presence of large amounts of miscellaneous trash and debris; and
- Due to the presence of wood salvage, miscellaneous trash and debris, etc., present in exterior portions of the subject property, some exterior areas of the site were not accessible for visual inspection.

#### 9.0 ADDITIONAL SERVICES

No additional services were performed as part of this Phase I ESA.

#### 10.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

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.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

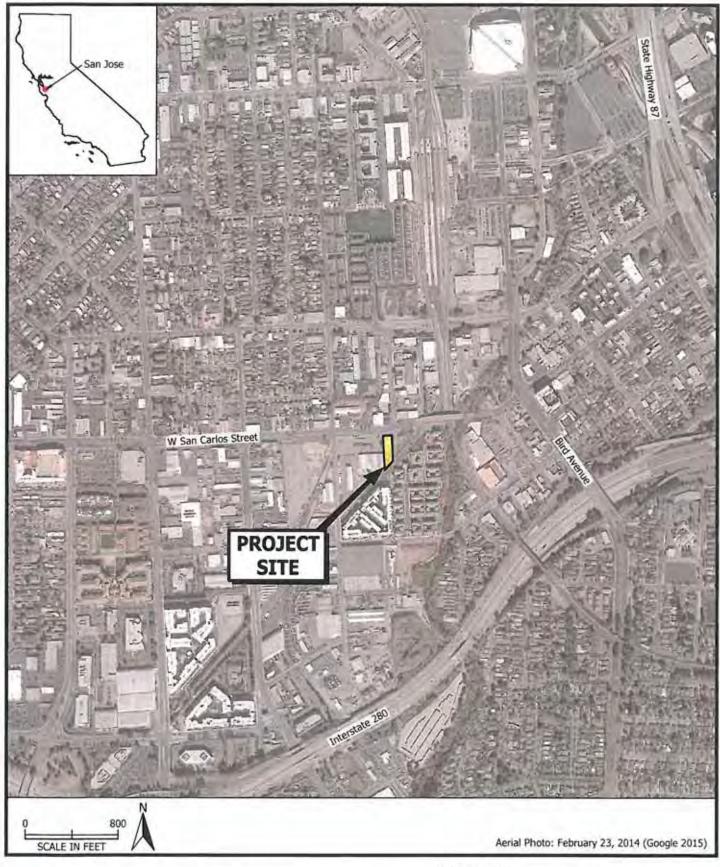
Resumes of the Environmental Professionals signing this report are presented in Appendix H.

#### 11.0 REFERENCES

- PES Environmental, Inc., 2017. Revised Corrective Action Plan, 740 West San Carlos Street, San Jose, California. June 5.
- PES Environmental, Inc., 2016. Summary of Limited Soil Vapor Investigation, 750 West San Carlos Street, San Jose, California. February 10.
- PES Environmental, Inc., 2015. Phase I Environmental Site Assessment, 740 and 750 West San Carlos Street, San Jose, California. May 14.

PES Environmental, Inc.

## ILLUSTRATIONS





## **Site Location**

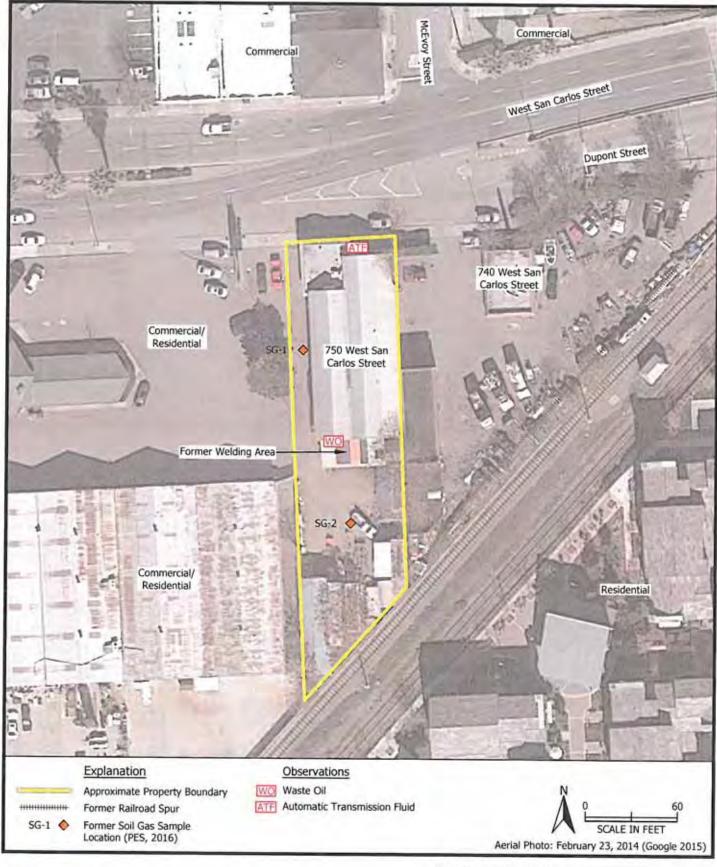
Phase I Environmental Site Assessment 750 West San Carlos Street San Jose, California

PLATE

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DRAWING NUMBER

JP REVIEWED BY





Site Plan and Vicinity

Phase I Environmental Site Assessment 750 West San Carlos Street San Jose, California 2

1440.006.01.003

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9/17

DRAWING NUMBER

REVIEWED BY



Photo 1. View of the subject property as seen from West San Carlos Street, looking south. Photograph taken August 16, 2017.



Photo 2. View of the northern portion of the subject property, looking east. Photograph taken August 16, 2017.



Site Photographs

Phase I Environmental Site Assessment 750 West San Carlos Street San Jose, California 3

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Photo 1. View of the western portion of the subject property, looking north. Photograph taken August 16, 2017.



Photo 2. View of the southern portion of the subject property, looking north. Photograph taken August 16, 2017.



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Photo 1. View of the southern portion of the subject property, looking southeast. Photograph taken August 16, 2017.



Photo 2. View of drum located on the northern portion of the subject property. Photograph taken August 16, 2017.



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Photo 1. View of miscellaneous trash and debris observed on the southern portion of the subject property. Photograph taken December 12, 2016.

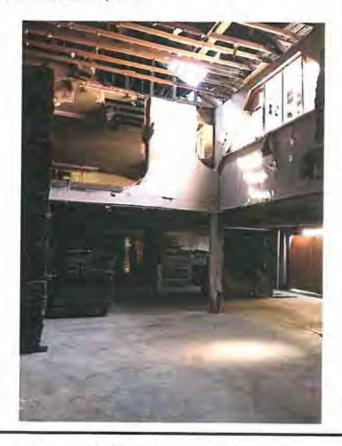


Photo 2. View of northern portion of the subject property building, looking southwest. Photograph taken August 16, 2017.



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Photo 1. View of southern portion of the subject property building, looking northeast. Photograph taken August 16, 2017.



Photo 2. View of miscellaneous trash and debris observed in the northern portion of the subject property building. Photograph taken August 16, 2017.



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Photo 1. View of typical forklift observed in the northern portion of the subject property building. Photograph taken August 16, 2017.



Photo 2. View of gasoline-powered generator and various containers of gasoline, paint, automobile motor oil, and tractor hydraulic fluid located in the southern portion of the subject property building. Photograph taken August 16, 2017.



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Photo 1. View of typical compressed acetylene gas container observed in the southern portion of the subject property building. Photograph taken August 16, 2017.



Photo 2. View of partially-full 5-gallon container of tractor hydraulic fluid located in the southern portion of the subject property building. Photograph taken August 16, 2017.



Site Photographs

Phase I Environmental Site Assessment 750 West San Carlos Street San Jose, California

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1440.006.01.003



Photo 1. View of the adjacent property to the west (800 West San Carlos Street). Photograph taken August 16, 2017.



Photo 2. View of the adjacent property to the east (740 West San Carlos Street). Photograph taken August 16, 2017.



Site Photographs

Phase I Environmental Site Assessment 750 West San Carlos Street San Jose, California 10

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## A Report Prepared For:

Bay+Area Property Developers 1850 Mt. Diablo Boulevard, Suite 337 Walnut Creek, California 94596

Attention: Mr. Blake Peters

## SUPPLEMENTAL SUBSURFACE INVESTIGATION REPORT 750 WEST SAN CARLOS STREET SAN JOSE, CALIFORNIA

**OCTOBER 5, 2017** 

By:

Gary Thomas, P.G. No. 8278

Associate Geologist

Kyle S. Flory, P.G. No. 647

Principal Geologist

1440.006.01.005

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DISTRIBUTION

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Plate 1 Site Location

Plate 2 Site Plan and Soil/Soil Vapor Sample Locations

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#### 1.0 INTRODUCTION

This report has been prepared by PES Environmental, Inc. (PES) for Bay + Area Property Developers (BAPD) to summarize the results of a supplemental subsurface investigation conducted at 750 West San Carlos Street, San Jose, California (the Site or subject property). The Site location is shown on Plate 1 and the Site plan and vicinity is shown on Plate 2. The subject property consists of approximately 0.4-acre of land zoned as combined industrial-commercial and developed with a single-story commercial building with mezzanine and a storage shed.

PES understands that BAPD is considering acquisition of the site and, if acquired, intends to develop it for residential purposes. PES further understands that the City of San Jose Planning Division (City) reviewed a September 2017 Phase I Environmental Site Assessment (ESA) <sup>1</sup> prepared for the subject property and based on their review, the City requested that a subsurface investigation be conducted to further evaluate potential vapor intrusion concerns related to the adjacent property at 740 West San Carlos Street, and further evaluate the subject property due to historical site uses. The findings of the 2017 Phase I ESA are discussed below in the background section.

This report is organized as follows:

- Section 2 summarizes the findings of PES' 2015 and 2017 Phase I ESAs, and soil vapor investigation conducted in January 2016;
- Section 3 discusses the field activities, and presents the methods and procedures utilized during the supplemental investigation and the investigation results; and
- Section 4 presents recommendations with respect to the findings of this investigation.

#### 2.0 BACKGROUND

PES conducted a Phase I ESA for the subject property and the adjacent 740 West San Carlos Street property in May 2015<sup>2</sup> and a second Phase I ESA was conducted for the subject property in September 2017<sup>3</sup>. As discussed in the September 2017 Phase I ESA, the subject property is currently occupied by Good News Wood Salvation, a wood salvage recycling business. These assessments revealed no recognized environmental conditions (RECs) in connection with the subject property. However, PES observed the following noteworthy observations during the performance of the 2017 Phase I ESA:

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<sup>&</sup>lt;sup>1</sup> PES Environmental, Inc., 2017. *Phase I Environmental Site Assessment, 750 West San Carlos Street, San Jose, California.* September 1.

<sup>&</sup>lt;sup>2</sup> PES Environmental, Inc., 2015. *Phase I Environmental Site Assessment, 740 and 750 West San Carlos Street, San Jose, California.* May 14.

<sup>&</sup>lt;sup>3</sup> PES Environmental, Inc., 2017. *Phase I Environmental Site Assessment, 750 West San Carlos Street, San Jose, California.* September 1.

- Analysis of soil vapor samples collected at the subject property in 2016 identified the presence of benzene, toluene, ethylbenzene, and/or xylenes (collectively, BTEX compounds) at concentrations well below the applicable screening levels for vapor intrusion concerns. However, several subsurface investigations at the adjacent property to the east (740 West San Carlos) have identified the presence of petroleum hydrocarbons and associated constituents in soil, soil gas, and groundwater. Borings advanced approximately 65 (B23) and 32 (B24) feet east of the subject property, respectively, identified free product in groundwater. Based on the documented contamination in soil, soil gas, and groundwater, the proximity to the subject property, and the results of the 2016 soil vapor investigation conducted on the western and central portions of the subject property, there is the potential for vapor intrusion concerns to be present on the eastern portion of the subject property;
- Based on the date of construction of the subject property buildings, materials in the
  buildings may contain asbestos. As such, prior to any significant renovation and/or
  demolition of the site building, testing for asbestos content of the building materials to
  be disturbed should be performed, so that asbestos-containing material (ACM),
  if present, can be properly managed. An asbestos O&M plan should be developed
  for the building, if/as necessary, based on testing performed for the subject property;
  and
- Based on the construction date of the Site building, the potential exists for lead-based paint to be present at the Site. Prior to significant renovation or demolition activities, a lead paint survey should be conducted so that these materials, if present, can be properly managed.

As noted above, a limited soil gas survey was conducted in January 2016 at two locations (SG-1 and SG-2) on the subject property and the methods and results were summarized in a report dated February 10, 2016<sup>4</sup>. Pertinent data from this investigation is included in Appendix A. The soil gas samples were analyzed for volatile organic compounds (VOCs) and total volatile hydrocarbons (TVH). Aromatic hydrocarbons, specifically BTEX, were detected in soil gas samples collected at both 5 and 10 feet below ground surface (bgs) at each of the two soil gas sampling locations at the site. However, based on detections of BTEX compounds at concentrations well below applicable screening levels for vapor intrusion concerns, these constituents do not appear to present an unacceptable risk to human health or the environment. The report concluded that the results of the limited soil gas investigation indicated: (1) VOCs and volatile hydrocarbons were not present in soil gas at levels which would present a vapor intrusion concern for the existing or future development at the site; and (2) no further environmental assessment appeared warranted.

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<sup>&</sup>lt;sup>4</sup> PES, 2016. Summary of Limit Soil Vapor Investigation, 750 West San Carlos Street, San Jose, California. February 10.

#### 3.0 SUBSURFACE INVESTIGATION

During the subsurface investigation conducted on September 21, 2017, PES collected soil gas and/or soil samples at the following locations (see Plate 2):

- Soil gas samples were collected from two temporary soil gas borings (i.e., SG-3 and SG-4, with nested intakes at 5 and 10 feet bgs located near the property boundary with the 740 West San Carlos Street site to the east to assess current soil gas conditions. As indicated on Tables 1 and 2, soil samples were also collected and submitted for analysis from each of the soil gas borings; and
- Soil samples were collected from two borings (i.e., SB-1 and SB-2) that were advanced near former soil gas locations SG-1 and SG-2.

The field preparation activities, sampling and analytical methods used for the subsurface investigation, and investigation results are discussed below. Drilling and sampling activities were conducted with oversight by a licensed California Professional Geologist.

#### 3.1 Field Preparation Activities

Prior to conducting subsurface investigation activities, PES contacted Underground Service Alert more than 48 hours before beginning drilling activities to locate and mark utilities at the Site. Also, C. Cruz Sub-Surface Locators, Inc. (C. Cruz) of Milpitas, California, cleared the boring and soil gas locations for underground subsurface utilities. Additionally, PES coordinated with Environmental Control Associates, Inc. (ECA), of Aptos, California, a licensed drilling contractor possessing a valid C-57 water well contractor's license issued by the State of California, to schedule the sampling activities. A Site-specific Health and Safety Plan that complied with applicable federal, California Occupational Safety and Health Administration (OSHA), and Title 29 CFR 1910.120 guidelines was prepared by PES for the sampling activities. A drilling permit from the Santa Clara Valley Water District was not needed because the borings were shallower than 45 feet bgs.

#### 3.2 Active Soil Gas Survey

#### 3.2.1 Active Soil Gas Survey Methods and Analysis

The soil gas survey was conducted on September 21, 2017 in accordance with the procedures outlined in the *Advisory for Active Soil Gas Investigations* (ASGI) published by the Department of Toxic Substances Control, the Regional Water Quality Control Board, Los Angeles Region and the California Regional Water Quality Control Board, San Francisco Bay Region dated July 2015<sup>5</sup>. The temporary soil gas sampling probes were installed using a truck-mounted direct push drilling rig operated by ECA.

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<sup>&</sup>lt;sup>5</sup> Department of Toxic Substances Control (DTSC), 2015. *Advisory - Active Soil Gas Investigations*. Jointly developed by the California Environmental Protection Agency Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board – Los Angeles Region (LARWQCB) and RWQCB – San Francisco Region (RWQCB). July.

The multi-depth temporary soil gas probes were constructed by nesting two probes in each borehole with soil gas inlets placed at depths of approximately 5 and 10 feet bgs. The probes were constructed by advancing 2.25-inch outside-diameter sampling rod to the desired depth; soil was continuously sampled and logged. The soil cores were field screened for VOCs via headspace analyses using a photoionization detector (PID) and readings were recorded on the lithologic log. Soil samples for laboratory analysis were collected at depths of approximately 1 to 1.5 and 4 to 4.5 feet bgs following the soil sampling analytical methods and procedures discussed below in Section 3.3.1. A PES geologist supervised the drilling and probe installation activities and prepared lithologic logs using the Unified Soil Classification System (USCS) and Munsell Color Index. Copies of the lithologic logs are included in Appendix B.

The soil gas probes were constructed within the direct-push sampler rods, utilizing a stainless-steel vapor probe tip, fitted with ¼-inch outside-diameter Teflon® tubing. The stainless-steel vapor probe tip for each interval was placed at the midpoint of each 1-foot thick sandpack (No. 2/12 sand). One foot of dry granular bentonite was placed on top of each sand pack, followed by hydrated bentonite in the interval between the probe tips and above the upper dry bentonite seal to the surface. The probes were allowed to equilibrate for a minimum of 2 hours prior to purging and sampling.

Prior to the collection of soil gas samples from each probe, shut-in leak testing, purging, and sample train leak testing was performed. The shut-in test consisted of assembling above-ground sampling apparatus (e.g., valves, lines and fittings downstream from the top of the probe), and evacuating the lines to a measured vacuum of approximately 100 inches of water column (in-H2O), then shutting the vacuum in with closed valves on opposite ends of the sampling train. A vacuum gauge was used to assess if there is any observable loss of vacuum (for at least one minute) prior to purging and the collection of soil gas samples. If observable vacuum loss was noted, the sample train was re-assembled and the shut-in test was repeated. This process was repeated as necessary until a successful shut-in test was performed.

A default of three purge volumes was extracted prior to collecting the soil gas samples. The stagnant air was purged with a six-liter SUMMA canister. The purge volume was calculated using the volumes of: (1) the internal volume of the tubing; (2) the void space of the sand pack around the probe tip; and (3) the void space of the dry bentonite in the annular space. In accordance with the ASGI, purging and collection of soil gas samples was performed using a flow rate of 100 to 200 milliliters per minute (mL/min) and a low vacuum of less than 100 inches of water was maintained to mitigate ambient air breakthrough into samples.

Following completion of the shut-in leak test and purging, sample train leak testing was performed using 1,1-difluoroethane (1,1-DFA) as a propellant tracer in combination with a shroud box. The shroud box consisted of a polycarbonate box equipped with an access port to allow charging of the box with a propellant tracer. The shroud box was positioned over the wellhead with the sample collection tubing passing through the bottom. Once in position, the sample train was connected to a 1-liter soil gas sample SUMMA canister. For quality assurance/quality control (QA/QC) evaluation, a second 1-liter SUMMA canister was placed

within the shroud and used to collect a shroud air sample concurrent with each soil gas sample to quantitatively assess the propellant tracer concentration in the shroud. The shroud box was then charged by spraying the tracer propellant into the shroud box. The shroud box remained in place for the duration of sampling.

A 1-liter vapor sample SUMMA canister that was batch-certified clean by a California-certified analytical laboratory was utilized to collect the soil gas sample. Each shroud and soil gas sample canister was filled until the vacuum gauge reads approximately 5 inches of mercury (Hg) or less.

After sampling, the Summa canisters were transported to K-Prime Inc. (K-Prime), of Santa Rosa, California, under chain-of-custody protocol. The soil gas samples were analyzed for VOCs using U.S. Environmental Protection Agency (U.S. EPA) Test Method TO-15 and for 1,1-DFA by U.S. EPA Test Method TO-3. The shroud samples were analyzed for 1,1-DFA by U.S. EPA Test Method TO-3.

Following the completion of the soil gas sampling, ECA backfilled the borings with grout. Soil cuttings generated during drilling activities are temporarily stored on-Site in a 55-gallon drum until arrangements are made for disposal.

#### 3.2.2 Soil Gas and Shroud Sample Analytical Results

Analytical results for the soil gas samples are presented in Table 3 and the K-Prime laboratory analytical reports and chain of custody forms for the soil gas and shroud samples are presented in Appendix C. As indicated on the table, the leak check compound (1,1-DFA) was not detected at or above the indicated reporting limit in the soil gas samples. The results are summarized below.

The soil gas analytical results were compared to California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) soil gas Tier 1 Environmental Screening Levels (ESLs)<sup>6</sup>. As indicated on Table 3, VOCs detected in the soil gas samples collected at these locations SG-3 and SG-4 included benzene, toluene, ethylbenzene, m,p-xylene, o-xylene, tetrachloroethene (PCE), 1,1,1-trichloroethane (1,1,1-TCA), and 1,3-dichlorobenzene (1,3-DCB). None of these constituents were detected at or above the soil gas Tier 1 ESLs. As indicated on Table 3, the leak check compound (1,1-DFA) was not detected at or above the laboratory reporting limit in the samples.

Data quality for the soil gas samples was assessed by implementing appropriate QA/QC procedures and through review of analytical data, including analysis of a field duplicate sample and laboratory QA/QC data. The following is a summary of the data quality review:

<sup>&</sup>lt;sup>6</sup> California Regional Water Quality Control Board - San Francisco Region (RWQCB), 2016. February 2016, Rev. 3, Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) Environmental Screening Levels (ESLs).

- All samples were analyzed within the required holding times for the requested analyses;
- The method blanks did not contain VOCs at or above the laboratory reporting limits;
- The results of the laboratory control and laboratory control duplicate samples were within acceptable ranges; and
- Results for the field duplicate sample from the 5 feet bgs sample collected at location SG-4 generally agreed with respect to quantity (within acceptable precision limits) and to detection of target compounds. The relative percent differences (RPDs) for the detected compounds ranged from 2.5 to 4.3 percent. The duplicate result indicates acceptable quality of the data set.

#### 3.3 Soil Sampling Activities

#### 3.3.1 Soil Sampling Procedures and Analytical Methods

During subsurface soil sampling activities, ECA utilized a truck-mounted direct-push drilling rig to advance the borings to the desired depth. Continuous soil cores were collected from each of the borings, which were advanced using dual-walled direct-push tooling equipped with clear polyvinyl chloride (PVC) liners.

PES observed the borehole drilling and prepared a lithologic log for the continuously cored borings using the USCS and Munsell Color Index. The soil cores were screened for VOCs via headspace analysis using a PID. The PID readings were recorded on the lithologic logs. Lithologic logs are presented in Appendix B. As indicated on the boring logs, soil samples for submittal to the laboratory were collected at depths of 1 to 1.5 and 4 to 4.5 feet bgs. Soil samples for VOC analysis were collected using Terra Core™ samplers in accordance with U.S. EPA Method 5035 protocols.

Sample containers were labeled to indicate project location, job number, boring number, sample number, and time and date collected. The samples were immediately placed in a thermally insulated cooler containing ice. The samples were transported under chain of custody protocol to Enthalpy Analytical (Enthalpy) in Berkeley, California, which is a California state-certified laboratory for the chemical analyses performed. As indicated on Tables 1 and 2, select soil samples from the soil and soil gas borings were analyzed by one or more of the following constituents:

- VOCs by U.S. EPA Test Method 8260B;
- TPHg by U.S. EPA Test Method 8015B;

- TPH quantified as diesel/motor oil (TPHd/mo) by U.S. EPA Test Method 8015B, including silica gel cleanup (U.S. EPA Method 3630C); and
- Title 22 metals using U.S. EPA Test Method 6010B and 7471B.

In addition, two soil samples were analyzed for soluble chromium using the California Waste Extraction Test (WET) analysis with extracts digested using U.S. EPA Method 3010A and analyzed by U.S. EPA Method 6010B.

Downhole drilling and sampling equipment were cleaned via high pressure, hot water washes prior to use and between the soil and soil gas borings. Upon completion of sampling activities, each borehole was grouted to the surface with cement grout. Soil cuttings generated during drilling activities are temporarily stored on-Site in 55-gallon drums until arrangements are made for disposal.

#### 3.3.2 Subsurface Conditions and Soil Analytical Results

The following sections present the results of the soil sampling investigation including a discussion of the subsurface conditions (Section 4.2.2.1) and the soil analytical results (Section 4.2.2.2).

#### 3.3.2.1 Subsurface Conditions

Based on the findings of this investigation, it appears that the Site is underlain by minimum of 8.5 feet of interbedded silts and clays with varying amounts of sand. In soil borings SB-1 and SB-2, poorly-graded sand with varying amounts of gravel was encountered at 8.5 feet bgs and extended to the total depth explored (i.e., 10.5 feet bgs). Brick fragments were present at approximately 2 feet bgs in soil borings SB-1 and SB-2. PID readings in the soil and soil gas borings ranged from 0 to 0.1 parts per million by volume (ppmv) and no odors were noted in the borings. Specific lithologies encountered at each boring are described in the boring logs included in Appendix B.

#### 3.3.2.2 Soil Analytical Results

Analytical results for the soil samples are summarized in Tables 1 and 2. Laboratory analytical reports and chain-of-custody forms are presented in Appendix D. The soil results presented on Table 1 (petroleum hydrocarbons and VOC constituents) and 2 (metals) and discussed below were compared to:

• Soil Tier 1 ESLs developed by the RWQCB<sup>7</sup>;

<sup>&</sup>lt;sup>7</sup> California Regional Water Quality Control Board - San Francisco Region (RWQCB), 2016. February 2016, Rev. 3, Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) Environmental Screening Levels (ESLs).

- The arsenic results were compared to the RWQCB background arsenic concentration of 11 mg/kg; and
- The soluble chromium results on Table 2 were compared to soluble threshold limit concentration (STLC) limit.

#### 3.3.2.2.1 Organic Constituents

As indicated on Table 1, organic constituents detected in the soil samples included TPHd and TPHmo. TPHg and VOCs were not detected at or above the laboratory reporting limits in the soil samples. The results for TPHd and TPHmo are summarized below:

- **TPHd:** TPHd was detected in 3 of 6 soil samples at concentrations ranging from 1.6 mg/kg (1 to 1.5 feet bgs sample from location SB-1) to 12 mg/kg (1 to 1.5 feet bgs sample from location SG-3). None of the detected concentrations are above the TPHd soil Tier 1 ESL of 230 mg/kg; and
- **TPHmo:** TPHmo was detected in 4 of 6 soil samples at concentrations ranging from 10 mg/kg (1 to 1.5 feet bgs sample from location SB-1) to 290 mg/kg (1 to 1.5 feet bgs sample from location SG-3). None of the detected concentrations are above the TPHmo soil Tier 1 ESL of 5,100 mg/kg.

#### 3.3.2.2.2 Metals

Thirteen (13) of the Title 22 list of 17 metals were detected in the four soil samples analyzed during the investigation (Table 2). As indicated on Table 2, the arsenic results, which range in concentration from of 3.3 mg/kg (1 to 1.5 feet bgs sample from location SG-3) to 17 mg/kg (1 to 1.5 feet bgs sample from location SB-1), are the only laboratory analytical result above soil Tier 1 ESLs. The maximum concentration of arsenic (17 mg/kg) in the 1 to 1.5 feet bgs sample collected from location SB-1 is slightly above the RWQCB background arsenic concentration of 11 mg/kg. However, the average concentration of arsenic in the four soil samples is 7.9 mg/kg, which is below the RWQCB background arsenic concentration. Additionally, studies of California soils have identified background concentrations that range from 0.6 to 42 mg/kg for arsenic<sup>8 9</sup>. The maximum and average arsenic concentrations discussed above are less than these levels and therefore are considered to represent background conditions.

To evaluate for soluble metal characteristics, the California WET extraction method was performed on two soil samples (shallow sample at location SG-3 and deeper sample at location SB-1) with total chromium concentrations that were at least 10 times greater than the

144000601R003 8

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<sup>&</sup>lt;sup>8</sup> Kearney Foundation of Soil Science, 1996. *Background Concentrations of Trace and Major Elements in California Soils*. March.

<sup>&</sup>lt;sup>9</sup> Lawrence Berkeley Lab, 2002. *Analysis of Background Distribution of Metals in the Soil at Lawrence Berkeley National Laboratory* for the Lawrence Berkeley National Laboratory, Environmental Restoration Program. June 2002.

chromium Title 22 CCR STLC limit of 5 milligrams per liter (mg/L). As indicated on Table 2, chromium was not detected at or above the laboratory detection limit of 0.25 mg/L in these samples.

#### 4.0 DISCUSSION AND RECOMMENDATIONS

A supplemental subsurface investigation was conducted at the Site in September 2017. During the investigation soil and soil vapor samples were collected to further assess subsurface conditions potentially affected by environmental conditions on an immediately adjacent property and from previous site uses. Previous Phase I ESA reports prepared for the Site did not identify Recognized Environmental Conditions (RECs) associated with the subject property. The soil vapor sampling was conducted at locations on the eastern portion of the Site in order to assess potential vapor intrusion concerns associated with the property located immediately east of the subject property. Soil samples were collected from the current soil vapor borings as well as locations of prior soil vapor sampling to assess soil conditions in the center and western portions of the Site.

Soil samples were collected and analyzed for petroleum hydrocarbons, VOCs, and metals. No petroleum hydrocarbons, VOCs or metals, with the exception of arsenic, were detected at or above RWQCB Tier 1 ESLs. All four soil samples contained concentrations of arsenic above the Tier 1 ESL. The RWQCB background levels for arsenic is also above the Tier 1 ESL. One soil sample contained arsenic at a concentration slightly above the RWQCB background level but the average concentration of arsenic in the four samples is below the background level. Additionally, studies of California soils have identified background concentrations that range from 0.6 to 42 mg/kg for arsenic. The maximum and average arsenic concentrations detected on the Site are less than these levels and therefore are considered to represent background conditions.

Four soil vapor samples were collected and analyzed for VOCs. No VOCs were detected at or above the RWQCB Tier 1 RWQCB Tier 1 ESLs.

Based on the information gathered during this supplemental investigation and the previous investigation conducted by PES in January 2016, further investigation or remediation at the Site is not warranted, nor recommended.

#### **TABLES**

Summary of Soil Analytical Results - Petroleum Hydrocarbons and VOCs 750 West San Carlos Street Table 1

San Jose, California

				Petrole	Petroleum Hydrocarbons	Irbons			Volatile Organic Compounds	c Compour	spu	
		Sample								Xylenes,		Other
Sample	Sample	Depth	Sample	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Total	MTBE	VOCs
Location	Identification	(feet bgs)	Date	(mg/kg)	(mg/kg)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
SG-3	SG-3-1-1.5	1 to 1.5	9/21/2017	< 0.15	12	730	< 4.6	< 4.6	< 4.6	< 4.6	< 4.6	All ND
	SG-3-4-4.5	4 to 4.5	9/21/2017	< 0.16	< 1.0	< 5.0	< 4.1	< 4.1	< 4.1	< 4.1	< 4.1	All ND
SG-4	SG-4-1-5	1 to 1.5	9/21/2017	< 0.16	3.4	28	> 3.6	< 3.6	< 3.6	> 3.6	< 3.6	All ND
	SG-4-4-5	4 to 4.5	9/21/2017	< 0.18	< 1.0	< 5.0	< 3.9	< 3.9	< 3.9	< 3.9	< 3.9	All ND
SB-1	SB-1-1-1.5	1 to 1.5	9/21/2017	< 0.17	1.6	10	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	All ND
	SB-1-4-5	4 to 4.5	9/21/2017	< 0.15	< 0.99	15	< 3.9	< 3.9	< 3.9	< 3.9	< 3.9	All ND
		Soil	Soil Tier 1 ESL (note 1)	100	230	5,100	0.044	2.9	1.4	2.3	23	N/A

Detections are shown in bold.

Results equal to or exceeding the Tier 1 soil ESLs are shaded.

# Abbreviations:

bgs = below ground surface.

TPHg = Total petroleum hydrocarbons quantified as gasoline.

TPHd = Total petroleum hydrocarbons quantified as diesel.

TPHmo = Total petroleum hydrocarbons quantified as motor oil.

VOCs = Volatile organic compounds.

MTBE = Methyl tert-butyl ether

µg/kg = Micrograms per kilogram.

mg/kg = Milligrams per kilogram. <0.15 = Not detected at or above the specified laboratory reporting limit. ND = Not detected at or above the laboratory reporting limit.

NE = Not established.

N/A = Not applicable.

1. ESL = February 2016 (Rev. 3) Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) soil Tier 1 Environmental Screening Levels (ESLs).

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Table 2
Summary of Soil Analytical Results - Metals
750 West San Carlos Street
San Jose, California

Sample	Sample	Sample	Sample	Antimony	Arsenic	Arsenic Barium	Beryllium	Cadmium	Chromium	Extractable (WET)	Cobalt	Copper	Lead	Mercury	Molybdenum	Nicke	Selenium	Silver	Thallium	Vanadium	Zinc
Location	Identification	(feet bgs)	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/L)	(mg/kg)	(mg/kg) (	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SG-3	SG-3-1-1.5	1 to 1.5	9/21/2017	< 2.0	3,3	200	0.64	< 0.25	20	< 0.25	1	30	13	960"0	< 0.25	29	< 2.0	< 0.25	< 0.50	38	160
	SG-3-4-4.5	4 to 4.5	9/21/2017	< 2.0	5.8	140	69.0	< 0.26	49	:	9.9	24	6.1	990"0	0.59	24	< 2.0	< 0.26	< 0.51	52	09
SB-1	SB-1-1-5	1 to 1.5	9/21/2017	< 2.0	17	190	0.73	0.45	48		9.6	31	7.4	0.091	< 0.26	61	< 2.0	< 0.26	< 0.52	49	75
	SB 1-4-5	4 to 4.5	9/21/2017	< 1.9	5.4	340	69.0	3.0	50	< 0.25	7.5	23	69	0.038	0.90	58	< 1.9	< 0.23	< 0.46	47	180
		Soil T	Soil Tier 1 ESL (note 1)	31	0.067	3,000	42	39	NE	NE	23	3,100	80	13	390	98	390	390	0.78	390	23,000
	Backgroun	d Arsenic Conc	Background Arsenic Concentration (note 2)	N/A	11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A/N	N/A

Detections are shown in **bold.**Results equal to or exceeding the Tier 1 soil ESLs are shaded.

Abbreviations:
bgs = bdw ground surface.
mg/Kg = Militgrams per kilogram.
mg/L = Militgrams per kilogram.
mg/L = Militgrams per kilogram.
c 2.0 = not detected at or above the specified laboratory reporting limit.
- Not Analyzed.
- Not Analyzed.
N/A = Not applicable.

Notes:
1. ESL = February 2016 (Rev. 3) Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) soil Tier 1 Environmental Screening Levels (ESLs).
2. SFRWQCB background arsenic concentration.

10/4/2017

Summary of Soil Gas Analytical Results 750 West San Carlos Street San Jose, California Table 3

Sample	Sample	Date	Sample	Benzene	Toluene	Ethyl- benzene	m,p- Xylene	o-Xylene	PCE	1,1,1-TCA	1,3-DCB	Other VOCs	1,1-DFA (Leak Check Compound)
Location	Identification	Collected	(feet bgs)	(µg/m <sub>3</sub> )	(µg/m³)	(µg/m³)	(mg/m³)	(mg/m³)	(µg/m <sub>3</sub> )	(mg/m³)	(µg/m³)	(mg/m³)	(ppmV)
SG-3	SG-3-5	09/21/17	2	< 3.19	< 3.77	< 4.34	< 8.68	< 4.34	< 6.78	< 5.46	< 6.01	All ND	< 10.0
	SG-3-10	09/21/17	10	< 3.19	< 3.77	4.43	20.7	69-9	85.0	< 5.46	6.25	All ND	< 10.0
SG-4	SG-4-5	09/21/17	2	6.20	8.37	< 4.34	< 8.68	< 4.34	< 6.78	109	< 6.01	All ND	< 10.0
	SG-4-5-DUP	09/21/17	2	6.36	8.74	< 4.34	< 8.68	< 4.34	< 6.78	106	< 6.01	All ND	< 10.0
	SG-4-10	09/21/17	10	9.52	< 3.77	< 4 34	< 8 68	< 4.34	< 6.78	91.0	< 6.01	All ND	< 10.0
		Tier 1 Soil G	Tier 1 Soil Gas ESL (Note 1)	48	160,000	260	52,000	52,000	240	520,000	NE	W/A	N/A

Detections are shown in **bold**.

Results equal to or exceeding the Tier 1 soil gas ESLs are shaded.

# Abbreviations:

bgs = below ground surface.

µg/m³ = micrograms per cubic meter.

ppmV = parts per million by volume. PCE = Tetrachloroethene.

1,1,1-TCA = 1,1,1-Trichloroethane.

1,1-DFA = 1,1-difluoroethane (leak check compound).

1,3-DCB = 1,3-Dichlorobenzene.

< 3.19 = not detected at or above the specified laboratory reporting limit.

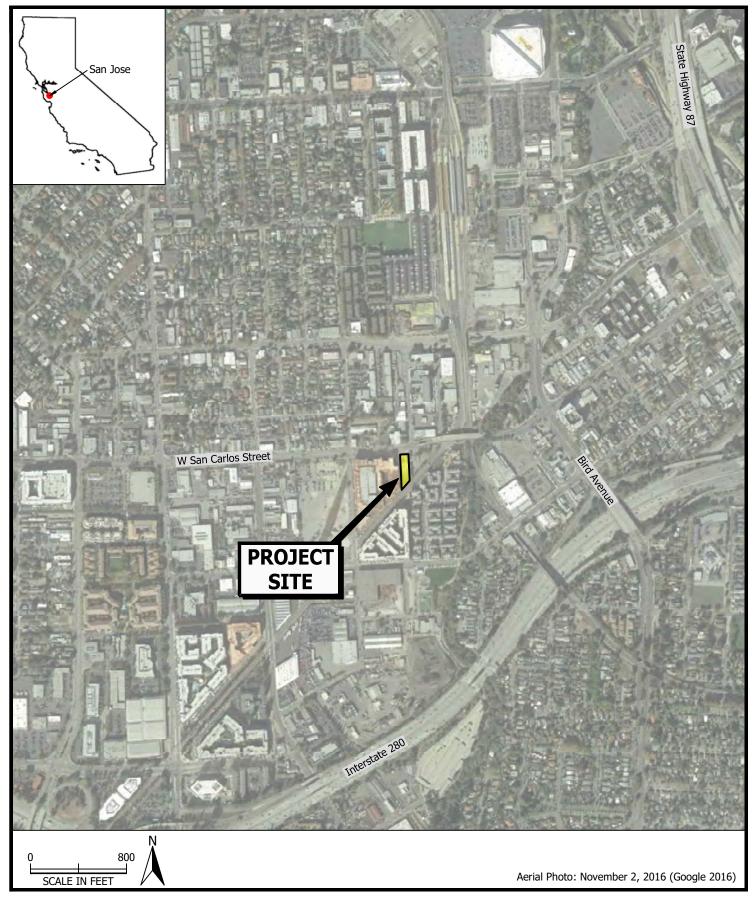
ND = Not detected at or above the laboratory reporting limit. NE = Not established.

N/A = Not applicable.

Notes:
1. ESL = February 2016 (Rev. 3) Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Soil Gas Tier 1 Environmental Screening Levels (ESLs).

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## **ILLUSTRATIONS**





#### **Site Location**

Supplemental Subsurface Investigation 750 West San Carlos Street San Jose, California

PLATE

 $\overline{GDT}$ 10/17 REVIEWED BY





## Site Plan Showing Soil/Soil Vapor Sample Locations

Supplemental Subsurface Investigation 750 West San Carlos Street San Jose, California PLATE

2

#### APPENDIX A

## PERTINENT INFORMATION FROM PES' JANUARY 2016 LIMITED SOIL GAS INVESTIGATION

750 West San Carlos Street, San Jose, California Summary of Soil Vapor Analytical Results Limited Soil Vapor Investigation Table 1

Sample Location	Sample ID	Sample Depth (feet bgs)	Date Sampled	TVH (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethylbenzene (µg/m³)	m,p-Xylene (µg/m³)	o-Xylene (µg/m³)	Other VOCs (µg/m³)	1,1-DFA (ppmv)
7 50	SG-1-5	5.0	5.0 1/27/2016	< 44,000	16.2	14.2	< 10.9	17.1	< 10.9	QN	< 25.0
500	SG-1-10	10.0	1/27/2016	< 17,600	6.52	8.03	< 4.34	6.64	< 4.34	QN	< 0.10
6 00	SG-2-2	5.0	5.0 1/27/2016	< 17,600	4.57	26.5	12.6	92.0	25.7	QN	18.7
2-00	SG-2-10	10.0	10.0 1/27/2016	< 17,600	4.41	20'9	< 4.34	5.34	< 4.34	QN	< 0.10
	Residential L	Residential Land Use ESL (Soil Gas) <sup>1</sup>	(Soil Gas)	300,000 ²	42	160,000	490	52,000	000	NE	NE

Detections are shown in bold. Results equal to or exceeding applicable regulatory screening levels are shaded.

TVH = Total volatile hydrocarbons, C2 to C10 as hexane.

VOCs = Volatile organic compounds.

DFA = Difluoroethane

bgs = Below ground surface.

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

ppmv = Parts per million by volume.

< 2.9 = Not detected at or above the indicated laboratory method reporting limit.

ND = Not detected at or above the respective laboratory method reporting limits.

NE = Not established.

- -- = Not applicable/not analyzed.
- 1. ESL = December 2013 Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) Environmental Screening Levels (ESLs), Table E-2 Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion.
- 2. ESL for total petroleum hydrocarbons as gasoline.

750 West San Carlos Street, San Jose, California Summary of Soil Vapor Leak Check Results **Limited Soil Vapor Investigation** Table 2

Sample Location	Sample ID	Sample Depth (feet bgs)	Date Sampled	1,1-DFA Detected in Sample (ppmv)	1,1-DFA Detected in Shroud (ppmv)	RPD (%)
SG 1	SG-1-5	5.0	1/27/2016	ND	9,480	0.0
200	SG-1-10	10.0	1/27/2016	ND	9,480	0'0
6 98	SG-2-5	5.0	1/27/2016	18.7	6,770	0.3
200	SG-2-10	10.0	1/27/2016	ND	6,770	0'0
		RPD Accept	RPD Acceptable Limit			%9

# Notes:

Detections are shown in bold. Results equal to or exceeding applicable RPD limits are shaded.

bgs = Below ground surface.

RPD = Relative percent difference.

ppmv = parts per million by volume. ND = Not detected at or above the respective laboratory method reporting limit.

-- = Not applicable.

1. In accordance with California Environmental Protection Agency/Department of Toxic Substances Control Advisory - Active Soil Gas Investigations, July 2015 - Appendix C. Quantitative Leak Testing Using a Tracer Gas. 144000601R001.xlsx





## Site Plan Showing Soil Vapor Sample Locations

Limited Soil Vapor Investigation 750 West San Carlos Street San Jose, California PLATE

2

#### APPENDIX B

#### LITHOLOGIC LOGS

MAJ	IOR DIVI	SIONS			TYPICAL NAMES
		CLEAN GRAVELS WITH LESS THAN	GW		WELL-GRADED GRAVELS WITH OR WITHOUT SAND
뽕	AVELS THAN HALF	15% FINES	GP		POORLY-GRADED GRAVELS WITH OR WITHOUT SAND
S COARSE ON IS LARG NO. 4	FRACTION GER THAN 4 SIEVE	GRAVELS WITH 15% OR MORE	GM		SILTY GRAVELS WITH OR WITHOUT SAND
MORE THAN HALF IS COARSE-GRAINED SOILS COARSER THAN NO. 200 ASSENDED ASSEND		FINES	GC		CLAYEY GRAVELS WITH OR WITHOUT SAND
ARSE-GR F IS COA!		CLEAN SANDS WITH LESS THAN	sw		WELL-GRADED SANDS WITH OR WITHOUT GRAVEL
OS HAIN HAIN HAIN MORE T	ANDS THAN HALF	15% FINES	SP		POORLY-GRADED SANDS WITH OR WITHOUT GRAVEL
S COARSE  A SIE  COARSE	FRACTION THAN NO. VE SIZE	SANDS WITH 15%	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
		OR MORE FINES	sc		CLAYEY SANDS WITH OR WITHOUT GRAVEL
SIEVE			ML		INORGANIC SILTS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
FINE-GRAINED SOILS 14LF IS FINER THAN NO. 2 ADDITIONAL THAN NO. 2		ID CLAYS 50% OR LESS	CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OL		ORGANIC SILTS OR CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			МН		INORGANIC SILTS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
H H LIQUI		ID CLAYS EATER THAN 50%	СН		INORGANIC CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
MOR			ОН		ORGANIC SILTS OR CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
HIGH	HLY ORGANI	C SOILS	PT		PEAT AND OTHER HIGHLY ORGANIC SOILS
AF	BBREVIA	TION KEY			SYMBOLS KEY
		Detector readings in parts	s ner	□N	o Soil Sample Recovered
		neadspace sample scree			artial Soil Sample Recovered

PES Environmental, Inc.
Engineering & Environmental Services

2.5YR 6/2

feet MSL

feet BGS

- Soil Color according to Munsell Soil Color Charts (1994 Revised Edition)

- feet above Mean Seal Level

- feet below ground surface

USCS CHART1 1440 006 01 005 GPJ PES\_ENV GDT 10/4/17

**Unified Soil Classification System Chart** 750 West San Carlos Street San Jose, CA

 $\frak{7}{4}$  First Encountered Groundwater Level

▼ Piezometric Groundwater level

Hydropunch Sample

PLATE

**B-0** 

 1440.006.01.005
 USCS CHART1
 GDT
 10/17

 JOB NUMBER
 DRAWING NUMBER
 REVIEWED BY
 DATE

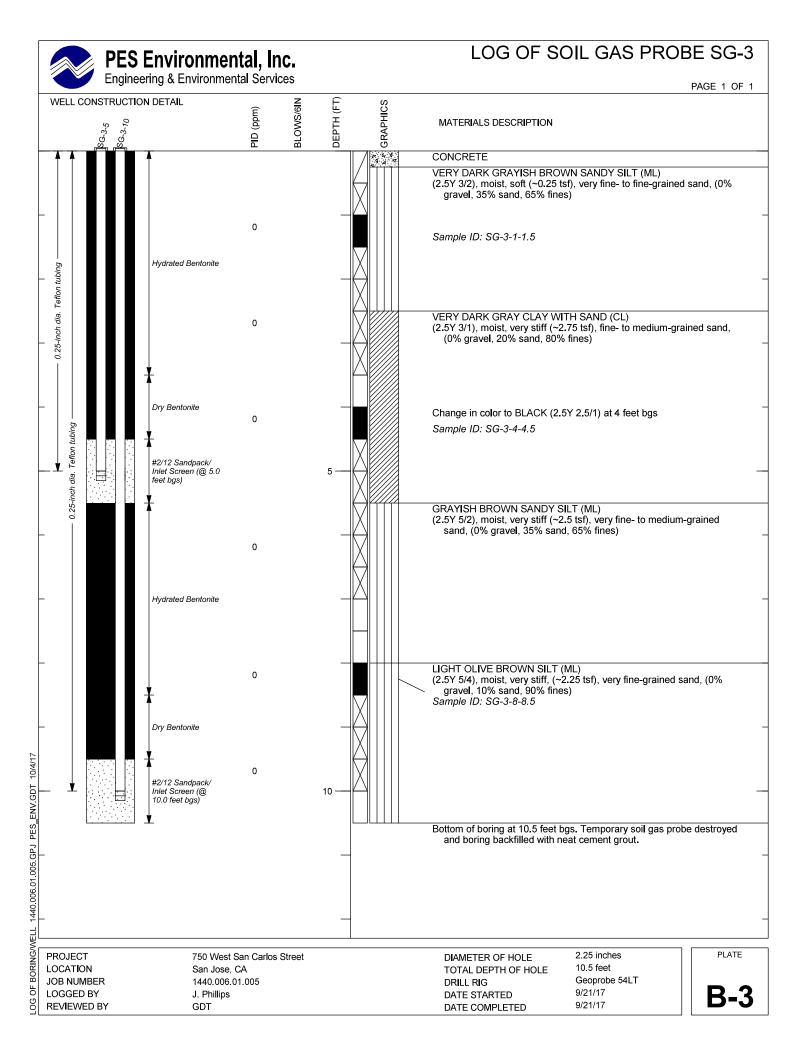
#### LOG OF BORING SB-1 PES Environmental, Inc. Engineering & Environmental Services PAGE 1 OF 1 DEPTH (FT) **BLOWS/6IN** GRAPHICS MATERIALS DESCRIPTION OLIVE BROWN SANDY SILT (ML) (2.5Y 4/3), moist, soft (~0.25 tsf), very fine- to fine-grained sand, (0% gravel, 35% sand, 65% fines) Sample ID: SB-1-1-1.5 BLACK CLAY WITH SAND (CL) (2.5Y 2.5/1), moist, very stiff (~2.5 tsf), very fine-grained sand (0% gravel, 20% sand, 80% fines), brick fragments at 2 feet bgs 0 Change in color to GRAYISH BROWN (2.5Y 5/2) at 4 feet bgs, increase in sand to (0% gravel, 25% sand, 75% fines) Sample ID: SB-1-4-4.5 GRAYISH BROWN SILT (ML) (2.5Y 5/2), moist, very stiff (~2.5 tsf), very fine- to medium-grained sand, (0% gravel, 10% sand, 90% fines) GRAYISH BROWN SANDY SILT (ML) (2.5Y 5/2), moist, very stiff (~2.5 tsf), very fine- to medium-grained sand, (0% gravel, 35% sand, 65% fines) Sample ID: SB-4-8-8.5 LIGHT OLIVE BROWN POORLY-GRADED SAND WITH GRAVEL (SP) (2.5Y 5/4), moist, fine- to medium-grained sand, subangular to subrounded gravel up to 1-inch diameter, (25% gravel, 65% sand, 10% fines) 10/4/17 0 1440 006 01 005 GPJ PES\_ENV.GDT 10 Bottom of boring at 10.5 feet bgs. Boring backfilled with neat cement grout. PLATE 2.25 inches **PROJECT** 750 West San Carlos Street DIAMETER OF HOLE 10.5 feet LOCATION San Jose, CA TOTAL DEPTH OF HOLE Geoprobe 54LT JOB NUMBER 1440.006.01.005 DRILL RIG LOG OF 9/21/17 LOGGED BY J. Phillips DATE STARTED 9/21/17 REVIEWED BY DATE COMPLETED

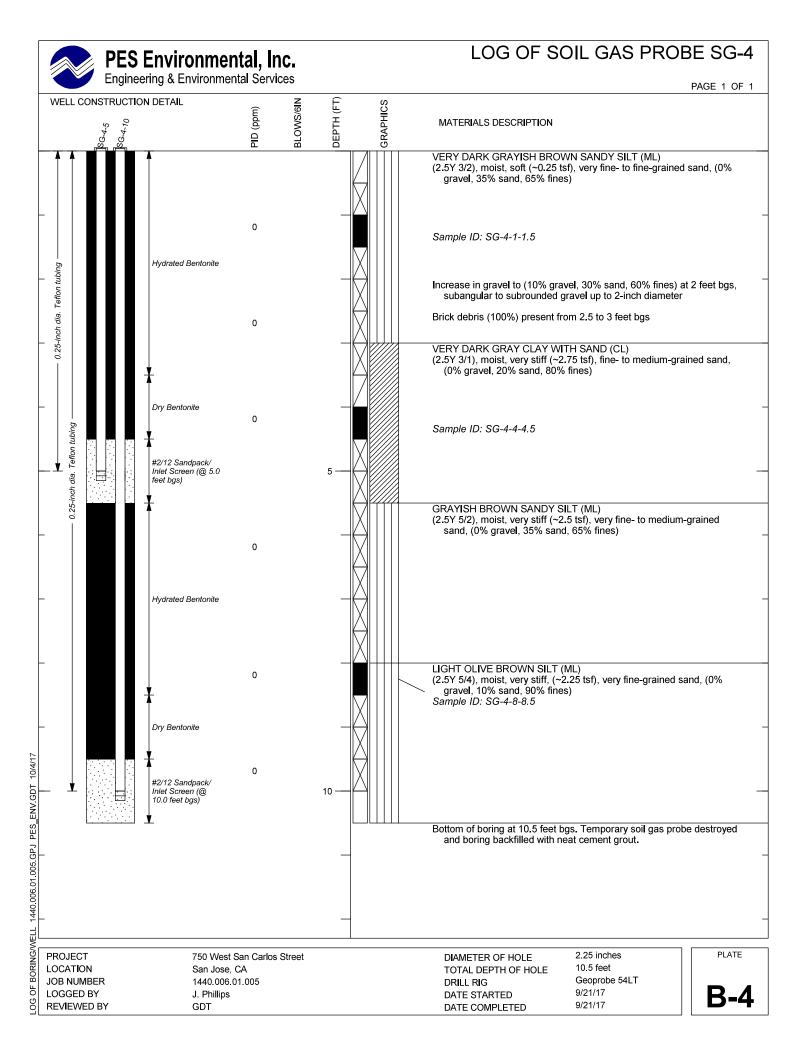
#### LOG OF BORING SB-2 PES Environmental, Inc. Engineering & Environmental Services PAGE 1 OF 1 DEPTH (FT) **BLOWS/6IN** GRAPHICS MATERIALS DESCRIPTION **ASPHALT** OLIVE BROWN SANDY SILT (ML) (2.5Y 4/3), moist, soft (~0.25 tsf), very fine- to fine-grained sand, (0% gravel, 35% sand, 65% fines) Sample ID: SB-2-1-1.5 BLACK CLAY WITH SAND (CL) (2.5Y 2.5/1), moist, very stiff (~2.5 tsf), very fine-grained sand (0% gravel, 20% sand, 80% fines), brick fragments at 2 feet bgs 0.1 Sample ID: SB-2-4-4.5 Change in color to GRAYISH BROWN (2.5Y 5/2) at 4.5 feet bgs 0 GRAYISH BROWN SILT (ML) (2.5Y 5/2), moist, very stiff (~2.5 tsf), very fine- to medium-grained sand, (0% gravel, 10% sand, 90% fines) GRAYISH BROWN SANDY SILT (ML) (2.5Y 5/2), moist, very stiff (~2.5 tsf), very fine- to medium-grained sand, (0% gravel, 35% sand, 65% fines) Sample ID: SB-2-8-8.5 LIGHT OLIVE BROWN POORLY-GRADED SAND WITH GRAVEL (SP) (2.5Y 5/4), moist, fine- to medium-grained sand, subangular to subrounded gravel up to 1-inch diameter, (25% gravel, 65% sand, 10% fines) 10/4/17 DARK OLIVE BROWN POORLY-GRADED SAND (SP) 0 (2.5Y 3/3), moist, very fine- to medium-grained sand, (0% gravel, 95% sand, 5% fines) 1440 006 01 005 GPJ PES\_ENV GDT 10 Bottom of boring at 10.5 feet bgs. Boring backfilled with neat cement grout. PLATE 2.25 inches **PROJECT** 750 West San Carlos Street DIAMETER OF HOLE 10.5 feet LOCATION San Jose, CA TOTAL DEPTH OF HOLE Geoprobe 54LT JOB NUMBER 1440.006.01.005 DRILL RIG LOG OF 9/21/17 LOGGED BY J. Phillips DATE STARTED

REVIEWED BY

9/21/17

DATE COMPLETED





#### **APPENDIX C**

## SOIL GAS ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION SOIL

CONSULTING ANALYTICAL CHEMISTS

3621 Westwind Blvd. Santa Rosa CA 95403

Phone: 707 527 7574

707 527 7879 FAX:

9418

1440.006.01.005

ACCT:

PROJ:

#### **TRANSMITTAL**

DATE:

9/27/2017

TO:

MR. KYLE FLORY

MR. GARY THOMAS

PES ENVIRONMENTAL, INC.

7665 REDWOOD BLVD... SUITE 200

NOVATO, CA 94945

Phone:

415-899-1600

Fax:

415-899-1601

Email:

kflory@pesenv.com

gthomas@pesenv.com

FROM:

Richard A. Kagel, Ph.D. RMC 9/27/2017

Laboratory Director

SUBJECT: LABORATORY RESULTS FOR YOUR PROJECT

1440.006.01.005

Enclosed please find K Prime's laboratory reports for the following samples:

SAMPLE ID	TYPE	DATE	TIME	KPI LAB #
SG-3-5-SHROUD	AIR	9/21/2017	12:27	158990
SG-3-5	AIR	9/21/2017	12:27	158991
SG-3-10	AIR	9/21/2017	12:37	158992
SG-3-10-SHROUD	AIR	9/21/2017	12:37	158993
SG-4-5	AIR	9/21/2017	13:31	158994
SG-4-5-DUP	AIR	9/21/2017	13:31	158995
SG-4-5-SHROUD	AIR	9/21/2017	13:31	158996
SG-4-10	AIR	9/21/2017	13:51	158997
SG-4-10-SHROUD	AIR	9/21/2017	13:51	158998

The above listed sample group was received on on the chain of custody document.

9/21/2017 and tested as requested

Please call me if you have any questions or need further information. Thank you for this opportunity to be of service.

K PRIME PROJECT: 9418

CLIENT PROJECT: 1440.006.01.005

METHOD: VOC'S IN AIR

REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

SAMPLE ID: SG-3-5 158991 LAB NO: SAMPLE TYPE: AIR DATE SAMPLED: 9/21/2017 TIME SAMPLED: 12:27 091417A1 BATCH ID: DATE ANALYZED: 9/25/2017

		PPB (	V/V)	µg/cu	ı. m
COMPOUND NAME	CAS NO.	RL	SAMPLE	RL	SAMPLE
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	ND	2.07	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	ND	2.64	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1.1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
1.1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1,2-DICHLOROETHENE	159-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1.1.1-TRICHLOROETHANE	71-55-6	1.00	ND	5.46	ND
1,2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND
BENZENE	71-43-2	1.00	ND	3.19	ND
CARBON TETRACHLORIDE	58-23-5	1.00	ND	6.29	ND
1,2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	ND	3.77	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.48	ND
1,2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	ND	4.34	ND
XYLENE (M+P)	179601-23-1	2.00	ND	8.68	ND
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	ND	4.34	ND ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	ND	4.92	ND ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	ND	4.92	ND
1,3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND
1,4-DICHLOROBENZENE	106-46-7	1.00	ND_	6.01	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

#### NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

**RL - REPORTING LIMIT** 

NA - NOT APPLICABLE OR AVAILABLE

μg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

> APPROVED BY: DATE:

K PRIME PROJECT: 9418

CLIENT PROJECT: 1440.006.01.005

METHOD: VOC'S IN AIR

SAMPLE ID: SG-3-10 LAB NO: 158992 AIR SAMPLE TYPE: 9/21/2017 DATE SAMPLED: TIME SAMPLED: 12:37

BATCH ID: 091417A1 9/25/2017 DATE ANALYZED:

REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN) PPB (V/V) μg/cu. m

COMPOUND NAME	CAS NO.	RL	SAMPLE	RL	SAMPLE
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	ND	2.07	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	ND	2.64	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1.1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
1.1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1.2-DICHLOROETHENE	159-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1.1.1-TRICHLOROETHANE	71-55-6	1.00	ND	5.46	ND
1.2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND -
BENZENE	71-43-2	1.00	ND	3.19	ND
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND
1.2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1.3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1.3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	ND	3.77	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND
1.2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	12.5	6.78	85.0
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	1.02	4.34	4.43
XYLENE (M+P)	179601-23-1	2.00	4.77	8.68	20.7
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	1.54	4.34	6.69
1.1.2.2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	ND	4.92	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	ND	4.92	ND
1,3-DICHLOROBENZENE	541-73-1	1.00	1.04	6.01	6.25
1,4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

#### NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

**RL - REPORTING LIMIT** 

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

> APPROVED BY: DATE:

K PRIME PROJECT: 9418

CLIENT PROJECT: 1440.006.01.005

METHOD: VOC'S IN AIR

REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

SAMPLE ID: SG-4-5

LAB NO: 158994

SAMPLE TYPE: AIR

DATE SAMPLED: 9/21/2017

TIME SAMPLED: 13:31

BATCH ID: 091417A1

DATE ANALYZED: 9/25/2017

ND

ND

PPB (V/V) μg/cu. m SAMPLE SAMPLE **COMPOUND NAME** CAS NO. RL RL CONC CONC DICHLORODIFLUOROMETHANE 75-71-8 1.00 ND 4.95 ND 74-87-3 1.00 ND 2.07 ND CHLOROMETHANE DICHLOROTETRAFLUOROETHANE ND 6.99 ND 76-14-2 1.00 ND ND 2.56 VINYL CHLORIDE 75-01-4 1.00 **BROMOMETHANE** 74-83-9 1.00 ND 3.88 ND CHLOROETHANE 75-00-3 1.00 ND 2.64 ND TRICHLOROFLUOROMETHANE 1.00 ND ND 5.62 75-69-4 3.97 ND ND 1,1-DICHLOROETHENE 75-35-4 1.00 ND TRICHLOROTRIFLUOROETHANE 76-13-1 1.00 ND 7.66 75-09-2 1.00 ND 3.47 ND METHYLENE CHLORIDE ND 4.05 ND 75-34-3 1.00 1.1-DICHLOROETHANE ND 159-59-2 3.97 CIS-1,2-DICHLOROETHENE 1.00 ND CHLOROFORM 67-66-3 1.00 ND 4.88 1,1,1-TRICHLOROETHANE 71-55-6 1.00 20.0 5.46 109 1,2-DICHLOROETHANE 107-06-2 1.00 ND 4.05 ND 1.94 3.19 6.20 71-43-2 1.00 BENZENE CARBON TETRACHLORIDE 1.00 ND 6.29 ND 56-23-5 4.62 ND 1.00 ND 1,2-DICHLOROPROPANE 78-87-5 ND TRICHLOROETHENE 79-01-6 1.00 ND 5.37 CIS-1,3-DICHLOROPROPENE 10061-01-5 1.00 ND 4.54 ND 1.00 ND 4.54 ND TRANS-1,3-DICHLOROPROPENE 10061-02-6 1.00 3.77 8.37 108-88-3 2.22 TOLUENE 5.46 ND ND 1,1,2-TRICHLOROETHANE 79-00-5 1.00 ND 1,2-DIBROMOETHANE 106-93-4 1.00 ND 7.68 TETRACHLOROETHENE 127-18-4 1.00 ND 6.78 ND 4.60 ND 108-90-7 1.00 ND CHLOROBENZENE ND 4.34 100-41-4 ND 1.00 ETHYLBENZENE ND 8.68 XYLENE (M+P) 179601-23-1 2.00 ND ND 100-42-5 1.00 ND 4.26 STYRENE 1.00 ND 4.34 ND XYLENE (O) 95-47-6 1,1,2,2-TETRACHLOROETHANE 6.87 ND 79-34-5 1.00 ND ND ND 4.92 1,3,5-TRIMETHYLBENZENE 108-67-8 1.00 ND ND 4.92 1,2,4-TRIMETHYLBENZENE 95-63-6 1.00 ND 1,3-DICHLOROBENZENE 541-73-1 1.00 ND 6.01 1.00 ND 6.01 ND 1,4-DICHLOROBENZENE 106-46-7 6.01 ND 95-50-1 1.00 ND 1,2-DICHLOROBENZENE

#### NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

1,2,4-TRICHLOROBENZENE

HEXACHLOROBUTADIENE

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

120-82-1

87-68-3

1.00

1.00

ND

ND

7.42

APPROVED BY: /4/1/
DATE: 9/27/17

SAMPLE ID: SG-4-5-DUP LAB NO: 158995 SAMPLE TYPE: AIR DATE SAMPLED: 9/21/2017 K PRIME PROJECT: 9418 TIME SAMPLED: BATCH ID: 13:31 CLIENT PROJECT: 1440.006.01.005 091417A1 DATE ANALYZED: 9/25/2017 METHOD: VOC'S IN AIR

REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

		PPB (	V/V)	μg/cu. ι	m
COMPOUND NAME	CAS NO.	RL	SAMPLE	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	ND	2.07	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	ND	2.64	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1,1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
1.1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1,2-DICHLOROETHENE	159-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1.1.1-TRICHLOROETHANE	71-55-6	1.00	19.4	5.46	106
1,2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND
BENZENE	71-43-2	1.00	1.99	3.19	6.36
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND
1.2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	2.32	3.77	8.74
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND
1,2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	ND	4.34	ND
XYLENE (M+P)	179601-23-1	2.00	ND	8.68	ND
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	ND	4.34	ND
1.1.2.2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	ND	4.92	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	ND	4.92	ND
1,3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND
1.4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

#### NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

> APPROVED BY: DATE: 9/27-/17

K PRIME, INC.

LABORATORY REPORT

LAB NO:
SAMPLE TYPE:

SAMPLE TYPE: AIR

DATE SAMPLED: 9/21/2017

TIME SAMPLED: 13:51

BATCH ID: 091417A1

SG-4-10

158997

METHOD: VOC'S IN AIR DATE ANALYZED: 9/25/2017

REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

K PRIME PROJECT: 9418

CLIENT PROJECT: 1440.006.01.005

		PPB (V/V)		μg/cu. n	n	
COMPOUND NAME	CAS NO.	RL.	SAMPLE	RL	SAMPLE CONC	
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND	
CHLOROMETHANE	74-87-3	1.00	ND	2.07	ND	
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND	
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND	
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND	
CHLOROETHANE	75-00-3	1.00	ND	2.64	ND	
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND	
1.1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND	
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND	
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND	
1.1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND	
CIS-1,2-DICHLOROETHENE	159-59-2	1.00	ND	3.97	ND	
CHLOROFORM	67-66-3	1.00	ND	4.88	ND	
1.1.1-TRICHLOROETHANE	71-55-6	1.00	16.7	5.46	91.0	
1.2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND	
BENZENE	71-43-2	1.00	2.98	3.19	9.52	
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND	
1.2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND	
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND	
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND	
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND	
TOLUENE	108-88-3	1.00	ND	3.77	ND	
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND	
1.2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND	
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND	
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND	
ETHYLBENZENE	100-41-4	1.00	ND	4.34	ND	
XYLENE (M+P)	179601-23-1	2.00	ND	8.68	ND	
STYRENE	100-42-5	1.00	ND	4.26	ND	
XYLENE (O)	95-47-6	1.00	ND	4.34	ND	
1.1.2.2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND	
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	ND	4.92	ND	
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	ND	4.92	ND	
1,3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND	
1,4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND	
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND	
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND	
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND	

#### NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

 $\mu g/cu.$  m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: 1/1/1/
DATE: 9/27/17

K PRIME PROJECT: 9418

CLIENT PROJECT: 1440.006.01.005

**METHOD: 1,1-DIFLUOROETHANE** 

REFERENCE: EPA TO 3 UNITS: PPMV

SAMPLE ID	LAB NO.	SAMPLE TYPE	DATE SAMPLED	BATCH ID	DATE ANALYZED	MRL	SAMPLE
SG-3-5-SHROUD	158990	AIR	09/21/2017	092217A2	09/22/2017	10.0	45900
SG-3-5	158991	AIŘ	09/21/2017	092217A2	09/22/2017	10.0	ND
SG-3-10	158992	AIR	09/21/2017	092217A2	09/22/2017	10.0	ND
SG-3-10-SHROUD	158993	AIR	09/21/2017	092217A2	09/22/2017	10.0	74400
SG-4-5	158994	AIR	09/21/2017	092217A2	09/22/2017	10.0	ND `
SG-4-5-DUP	158995	AIR	09/21/2017	092217A2	09/22/2017	10.0	ND
\$G-4-5-SHROUD	158996	AIR	09/21/2017	092217A2	09/25/2017	10.0	22000
\$G-4-10	158997	AIR	09/21/2017	092217A2	09/22/2017	10.0	ND
SG-4-10-SHROUD	158998	AIR	09/21/2017	092217A2	09/25/2017	10.0	30200

#### NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE MRL - METHOD REPORTING LIMIT

APPROVED BY: 7/27/17

K PRIME, INC.
LABORATORY METHOD BLANK REPORT

METHOD BLANK ID: B091417A1
SAMPLE TYPE: AIR

BATCH ID: 091417A1

METHOD: VOC'S IN AIR

REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

DATE ANALYZED: 9/14/2017

		PPB (\	//V)	μg/cu.	m
COMPOUND NAME	CAS NO.	RL	SAMPLE	RL	SAMPLE
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND	2.47	ND
CHLOROMETHANE	74-87-3	0.500	ND	1.03	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	0.500	ND	3.50	_ND
VINYL CHLORIDE	75-01-4	0.500	ND	1.28	ND
BROMOMETHANE	74-83-9	0.500	ND	1.94	ND
CHLOROETHANE	75-00-3	0.500	ND	1.32	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND	2.81	ND
1.1-DICHLOROETHENE	75-35-4	0.500	ND	1.98	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND	3.83	ND
METHYLENE CHLORIDE	75-09-2	0.500	ND	1.74	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND	2.02	ND
CIS-1,2-DICHLOROETHENE	159-59-2	0.500	ND	1.98	ND
CHLOROFORM	67-66-3	0.500	ND	2.44	ND
1.1.1-TRICHLOROETHANE	71-55-6	0.500	ND	2.73	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND	2.02	ND
BENZENE	71-43-2	0.500	ND	1.60	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND	3.15	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND	2.31	ND
TRICHLOROETHENE	79-01-6	0.500	ND	2.69	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND	2.27	ND
TRANS-1.3-DICHLOROPROPENE	10061-02-6	0.500	ND	2.27	ND
TOLUENE	108-88-3	0.500	ND	1.88	ND
1.1.2-TRICHLOROETHANE	79-00-5	0.500	ND	2.73	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND	3.84	ND
TETRACHLOROETHENE	127-18-4	0.500	ND	3.39	ND
CHLOROBENZENE	108-90-7	0.500	ND	2.30	ND
ETHYLBENZENE	100-41-4	0.500	ND	2.17	ND
XYLENE (M+P)	179601-23-1	1.00	ND	4.34	ND
STYRENE	100-42-5	0.500	ND	2.13	ND_
XYLENE (O)	95-47-6	0.500	ND	2.17	ND
1.1.2.2-TETRACHLOROETHANE	79-34-5	0.500	ND	3.43	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND	2.46	ND
1.2.4-TRIMETHYLBENZENE	95-63-6	0.500	ND	2.46	ND
1.3-DICHLOROBENZENE	541-73-1	0.500	ND	3.01	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND	3.01	ND
1.2-DICHLOROBENZENE	95-50-1	0.500	ND	3.01	ND
1.2.4-TRICHLOROBENZENE	120-82-1	0.500	ND	3.71	ND
HEXACHLOROBUTADIENE	87-68-3	0.500	ND	5.33	ND

### NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

MRL - METHOD REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

 $\mu\text{g/cu.}$  m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

K PRIME, INC. LABORATORY QUALITY CONTROL REPORT LAB CONTROL ID: L091417A1

LAB CONTROL DUPLICATE ID: D091417A1

SAMPLE TYPE:

AIR

METHOD: VOC'S IN AIR

REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

**BATCH ID:** 091417A1 **DATE ANALYZED:** 9/14/2017

COMPOUND NAME	SPIKE ADDED (PPB)	REPORTING LIMIT (PPB)	SAMPLE CONC (PPB)	SPIKE CONC (PPB)	SPIKE REC (%)	REC LIMITS (%)
1,1-DICHLOROETHENE	10.0	0.500	ND	11.9	119	60 - 140
BENZENE	10.0	0.500	ND	12.3	123	60 ~ 140
TRICHLOROETHENE	10.0	0.500	ND	8.77	88	60 - 140
TOLUENE	10.0	0.500	ND	11.0	110	60 - 140
TETRACHLOROETHENE	10.0	0.500	ND	7.98	80	60 - 140

	SPIKE	SPIKE DUP	SPIKE DUP		Q	LIMITS
COMPOUND NAME	ADDED	CONC	REC	RPD	RPD	REC
	(PPB)	(PPB)	(%)	(%)	(%)	(%)
1,1-DICHLOROETHENE	10.0	11.9	119	0.2	25	60 - 140
BENZENE	10.0	12.3	123	0.1	25	60 - 140
TRICHLOROETHENE	10.0	8.79	88	0.2	25	60 - 140
TOLUENE	10.0	11.1	111	0.6	25	60 - 140
TETRACHLOROETHENE	10.0	8.07	81	1.1	25	60 - 140

## NOTES:

NA - NOT APPLICABLE OR AVAILABLE

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

K PRIME, INC. LABORATORY QC REPORT

METHOD BLANK ID: B092217A2

LAB CONTROL SAMPLE ID: L092217A2

LAB CONTROL DUPLICATE ID: D092217A2

**BATCH ID:** 092217A2

**METHOD: 1,1-DIFLUOROETHANE** 

**REFERENCE: EPA TO 3** 

SAMPLE TYPE:

AIR

UNITS: PPM -V/V

**METHOD BLANK** 

COMPOUND NAME	REPORTING	SAMPLE
	LIMIT	CONC
1,1-DIFLUOROETHANE	10.0	ND

# ACCURACY (LAB CONTROL SAMPLE)

COMPOUND NAME	<b>EXPECTED</b>	MEASURED	PERCENT	LIMITS
	CONC	CONC	RECOVERY	(PERCENT)
1,1-DIFLUOROETHANE	10000	10500	105	60-140

# PRECISION (LAB CONTROL DUPLICATE)

COMPOUND NAME	SAMPLE RESULT	DUPLICATE RESULT	RPD (PERCENT)	LIMITS (PERCENT)
1,1-DIFLUOROETHANE	10500	10300	1.92	±30

# NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

# CHAIN OF CUSTODY RECORD

7665 Redwood Boulevard, Suite 200 Novato, California 94945 (415) 899-1600 FAX (415) 899-1601

ANALYSIS REQUESTED TPHg by 5035/8015M SA Phillips SAMPLERS: J. Phillips Jose Ses RECORDER: Street. いとう Thomas PES Environmental, Inc. Engineering & Environmental Services 500 San Ś 1440.006.01-West TI ON 750 POJECT MANAGER: IC. AME / LOCATION: ABORATORY: OB NUMBER:

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	EPA 5035A	-										1
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MNA Parameters (see notes)

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	DISPATCHED BY: (Signature)	DATE. TIME RECEIVED FOR LAB BY: (Signalum)	DATE
Page 1 of 1	Pickfad of by lah cookey	200	

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# PES Environmental, Inc. Engineering & Environmental Services

# CHAIN OF CUSTODY RECORD

STODY RECORD
Novato, Ca

7665 Redwood Boulevard, Suite 200 Novato, California 94945 (415) 899-1600 FAX (415) 899-1601

SAMPLE NUMBER /  SAMPLE NUMBER /  DESIGNATION  SG-3-5  SG-3-10-S#EWID  SG-3-10-S#EWID  SG-4-5-60  SG-4-5-60  SG-4-5-10-SHEWD  SG-4-10-SHEWD  SG-4-10-SHEWD  SG-4-10-SHEWD	LABORATORY:	V	C Prime		SAME	SAMPLERS:	;	Phillips						AN	ALYSIS	ANALYSIS REQUESTED	ED	
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# APPENDIX D

# SOIL ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION





# **Enthalpy Analytical**

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

# Laboratory Job Number 292706 ANALYTICAL REPORT

PES Environmental, Inc.

Project : 1440.006.01.005 7665 Redwood Boulevard

Novato, CA 94945

Location: 750 West San CArlos Street San JoseCA

Level : II

Sample ID	<u>Lab ID</u>
SG-3-1-1.5	292706-001
SG-3-4-4.5	292706-002
SG-3-8-8.5	292706-003
SG-4-1-1.5	292706-004
SG-4-4-4.5	292706-005
SG-4-8-8.5	292706-006
SB-1-1-1.5	292706-007
SB-1-4-4.5	292706-008
SG-1-8-8.5	292706-009
SG-2-1-1.5	292706-010
SG-2-4-4.5	292706-011
SG-2-8-8.5	292706-012

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:

Patrick McCarthy Project Manager patrick.mccarthy@enthalpy.com (510) 204-2236

CA ELAP# 2896, NELAP# 4044-001

Date: <u>09/25/2017</u>



### CASE NARRATIVE

Laboratory number: 292706

Client: PES Environmental, Inc.

Project:

1440.006.01.005 750 West San CArlos Street San JoseCA Location:

09/21/17 Request Date: 09/21/17 Samples Received:

This data package contains sample and QC results for six soil samples, requested for the above referenced project on 09/21/17. The samples were received cold and intact.

# TPH-Purgeables and/or BTXE by GC (EPA 8015B):

Matrix spikes were not performed for this analysis in batch 251906 due to insufficient sample amount. No other analytical problems were encountered.

# TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

# Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

# Metals (EPA 6010B and EPA 7471A):

Low response was observed for silver in the CCV analyzed 09/23/17 00:54; affected data was qualified with "b". No other analytical problems were encountered.



PES Environmental, Inc. Engineering & Environmental Services

Car 163 G. Thom.s LABORATORY CUT HIS & Tompkins Sin 1440,006.01.005 750 West PROJECT MANAGER: K. Flary NAME / LOCATION: JOB NUMBER:

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CHAIN OF CUSTODY RECORD

Novato, California 94945 (415) 899-1600 FAX (415) 899-1601 7665 Redwood Boulevard, Suite 200 ANALYSIS REQUESTED

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J. Phillips	San Jox	J. Phillips	
SAMPLERS:	Street	RECORDER: -	

22 matels (60101)

MNA Parameters (see notes)

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**EPA** 8270C

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CHA					DATE	INK-Field or Off
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NOTES	Turn Around Time: 48-Hav *RUSH* TAT					သ Page 1 of 1 A

# COOLER RECEIPT CHECKLIST



Login # 292706 Date Received 97 Proj	21, $1+$ Number	ber of coolers	105	ENTHA Berkel
Date Opened 9.20.17 By (print)  Date Logged in By (print)  Date Labelled By (print)	DC DC	(sign) (sign) (sign)		
Did cooler come with a shipping slip (air Shipping info			YES	NO
2A. Were custody seals present? \( \sum \) YI How many \( \sum \) Name 2B. Were custody seals intact upon arrival?  3. Were custody papers dry and intact when 4. Were custody papers filled out properly (if 5. Is the project identifiable from custody papers in cooler: (if other, of the custody papers)	received?ink, signed, etc)'apers? (If so fill	Da	YES TES	NO NO
☐ Bubble Wrap ☐ Foam blocks☐ Cloth material ☐ Cardboard 7. Temperature documentation: * Notif	□ Styro	foam ature exceeds	☐ None ☐ Paper tow 6°C	/els
	ıe/Gel □ Non		•	کر
☐ Temperature blank(s) included? ☐				1
☐ Samples received on ice directly fro				<del></del>
8. Were Method 5035 sampling containers p If YES, what time were they transferr 9. Did all bottles arrive unbroken/unopened? 10. Are there any missing / extra samples? 11. Are samples in the appropriate containers 12. Are sample labels present, in good condit. 13. Do the sample labels agree with custody p 14. Was sufficient amount of sample sent for 15. Are the samples appropriately preserved? 16. Did you check preservatives for all bottles 17. Did you document your preservative check 18. Did you change the hold time in LIMS for 19. Did you change the hold time in LIMS for 20. Are bubbles > 6mm absent in VOA sample 21. Was the client contacted concerning this satisfies.  If YES, Who was called?  COMMENTS	for indicated te ion and complet papers? tests requested? for each sample k? (pH strip lots unpreserved terraces? mple delivery? By	sts? e? e? # OAs? cores?	YES N	

Rev 14, 8/01/17



# Detections Summary for 292706

Results for any subcontracted analyses are not included in this summary.

Client : PES Environmental, Inc.

Project : 1440.006.01.005

Location: 750 West San CArlos Street San JoseCA

Client Sample ID: SG-3-1-1.5 Laboratory Sample ID: 292706-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	12	Y	1.0	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	290	Y	5.0	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Arsenic	3.3		1.5	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	200		0.25	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.64		0.099	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	50		0.25	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	11		0.25	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	30		0.25	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	13		0.99	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.096		0.017	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	67		0.25	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	38		0.25	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	160		0.99	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID: SG-3-4-4.5 Laboratory Sample ID: 292706-002

Analyte	Result	Flags	RL	Units			IDF				Method
Arsenic	5.8		1.5	mg/Kg	As F	Recd	1.000	EPA	6010B	EPA	3050B
Barium	140		0.26	mg/Kg	As F	Recd	1.000	EPA	6010B	EPA	3050B
Beryllium	0.69		0.10	mg/Kg	As F	Recd	1.000	EPA	6010B	EPA	3050B
Chromium	49		0.26	mg/Kg	As F	Recd	1.000	EPA	6010B	EPA	3050B
Cobalt	6.6		0.26	mg/Kg	As F	Recd	1.000	EPA	6010B	EPA	3050B
Copper	24		0.26				1.000				
Lead	6.1		1.0	mg/Kg	As F	Recd	1.000	EPA	6010B	EPA	3050B
Mercury	0.066		0.017	mg/Kg	As F	Recd	1.000	EPA	7471A	METH	HOD
Molybdenum	0.59		0.26	mg/Kg	As F	Recd	1.000	EPA	6010B	EPA	3050B
Nickel	54		0.26	mg/Kg	As F	Recd	1.000	EPA	6010B	EPA	3050B
Vanadium	52		0.26				1.000				
Zinc	60		1.0	mg/Kg	As F	Recd	1.000	EPA	6010B	EPA	3050B

Client Sample ID: SG-4-1-1.5 Laboratory Sample ID: 292706-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	3.4	Y	1.0	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	37		5.0	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C

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Client Sample ID: SG-4-4-4.5 Laboratory Sample ID: 292706-005

No Detections

Client Sample ID: SB-1-1-1.5 Laboratory Sample ID: 292706-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	1.6	Y	0.99	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	10		5.0	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Arsenic	17		1.5	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	190		0.26	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.73		0.10	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.45		0.26	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	48		0.26	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	9.6		0.26	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	31		0.26	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.4		1.0	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.091		0.016	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	61		0.26	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	49		0.26	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	75		1.0	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID: SB-1-4-4.5 Laboratory Sample ID: 292706-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Motor Oil C24-C36	15		5.0	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550C
Arsenic	5.4		1.4	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	340		0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.69		0.093	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	3.0		0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	50		0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	7.5		0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	23		0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	69		0.93	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.038		0.017	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.90		0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	58		0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	47		0.23	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	180		0.93	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Y = Sample exhibits chromatographic pattern which does not resemble standard Page 2 of 2



Gasoline by GC/FID (5035 Prep) Lab #: Location: 750 West San CArlos Street San JoseCA PES Environmental, Inc. EPA 5035 Client: Prep: 1440.006.01.005 Analysis: EPA 8015B Project#: Matrix: Soil Batch#: 251906 09/21/17 mq/Kq Units: Sampled: as received Received: 09/21/17 Basis: Diln Fac: 1.000

Field ID: SG-3-1-1.5 292706-001 Lab ID: 09/21/17 Type: SAMPLE Analyzed:

ND

Analyte Result RL 0.15

%REC Limits Surrogate Bromofluorobenzene (FID) 65-136

Field ID: SG-3-4-4.5 292706-002 Lab ID: SAMPLE Analyzed: 09/21/17 Type:

Analyte Result C7-C12 0.16

Surrogate %REC Limits Bromofluorobenzene (FID) 118

Field ID: SG-4-1-1.5 Lab ID: 292706-004 SAMPLE 09/21/17 Analyzed: Type:

Analyte Result RL Gasoline C7-C12 ND 0.16

%REC Limits Surrogate Bromofluorobenzene (FID)

Field ID: 292706-005 SG-4-4-4.5Lab ID: Type: SAMPLE Analyzed: 09/21/17

Analyte Result Gasoline C7-C12 0.18

Surrogate %REC Limits Bromofluorobenzene (FID)

Field ID: SB-1-1-1.5 Lab ID: 292706-007 SAMPLE 09/21/17 Analyzed: Type:

Analyte Result 0.17 Gasoline C7-C12 ND

Surrogate %REC Limits Bromofluorobenzene (FID) 119

ND= Not Detected RL= Reporting Limit

Gasoline C7-C12

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3.0



Gasoline by GC/FID (5035 Prep) 292706 Location: 750 West San CArlos Street San JoseCA Lab #: Client: PES Environmental, Inc. Prep: EPA 5035 Project#: 1440.006.01.005 Analysis: EPA 8015B 251906 Matrix: Batch#: Soil 09/21/17 mg/Kg Units: Sampled: as received 1.000 Basis: Received: 09/21/17 Diln Fac:

Field ID: SB-1-4-4.5 Lab ID: 292706-008 Type: SAMPLE Analyzed: 09/22/17

Analyte Result RL
Gasoline C7-C12 ND 0.15

Surrogate %REC Limits
Bromofluorobenzene (FID) 114 65-136

Type: BLANK Analyzed: 09/21/17 Lab ID: 09/01915

AnalyteResultRLGasoline C7-C12ND0.20

Surrogate %REC Limits
Bromofluorobenzene (FID) 82 65-136

ND= Not Detected RL= Reporting Limit Page 2 of 2

3.0



Batch QC Report

Gasoline by GC/FID (5035 Prep)							
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA					
Client:	PES Environmental, Inc.	Prep: EPA 5035					
Project#:	1440.006.01.005	Analysis: EPA 8015B					
Matrix:	Soil	Batch#: 251906					
Units:	mg/Kg	Analyzed: 09/21/17					
Diln Fac:	1.000						

Type: BS

Lab ID: QC901913

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9432	94	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	81	65-136

Type: BSD

Lab ID: QC901914

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2.000	2.046	102	80-121	8	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	65-136



Total Extractable Hydrocarbons Lab #: 292706 750 West San CArlos Street San JoseCA Location: PES Environmental, Inc. EPA 3550C Client: Prep: 1440.006.01.005 Analysis: EPA 8015B Project#: Matrix: Soil Batch#: 251931 09/21/17 Units: mq/Kq Sampled: Received: 09/21/17 Basis: as received Diln Fac: 1.000 Prepared: 09/22/17

Field ID: SG-3-1-1.5 Analyzed: 09/23/17
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 292706-001

 Analyte
 Result
 RL

 Diesel C10-C24
 12 Y
 1.0

 Motor Oil C24-C36
 290 Y
 5.0

Surrogate %REC Limits
o-Terphenyl 77 55-133

Field ID: SG-3-4-4.5 Analyzed: 09/24/17
Type: SAMPLE Cleanup Method: EPA 3630C

Lab ID: 292706-002

 Analyte
 Result
 RL

 Diesel C10-C24
 ND
 1.0

 Motor Oil C24-C36
 ND
 5.0

 Surrogate
 %REC
 Limits

 o-Terphenyl
 85
 55-133

Field ID: SG-4-1-1.5 Analyzed: 09/24/17
Type: SAMPLE Cleanup Method: EPA 3630C

Lab ID: 292706-004

 Analyte
 Result
 RL

 Diesel C10-C24
 3.4 Y
 1.0

 Motor Oil C24-C36
 37
 5.0

 Surrogate
 %REC
 Limits

 o-Terphenyl
 98
 55-133

Field ID: SG-4-4-4.5 Analyzed: 09/24/17 Type: SAMPLE Cleanup Method: EPA 3630C

Lab ID: 292706-005

 Analyte
 Result
 RL

 Diesel C10-C24
 ND
 1.0

 Motor Oil C24-C36
 ND
 5.0

 Surrogate
 %REC
 Limits

 o-Terphenyl
 80
 55-133

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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15.1



Total Extractable Hydrocarbons Location: 750 West San CArlos Street San JoseCA Lab #: 292706 Prep: EPA 30000 Analysis: EPA 8015B Batch#: 251931 09/21/17 PES Environmental, Inc. Client: Project#: 1440.006.01.005 Soil Matrix: Units: mg/Kg 09/21/17 09/22/17 as received 1.000 Basis: Received: Diln Fac: Prepared:

Field ID: SB-1-1-1.5 Analyzed: 09/24/17 Type: SAMPLE Cleanup Method: EPA 3630C

Lab ID: 292706-007

Analyte	Result	RL	
Diesel C10-C24	1.6 Y	0.99	
Motor Oil C24-C36	10	5.0	

Surrogate	%REC	Limits	
Surrogate	OKEC	HIMI CS	
o-Terphenyl	85	55-133	

Field ID: SB-1-4-4.5 Analyzed: 09/24/17 Type: SAMPLE Cleanup Method: EPA 3630C

Lab ID: 292706-008

Analyte	Result	RL	
Diesel C10-C24	ND	0.99	
Motor Oil C24-C36	15	5.0	

•	0550		
Surrogate	%REC	Limits	
o-Terphenyl	87	55-133	

Type: BLANK Analyzed: 09/23/17 Lab ID: QC902001 Cleanup Method: EPA 3630C

Analyte	Result	RL	
Diesel C10-C24	ND	1.0	
Motor Oil C24-C36	ND	5.0	

Surrogate	%REC	Limits	
o-Terphenvl	99	55-133	

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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15.1



# Batch QC Report

	Total Extract	able Hydrocarbons
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA
Client:	PES Environmental, Inc.	Prep: EPA 3550C
Project#:	1440.006.01.005	Analysis: EPA 8015B
Type:	LCS	Diln Fac: 1.000
Lab ID:	QC902002	Batch#: 251931
Matrix:	Soil	Prepared: 09/22/17
Units:	mg/Kg	Analyzed: 09/23/17

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	41.82	84	51-137

Surrogate	%REC	Limits
o-Terphenyl	96	55-133



Batch QC Report

	Total Extracta	able Hydrocarbons
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA
Client:	PES Environmental, Inc.	Prep: EPA 3550C
Project#:	1440.006.01.005	Analysis: EPA 8015B
Field ID:	ZZZZZZZZZ	Batch#: 251931
MSS Lab ID:	292695-001	Sampled: 09/21/17
Matrix:	Soil	Received: 09/21/17
Units:	mg/Kg	Prepared: 09/22/17
Basis:	as received	Analyzed: 09/23/17
Diln Fac:	2.000	

Type: MS Lab ID: QC902003

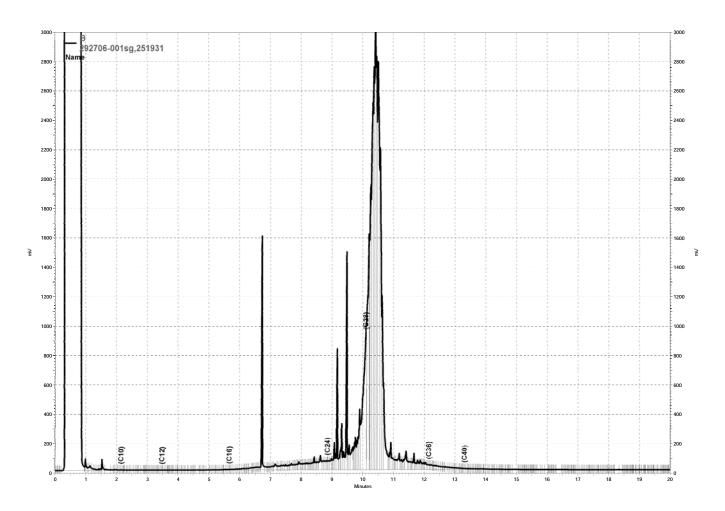
Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	21.11	49.73	69.87	98	36-143

Surrogate	%REC	Limits
o-Terphenyl	109	55-133

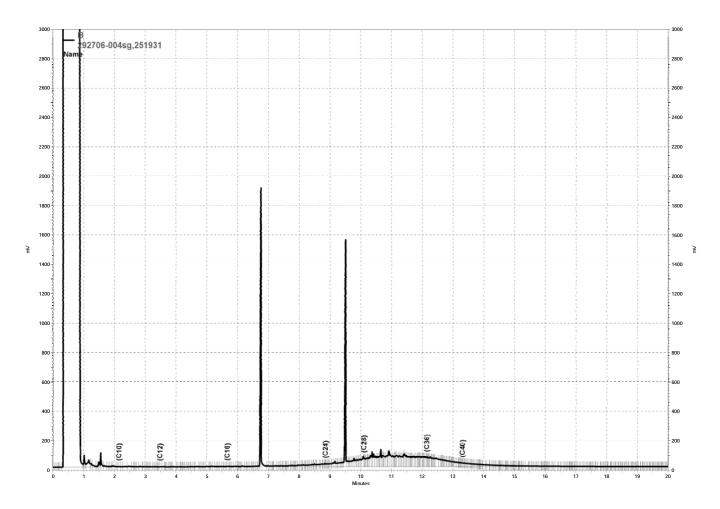
Type: MSD Lab ID: QC902004

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.03	67.98	94	36-143	3	55

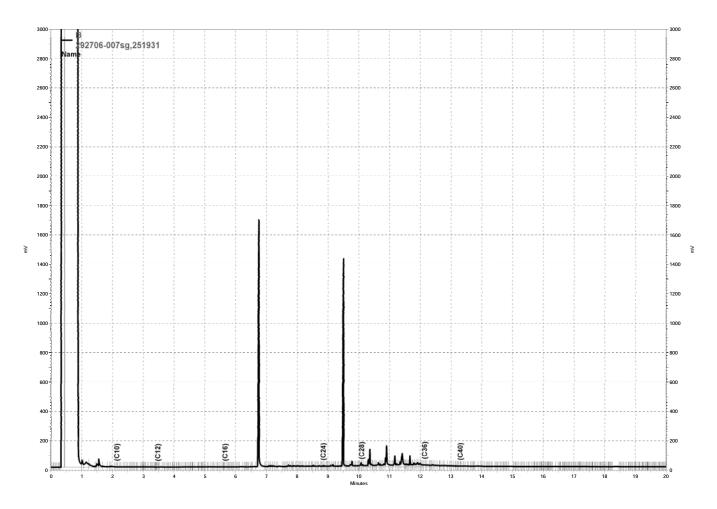
Surrogate	%REC	Limits	
o-Terphenyl	105	55-133	



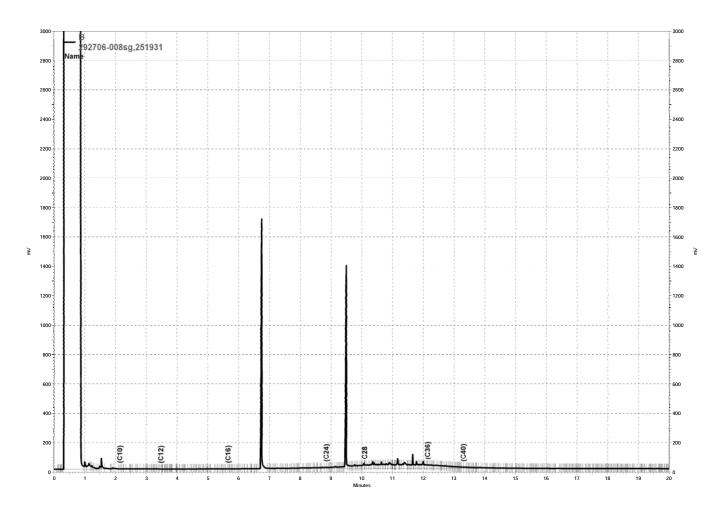
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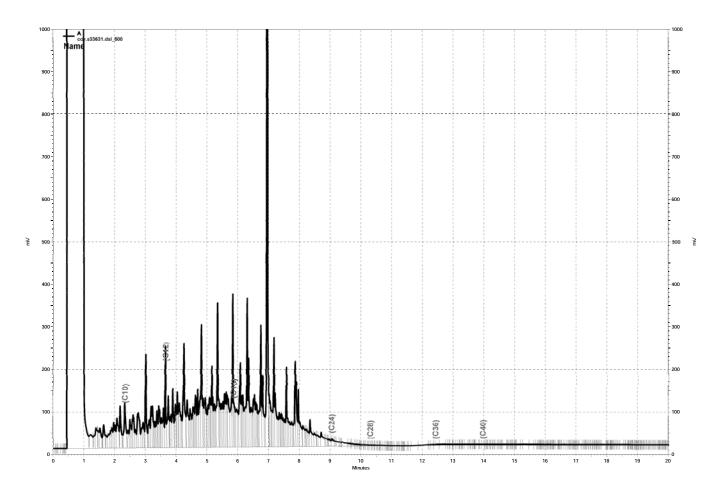
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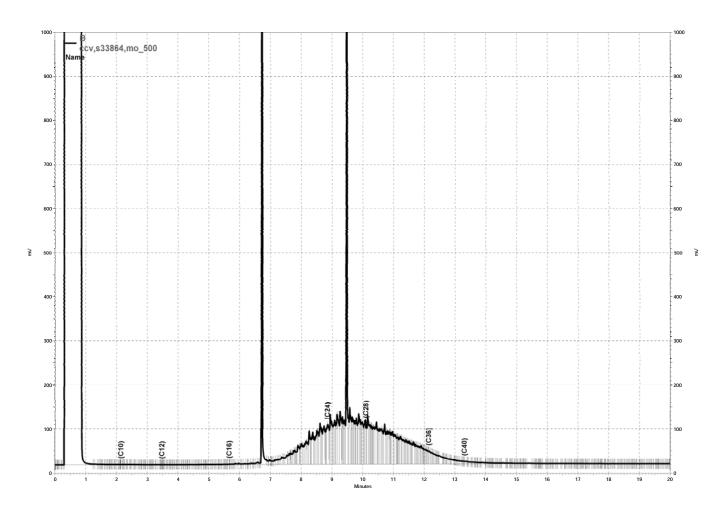
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\kraken\gdrive\ezchrom\Projects\GC14B\Data\2017\266b003, B



	Purgeable O	rganics by GC/MS	
Lab #:	292706	Location: 750 West San CArlos Street San Jose	eCA
Client:	PES Environmental, Inc.	Prep: EPA 5035	
Project#:	1440.006.01.005	Analysis: EPA 8260B	
Field ID:	SG-3-1-1.5	Diln Fac: 0.9124	
Lab ID:	292706-001	Batch#: 251925	
Matrix:	Soil	Sampled: 09/21/17	
Units:	ug/Kg	Received: 09/21/17	
Basis:	as received	Analyzed: 09/22/17	

Analyte	Result	RL	
Freon 12	ND	9.1	
Chloromethane	ND	9.1	
Vinyl Chloride	ND	9.1	
Bromomethane	ND	9.1	
Chloroethane	ND	9.1	
Trichlorofluoromethane	ND	4.6	
Acetone	ND	18	
Freon 113	ND	4.6	
1,1-Dichloroethene	ND	4.6	
Methylene Chloride	ND	18	
Carbon Disulfide	ND	4.6	
MTBE	ND	4.6	
trans-1,2-Dichloroethene	ND	4.6	
Vinyl Acetate	ND	46	
1,1-Dichloroethane	ND	4.6	
2-Butanone	ND	9.1	
cis-1,2-Dichloroethene	ND	4.6	
2,2-Dichloropropane	ND	4.6	
Chloroform	ND	4.6	
Bromochloromethane	ND	4.6	
1,1,1-Trichloroethane	ND	4.6	
1,1-Dichloropropene	ND	4.6	
Carbon Tetrachloride	ND	4.6	
1,2-Dichloroethane	ND	4.6	
Benzene	ND	4.6	
Trichloroethene	ND	4.6	
1,2-Dichloropropane	ND	4.6	
Bromodichloromethane	ND	4.6	
Dibromomethane	ND	4.6	
4-Methyl-2-Pentanone	ND	9.1	
cis-1,3-Dichloropropene	ND	4.6	
Toluene	ND	4.6	
trans-1,3-Dichloropropene	ND	4.6	
1,1,2-Trichloroethane	ND	4.6	
2-Hexanone	ND	9.1	
1,3-Dichloropropane	ND	4.6	
Tetrachloroethene	ND	4.6	

RL= Reporting Limit



	Purgeable O	eganics by GC/MS	
Lab #:	292706	Location: 750 West San CArlos Street San Jose	eCA
Client:	PES Environmental, Inc.	Prep: EPA 5035	
Project#:	1440.006.01.005	Analysis: EPA 8260B	
Field ID:	SG-3-1-1.5	Diln Fac: 0.9124	
Lab ID:	292706-001	Batch#: 251925	
Matrix:	Soil	Sampled: 09/21/17	
Units:	ug/Kg	Received: 09/21/17	
Basis:	as received	Analyzed: 09/22/17	

Analyte	Result	RL	
Dibromochloromethane	ND	4.6	
1,2-Dibromoethane	ND	4.6	
Chlorobenzene	ND	4.6	
1,1,1,2-Tetrachloroethane	ND	4.6	
Ethylbenzene	ND	4.6	
m,p-Xylenes	ND	4.6	
o-Xylene	ND	4.6	
Styrene	ND	4.6	
Bromoform	ND	4.6	
Isopropylbenzene	ND	4.6	
1,1,2,2-Tetrachloroethane	ND	4.6	
1,2,3-Trichloropropane	ND	4.6	
Propylbenzene	ND	4.6	
Bromobenzene	ND	4.6	
1,3,5-Trimethylbenzene	ND	4.6	
2-Chlorotoluene	ND	4.6	
4-Chlorotoluene	ND	4.6	
tert-Butylbenzene	ND	4.6	
1,2,4-Trimethylbenzene	ND	4.6	
sec-Butylbenzene	ND	4.6	
para-Isopropyl Toluene	ND	4.6	
1,3-Dichlorobenzene	ND	4.6	
1,4-Dichlorobenzene	ND	4.6	
n-Butylbenzene	ND	4.6	
1,2-Dichlorobenzene	ND	4.6	
1,2-Dibromo-3-Chloropropane	ND	4.6	
1,2,4-Trichlorobenzene	ND	4.6	
Hexachlorobutadiene	ND	4.6	
Naphthalene	ND	4.6	
1,2,3-Trichlorobenzene	ND	4.6	

Surrogate	%REC	Limits	
Dibromofluoromethane	106	76-132	
1,2-Dichloroethane-d4	97	74-149	
Toluene-d8	102	80-120	
Bromofluorobenzene	109	78-134	

RL= Reporting Limit

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	Purgeable O	rganics by GC/MS	
Lab #:	292706	Location: 750 West San CArlos Street San Jos	seCA
Client:	PES Environmental, Inc.	Prep: EPA 5035	
Project#:	1440.006.01.005	Analysis: EPA 8260B	
Field ID:	SG-3-4-4.5	Diln Fac: 0.8278	
Lab ID:	292706-002	Batch#: 251925	
Matrix:	Soil	Sampled: 09/21/17	
Units:	ug/Kg	Received: 09/21/17	
Basis:	as received	Analyzed: 09/22/17	

Analyte	Result	RL	
Freon 12	ND	8.3	
Chloromethane	ND	8.3	
Vinyl Chloride	ND	8.3	
Bromomethane	ND	8.3	
Chloroethane	ND	8.3	
Trichlorofluoromethane	ND	4.1	
Acetone	ND	17	
Freon 113	ND	4.1	
1,1-Dichloroethene	ND	4.1	
Methylene Chloride	ND	17	
Carbon Disulfide	ND	4.1	
MTBE	ND	4.1	
trans-1,2-Dichloroethene	ND	4.1	
Vinyl Acetate	ND	41	
1,1-Dichloroethane	ND	4.1	
2-Butanone	ND	8.3	
cis-1,2-Dichloroethene	ND	4.1	
2,2-Dichloropropane	ND	4.1	
Chloroform	ND	4.1	
Bromochloromethane	ND	4.1	
1,1,1-Trichloroethane	ND	4.1	
1,1-Dichloropropene	ND	4.1	
Carbon Tetrachloride	ND	4.1	
1,2-Dichloroethane	ND	4.1	
Benzene	ND	4.1	
Trichloroethene	ND	4.1	
1,2-Dichloropropane	ND	4.1	
Bromodichloromethane	ND	4.1	
Dibromomethane	ND	4.1	
4-Methyl-2-Pentanone	ND	8.3	
cis-1,3-Dichloropropene	ND	4.1	
Toluene	ND	4.1	
trans-1,3-Dichloropropene	ND	4.1	
1,1,2-Trichloroethane	ND	4.1	
2-Hexanone	ND	8.3	
1,3-Dichloropropane	ND	4.1	
Tetrachloroethene	ND	4.1	

RL= Reporting Limit



	Purgeable O	eganics by GC/MS	
Lab #:	292706	Location: 750 West San CArlos Street San Jose	CA
Client:	PES Environmental, Inc.	Prep: EPA 5035	
Project#:	1440.006.01.005	Analysis: EPA 8260B	
Field ID:	SG-3-4-4.5	Diln Fac: 0.8278	
Lab ID:	292706-002	Batch#: 251925	
Matrix:	Soil	Sampled: 09/21/17	
Units:	ug/Kg	Received: 09/21/17	
Basis:	as received	Analyzed: 09/22/17	

Analyte	Result	RL	
Dibromochloromethane	ND	4.1	
1,2-Dibromoethane	ND	4.1	
Chlorobenzene	ND	4.1	
1,1,1,2-Tetrachloroethane	ND	4.1	
Ethylbenzene	ND	4.1	
m,p-Xylenes	ND	4.1	
o-Xylene	ND	4.1	
Styrene	ND	4.1	
Bromoform	ND	4.1	
Isopropylbenzene	ND	4.1	
1,1,2,2-Tetrachloroethane	ND	4.1	
1,2,3-Trichloropropane	ND	4.1	
Propylbenzene	ND	4.1	
Bromobenzene	ND	4.1	
1,3,5-Trimethylbenzene	ND	4.1	
2-Chlorotoluene	ND	4.1	
4-Chlorotoluene	ND	4.1	
tert-Butylbenzene	ND	4.1	
1,2,4-Trimethylbenzene	ND	4.1	
sec-Butylbenzene	ND	4.1	
para-Isopropyl Toluene	ND	4.1	
1,3-Dichlorobenzene	ND	4.1	
1,4-Dichlorobenzene	ND	4.1	
n-Butylbenzene	ND	4.1	
1,2-Dichlorobenzene	ND	4.1	
1,2-Dibromo-3-Chloropropane	ND	4.1	
1,2,4-Trichlorobenzene	ND	4.1	
Hexachlorobutadiene	ND	4.1	
Naphthalene	ND	4.1	
1,2,3-Trichlorobenzene	ND	4.1	

Surrogate	%REC	Limits	
Dibromofluoromethane	108	76-132	
1,2-Dichloroethane-d4	98	74-149	
Toluene-d8	101	80-120	
Bromofluorobenzene	108	78-134	

RL= Reporting Limit

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	Purgeable O	rganics by GC/MS	
Lab #:	292706	Location: 750 West San CArlos Street San Jose	eСА
Client:	PES Environmental, Inc.	Prep: EPA 5035	
Project#:	1440.006.01.005	Analysis: EPA 8260B	
Field ID:	SG-4-1-1.5	Diln Fac: 0.7278	
Lab ID:	292706-004	Batch#: 251925	
Matrix:	Soil	Sampled: 09/21/17	
Units:	ug/Kg	Received: 09/21/17	
Basis:	as received	Analyzed: 09/22/17	

Analyte	Result	RL	
Freon 12	ND	7.3	
Chloromethane	ND	7.3	
Vinyl Chloride	ND	7.3	
Bromomethane	ND	7.3	
Chloroethane	ND	7.3	
Trichlorofluoromethane	ND	3.6	
Acetone	ND	15	
Freon 113	ND	3.6	
1,1-Dichloroethene	ND	3.6	
Methylene Chloride	ND	15	
Carbon Disulfide	ND	3.6	
MTBE	ND	3.6	
trans-1,2-Dichloroethene	ND	3.6	
Vinyl Acetate	ND	36	
1,1-Dichloroethane	ND	3.6	
2-Butanone	ND	7.3	
cis-1,2-Dichloroethene	ND	3.6	
2,2-Dichloropropane	ND	3.6	
Chloroform	ND	3.6	
Bromochloromethane	ND	3.6	
1,1,1-Trichloroethane	ND	3.6	
1,1-Dichloropropene	ND	3.6	
Carbon Tetrachloride	ND	3.6	
1,2-Dichloroethane	ND	3.6	
Benzene	ND	3.6	
Trichloroethene	ND	3.6	
1,2-Dichloropropane	ND	3.6	
Bromodichloromethane	ND	3.6	
Dibromomethane	ND	3.6	
4-Methyl-2-Pentanone	ND	7.3	
cis-1,3-Dichloropropene	ND	3.6	
Toluene	ND	3.6	
trans-1,3-Dichloropropene	ND	3.6	
1,1,2-Trichloroethane	ND	3.6	
2-Hexanone	ND	7.3	
1,3-Dichloropropane	ND	3.6	
Tetrachloroethene	ND	3.6	

RL= Reporting Limit



	Purgeable Org	anics by GC/MS
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA
Client:	PES Environmental, Inc.	Prep: EPA 5035
Project#:	1440.006.01.005	Analysis: EPA 8260B
Field ID:	SG-4-1-1.5	Diln Fac: 0.7278
Lab ID:	292706-004	Batch#: 251925
Matrix:	Soil	Sampled: 09/21/17
Units:	ug/Kg	Received: 09/21/17
Basis:	as received	Analyzed: 09/22/17

Analyte	Result	RL	
Dibromochloromethane	ND	3.6	
1,2-Dibromoethane	ND	3.6	
Chlorobenzene	ND	3.6	
1,1,1,2-Tetrachloroethane	ND	3.6	
Ethylbenzene	ND	3.6	
m,p-Xylenes	ND	3.6	
o-Xylene	ND	3.6	
Styrene	ND	3.6	
Bromoform	ND	3.6	
Isopropylbenzene	ND	3.6	
1,1,2,2-Tetrachloroethane	ND	3.6	
1,2,3-Trichloropropane	ND	3.6	
Propylbenzene	ND	3.6	
Bromobenzene	ND	3.6	
1,3,5-Trimethylbenzene	ND	3.6	
2-Chlorotoluene	ND	3.6	
4-Chlorotoluene	ND	3.6	
tert-Butylbenzene	ND	3.6	
1,2,4-Trimethylbenzene	ND	3.6	
sec-Butylbenzene	ND	3.6	
para-Isopropyl Toluene	ND	3.6	
1,3-Dichlorobenzene	ND	3.6	
1,4-Dichlorobenzene	ND	3.6	
n-Butylbenzene	ND	3.6	
1,2-Dichlorobenzene	ND	3.6	
1,2-Dibromo-3-Chloropropane	ND	3.6	
1,2,4-Trichlorobenzene	ND	3.6	
Hexachlorobutadiene	ND	3.6	
Naphthalene	ND	3.6	
1,2,3-Trichlorobenzene	ND	3.6	

Surrogate	%REC	Limits	
Dibromofluoromethane	106	76-132	
1,2-Dichloroethane-d4	93	74-149	
Toluene-d8	99	80-120	
Bromofluorobenzene	106	78-134	

RL= Reporting Limit

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	Purgeable Org	anics by GC/MS
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA
Client:	PES Environmental, Inc.	Prep: EPA 5035
Project#:	1440.006.01.005	Analysis: EPA 8260B
Field ID:	SG-4-4-4.5	Diln Fac: 0.7704
Lab ID:	292706-005	Batch#: 251925
Matrix:	Soil	Sampled: 09/21/17
Units:	ug/Kg	Received: 09/21/17
Basis:	as received	Analyzed: 09/22/17

Analyte	Result	RL	
Freon 12	ND	7.7	
Chloromethane	ND	7.7	
Vinyl Chloride	ND	7.7	
Bromomethane	ND	7.7	
Chloroethane	ND	7.7	
Trichlorofluoromethane	ND	3.9	
Acetone	ND	15	
Freon 113	ND	3.9	
1,1-Dichloroethene	ND	3.9	
Methylene Chloride	ND	15	
Carbon Disulfide	ND	3.9	
MTBE	ND	3.9	
trans-1,2-Dichloroethene	ND	3.9	
Vinyl Acetate	ND	39	
1,1-Dichloroethane	ND	3.9	
2-Butanone	ND	7.7	
cis-1,2-Dichloroethene	ND	3.9	
2,2-Dichloropropane	ND	3.9	
Chloroform	ND	3.9	
Bromochloromethane	ND	3.9	
1,1,1-Trichloroethane	ND	3.9	
1,1-Dichloropropene	ND	3.9	
Carbon Tetrachloride	ND	3.9	
1,2-Dichloroethane	ND	3.9	
Benzene	ND	3.9	
Trichloroethene	ND	3.9	
1,2-Dichloropropane	ND	3.9	
Bromodichloromethane	ND	3.9	
Dibromomethane	ND	3.9	
4-Methyl-2-Pentanone	ND	7.7	
cis-1,3-Dichloropropene	ND	3.9	
Toluene	ND	3.9	
trans-1,3-Dichloropropene	ND	3.9	
1,1,2-Trichloroethane	ND	3.9	
2-Hexanone	ND	7.7	
1,3-Dichloropropane	ND	3.9	
Tetrachloroethene	ND	3.9	

RL= Reporting Limit



	Purgeable O	rganics by GC/MS	
Lab #:	292706	Location: 750 West San CArlos Street San J	oseCA
Client:	PES Environmental, Inc.	Prep: EPA 5035	
Project#:	1440.006.01.005	Analysis: EPA 8260B	
Field ID:	SG-4-4-4.5	Diln Fac: 0.7704	
Lab ID:	292706-005	Batch#: 251925	
Matrix:	Soil	Sampled: 09/21/17	
Units:	ug/Kg	Received: 09/21/17	
Basis:	as received	Analyzed: 09/22/17	

Analyte	Result	RL	
Dibromochloromethane	ND	3.9	
1,2-Dibromoethane	ND	3.9	
Chlorobenzene	ND	3.9	
1,1,1,2-Tetrachloroethane	ND	3.9	
Ethylbenzene	ND	3.9	
m,p-Xylenes	ND	3.9	
o-Xylene	ND	3.9	
Styrene	ND	3.9	
Bromoform	ND	3.9	
Isopropylbenzene	ND	3.9	
1,1,2,2-Tetrachloroethane	ND	3.9	
1,2,3-Trichloropropane	ND	3.9	
Propylbenzene	ND	3.9	
Bromobenzene	ND	3.9	
1,3,5-Trimethylbenzene	ND	3.9	
2-Chlorotoluene	ND	3.9	
4-Chlorotoluene	ND	3.9	
tert-Butylbenzene	ND	3.9	
1,2,4-Trimethylbenzene	ND	3.9	
sec-Butylbenzene	ND	3.9	
para-Isopropyl Toluene	ND	3.9	
1,3-Dichlorobenzene	ND	3.9	
1,4-Dichlorobenzene	ND	3.9	
n-Butylbenzene	ND	3.9	
1,2-Dichlorobenzene	ND	3.9	
1,2-Dibromo-3-Chloropropane	ND	3.9	
1,2,4-Trichlorobenzene	ND	3.9	
Hexachlorobutadiene	ND	3.9	
Naphthalene	ND	3.9	
1,2,3-Trichlorobenzene	ND	3.9	

Surrogate	%REC	Limits	
Dibromofluoromethane	107	76-132	
1,2-Dichloroethane-d4	96	74-149	
Toluene-d8	100	80-120	
Bromofluorobenzene	106	78-134	

RL= Reporting Limit

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	Purgeable Organics by GC/MS			
Lab #:	292706	Location: 750 West San CArlos Street San Jos	eCA	
Client:	PES Environmental, Inc.	Prep: EPA 5035		
Project#:	1440.006.01.005	Analysis: EPA 8260B		
Field ID:	SB-1-1-1.5	Diln Fac: 0.7541		
Lab ID:	292706-007	Batch#: 251925		
Matrix:	Soil	Sampled: 09/21/17		
Units:	ug/Kg	Received: 09/21/17		
Basis:	as received	Analyzed: 09/22/17		

Analyte	Result	RL	
Freon 12	ND	7.5	
Chloromethane	ND	7.5	
Vinyl Chloride	ND	7.5	
Bromomethane	ND	7.5	
Chloroethane	ND	7.5	
Trichlorofluoromethane	ND	3.8	
Acetone	ND	15	
Freon 113	ND	3.8	
1,1-Dichloroethene	ND	3.8	
Methylene Chloride	ND	15	
Carbon Disulfide	ND	3.8	
MTBE	ND	3.8	
trans-1,2-Dichloroethene	ND	3.8	
Vinyl Acetate	ND	38	
1,1-Dichloroethane	ND	3.8	
2-Butanone	ND	7.5	
cis-1,2-Dichloroethene	ND	3.8	
2,2-Dichloropropane	ND	3.8	
Chloroform	ND	3.8	
Bromochloromethane	ND	3.8	
1,1,1-Trichloroethane	ND	3.8	
1,1-Dichloropropene	ND	3.8	
Carbon Tetrachloride	ND	3.8	
1,2-Dichloroethane	ND	3.8	
Benzene	ND	3.8	
Trichloroethene	ND	3.8	
1,2-Dichloropropane	ND	3.8	
Bromodichloromethane	ND	3.8	
Dibromomethane	ND	3.8	
4-Methyl-2-Pentanone	ND	7.5	
cis-1,3-Dichloropropene	ND	3.8	
Toluene	ND	3.8	
trans-1,3-Dichloropropene	ND	3.8	
1,1,2-Trichloroethane	ND	3.8	
2-Hexanone	ND	7.5	
1,3-Dichloropropane	ND	3.8	
Tetrachloroethene	ND	3.8	

RL= Reporting Limit



	Purgeable Organics by GC/MS			
Lab #:	292706	Location: 750 West San CArlos Street San	JoseCA	
Client:	PES Environmental, Inc.	Prep: EPA 5035		
Project#:	1440.006.01.005	Analysis: EPA 8260B		
Field ID:	SB-1-1-1.5	Diln Fac: 0.7541		
Lab ID:	292706-007	Batch#: 251925		
Matrix:	Soil	Sampled: 09/21/17		
Units:	ug/Kg	Received: 09/21/17		
Basis:	as received	Analyzed: 09/22/17		

Analyte	Result	RL	
Dibromochloromethane	ND	3.8	
1,2-Dibromoethane	ND	3.8	
Chlorobenzene	ND	3.8	
1,1,1,2-Tetrachloroethane	ND	3.8	
Ethylbenzene	ND	3.8	
m,p-Xylenes	ND	3.8	
o-Xylene	ND	3.8	
Styrene	ND	3.8	
Bromoform	ND	3.8	
Isopropylbenzene	ND	3.8	
1,1,2,2-Tetrachloroethane	ND	3.8	
1,2,3-Trichloropropane	ND	3.8	
Propylbenzene	ND	3.8	
Bromobenzene	ND	3.8	
1,3,5-Trimethylbenzene	ND	3.8	
2-Chlorotoluene	ND	3.8	
4-Chlorotoluene	ND	3.8	
tert-Butylbenzene	ND	3.8	
1,2,4-Trimethylbenzene	ND	3.8	
sec-Butylbenzene	ND	3.8	
para-Isopropyl Toluene	ND	3.8	
1,3-Dichlorobenzene	ND	3.8	
1,4-Dichlorobenzene	ND	3.8	
n-Butylbenzene	ND	3.8	
1,2-Dichlorobenzene	ND	3.8	
1,2-Dibromo-3-Chloropropane	ND	3.8	
1,2,4-Trichlorobenzene	ND	3.8	
Hexachlorobutadiene	ND	3.8	
Naphthalene	ND	3.8	
1,2,3-Trichlorobenzene	ND	3.8	

Surrogate	%REC	Limits	
Dibromofluoromethane	107	76-132	
1,2-Dichloroethane-d4	96	74-149	
Toluene-d8	99	80-120	
Bromofluorobenzene	105	78-134	

RL= Reporting Limit

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10.0



Purgeable Organics by GC/MS				
Lab #:	292706	Location: 750 West San CArlos Street San Jose	eCA	
Client:	PES Environmental, Inc.	Prep: EPA 5035		
Project#:	1440.006.01.005	Analysis: EPA 8260B		
Field ID:	SB-1-4-4.5	Diln Fac: 0.7899		
Lab ID:	292706-008	Batch#: 251925		
Matrix:	Soil	Sampled: 09/21/17		
Units:	ug/Kg	Received: 09/21/17		
Basis:	as received	Analyzed: 09/22/17		

Analyte	Result	RL	
Freon 12	ND	7.9	
Chloromethane	ND	7.9	
Vinyl Chloride	ND	7.9	
Bromomethane	ND	7.9	
Chloroethane	ND	7.9	
Trichlorofluoromethane	ND	3.9	
Acetone	ND	16	
Freon 113	ND	3.9	
1,1-Dichloroethene	ND	3.9	
Methylene Chloride	ND	16	
Carbon Disulfide	ND	3.9	
MTBE	ND	3.9	
trans-1,2-Dichloroethene	ND	3.9	
Vinyl Acetate	ND	39	
1,1-Dichloroethane	ND	3.9	
2-Butanone	ND	7.9	
cis-1,2-Dichloroethene	ND	3.9	
2,2-Dichloropropane	ND	3.9	
Chloroform	ND	3.9	
Bromochloromethane	ND	3.9	
1,1,1-Trichloroethane	ND	3.9	
1,1-Dichloropropene	ND	3.9	
Carbon Tetrachloride	ND	3.9	
1,2-Dichloroethane	ND	3.9	
Benzene	ND	3.9	
Trichloroethene	ND	3.9	
1,2-Dichloropropane	ND	3.9	
Bromodichloromethane	ND	3.9	
Dibromomethane	ND	3.9	
4-Methyl-2-Pentanone	ND	7.9	
cis-1,3-Dichloropropene	ND	3.9	
Toluene	ND	3.9	
trans-1,3-Dichloropropene	ND	3.9	
1,1,2-Trichloroethane	ND	3.9	
2-Hexanone	ND	7.9	
1,3-Dichloropropane	ND	3.9	
Tetrachloroethene	ND	3.9	

ND= Not Detected

RL= Reporting Limit



Purgeable Organics by GC/MS				
Lab #:	292706	Location: 750 West San CArlos Street	: San JoseCA	
Client:	PES Environmental, Inc.	Prep: EPA 5035		
Project#:	1440.006.01.005	Analysis: EPA 8260B		
Field ID:	SB-1-4-4.5	Diln Fac: 0.7899		
Lab ID:	292706-008	Batch#: 251925		
Matrix:	Soil	Sampled: 09/21/17		
Units:	ug/Kg	Received: 09/21/17		
Basis:	as received	Analyzed: 09/22/17		

Analyte	Result	RL	
Dibromochloromethane	ND	3.9	
1,2-Dibromoethane	ND	3.9	
Chlorobenzene	ND	3.9	
1,1,1,2-Tetrachloroethane	ND	3.9	
Ethylbenzene	ND	3.9	
m,p-Xylenes	ND	3.9	
o-Xylene	ND	3.9	
Styrene	ND	3.9	
Bromoform	ND	3.9	
Isopropylbenzene	ND	3.9	
1,1,2,2-Tetrachloroethane	ND	3.9	
1,2,3-Trichloropropane	ND	3.9	
Propylbenzene	ND	3.9	
Bromobenzene	ND	3.9	
1,3,5-Trimethylbenzene	ND	3.9	
2-Chlorotoluene	ND	3.9	
4-Chlorotoluene	ND	3.9	
tert-Butylbenzene	ND	3.9	
1,2,4-Trimethylbenzene	ND	3.9	
sec-Butylbenzene	ND	3.9	
para-Isopropyl Toluene	ND	3.9	
1,3-Dichlorobenzene	ND	3.9	
1,4-Dichlorobenzene	ND	3.9	
n-Butylbenzene	ND	3.9	
1,2-Dichlorobenzene	ND	3.9	
1,2-Dibromo-3-Chloropropane	ND	3.9	
1,2,4-Trichlorobenzene	ND	3.9	
Hexachlorobutadiene	ND	3.9	
Naphthalene	ND	3.9	
1,2,3-Trichlorobenzene	ND	3.9	

Surrogate	%REC	Limits
Dibromofluoromethane	103	76-132
1,2-Dichloroethane-d4	92	74-149
Toluene-d8	99	80-120
Bromofluorobenzene	106	78-134

ND= Not Detected

RL= Reporting Limit

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Purgeable Organics by GC/MS					
Lab #:	292706	Location: 750 We	est San CArlos Street San JoseCA		
Client:	PES Environmental, Inc.	Prep: EPA 50	135		
Project#:	1440.006.01.005	Analysis: EPA 82	260B		
Type:	LCS	Diln Fac:	1.000		
Lab ID:	QC901986	Batch#:	251925		
Matrix:	Soil	Analyzed:	09/22/17		
Units:	ug/Kg				

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	29.17	117	68-132
Benzene	25.00	26.82	107	75-123
Trichloroethene	25.00	24.43	98	75-120
Toluene	25.00	23.89	96	76-120
Chlorobenzene	25.00	23.20	93	80-120

Surrogate	%REC	imits	
Dibromofluoromethane	107	6-132	
1,2-Dichloroethane-d4	99	4-149	
Toluene-d8	101	0-120	
Bromofluorobenzene	105	8-134	



Purgeable Organics by GC/MS				
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA		
Client:	PES Environmental, Inc.	Prep: EPA 5035		
Project#:	1440.006.01.005	Analysis: EPA 8260B		
Type:	BLANK	Diln Fac: 1.000		
Lab ID:	QC901987	Batch#: 251925		
Matrix:	Soil	Analyzed: 09/22/17		
Units:	ug/Kg			

Analyte	Result	RL	
Freon 12	ND	10	
Chloromethane	ND	10	
Vinyl Chloride	ND	10	
Bromomethane	ND	10	
Chloroethane	ND	10	
Trichlorofluoromethane	ND	5.0	
Acetone	ND	20	
Freon 113	ND	5.0	
1,1-Dichloroethene	ND	5.0	
Methylene Chloride	ND	20	
Carbon Disulfide	ND	5.0	
MTBE	ND	5.0	
trans-1,2-Dichloroethene	ND	5.0	
Vinyl Acetate	ND	50	
1,1-Dichloroethane	ND	5.0	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	5.0	
2,2-Dichloropropane	ND	5.0	
Chloroform	ND	5.0	
Bromochloromethane	ND	5.0	
1,1,1-Trichloroethane	ND	5.0	
1,1-Dichloropropene	ND	5.0	
Carbon Tetrachloride	ND	5.0	
1,2-Dichloroethane	ND	5.0	
Benzene	ND	5.0	
Trichloroethene	ND	5.0	
1,2-Dichloropropane	ND	5.0	
Bromodichloromethane	ND	5.0	
Dibromomethane	ND	5.0	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	5.0	
Toluene	ND	5.0	
trans-1,3-Dichloropropene	ND	5.0	
1,1,2-Trichloroethane	ND	5.0	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	5.0	
Tetrachloroethene	ND	5.0	

ND= Not Detected

RL= Reporting Limit

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13.0



Purgeable Organics by GC/MS					
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA			
Client:	PES Environmental, Inc.	Prep: EPA 5035			
Project#:	1440.006.01.005	Analysis: EPA 8260B			
Type:	BLANK	Diln Fac: 1.000			
Lab ID:	QC901987	Batch#: 251925			
Matrix:	Soil	Analyzed: 09/22/17			
Units:	ug/Kg				

Analyte	Result	RL	
Dibromochloromethane	ND	5.0	
1,2-Dibromoethane	ND	5.0	
Chlorobenzene	ND	5.0	
1,1,1,2-Tetrachloroethane	ND	5.0	
Ethylbenzene	ND	5.0	
m,p-Xylenes	ND	5.0	
o-Xylene	ND	5.0	
Styrene	ND	5.0	
Bromoform	ND	5.0	
Isopropylbenzene	ND	5.0	
1,1,2,2-Tetrachloroethane	ND	5.0	
1,2,3-Trichloropropane	ND	5.0	
Propylbenzene	ND	5.0	
Bromobenzene	ND	5.0	
1,3,5-Trimethylbenzene	ND	5.0	
2-Chlorotoluene	ND	5.0	
4-Chlorotoluene	ND	5.0	
tert-Butylbenzene	ND	5.0	
1,2,4-Trimethylbenzene	ND	5.0	
sec-Butylbenzene	ND	5.0	
para-Isopropyl Toluene	ND	5.0	
1,3-Dichlorobenzene	ND	5.0	
1,4-Dichlorobenzene	ND	5.0	
n-Butylbenzene	ND	5.0	
1,2-Dichlorobenzene	ND	5.0	
1,2-Dibromo-3-Chloropropane	ND	5.0	
1,2,4-Trichlorobenzene	ND	5.0	
Hexachlorobutadiene	ND	5.0	
Naphthalene	ND	5.0	
1,2,3-Trichlorobenzene	ND	5.0	

Surrogate	%REC	Limits	
Dibromofluoromethane	111	76-132	
1,2-Dichloroethane-d4	105	74-149	
Toluene-d8	101	80-120	
Bromofluorobenzene	108	78-134	

ND= Not Detected

RL= Reporting Limit

Page 2 of 2

13.0



Purgeable Organics by GC/MS						
Lab #:	292706	Location: 750 West San CArlos Street San JoseC.				
Client:	PES Environmental, Inc.	Prep: EPA 5030B				
Project#:	1440.006.01.005	Analysis: EPA 8260B				
Field ID:	ZZZZZZZZZZ	Batch#: 251925				
MSS Lab ID:	292703-005	Sampled: 09/21/17				
Matrix:	Soil	Received: 09/21/17				
Units:	ug/Kg	Analyzed: 09/22/17				
Basis:	as received					

Type: MS Diln Fac: 0.9579

Lab ID: QC902021

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5858	47.89	47.59	99	64-131
Benzene	<0.6825	47.89	48.65	102	66-122
Trichloroethene	<0.7108	47.89	48.51	101	57-133
Toluene	<0.7476	47.89	42.82	89	61-120
Chlorobenzene	<0.6128	47.89	40.69	85	56-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	76-132
1,2-Dichloroethane-d4	85	74-149
Toluene-d8	98	80-120
Bromofluorobenzene	100	78-134

Type: MSD Diln Fac: 0.9785

Lab ID: QC902022

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	48.92	47.86	98	64-131	2	32
Benzene	48.92	48.32	99	66-122	3	32
Trichloroethene	48.92	48.14	98	57-133	3	34
Toluene	48.92	42.00	86	61-120	4	32
Chlorobenzene	48.92	39.98	82	56-120	4	33

Surrogate	%REC	Limits	
Dibromofluoromethane	95	76-132	
1,2-Dichloroethane-d4	86	74-149	
Toluene-d8	97	80-120	
Bromofluorobenzene	98	78-134	



California Title 22 Metals						
Lab #:	292706	Project#: 1440.006.01.005				
Client:	PES Environmental, Inc.	Location: 750 West San CArlos Street San JoseCA				
Field ID:	SG-3-1-1.5	Basis: as received				
Lab ID:	292706-001	Diln Fac: 1.000				
Matrix:	Soil	Sampled: 09/21/17				
Units:	mg/Kg	Received: 09/21/17				

Analyte	Result	RL	Batch# Prepared	Analyzed Prep	Analysis
Antimony	ND	2.0	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Arsenic	3.3	1.5	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Barium	200	0.25	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Beryllium	0.64	0.099	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Cadmium	ND	0.25	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Chromium	50	0.25	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Cobalt	11	0.25	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Copper	30	0.25	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Lead	13	0.99	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Mercury	0.096	0.017	251990 09/25/17	09/25/17 METHOD	EPA 7471A
Molybdenum	ND	0.25	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Nickel	67	0.25	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Selenium	ND	2.0	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Silver	ND	0.25	251932 09/22/17	09/25/17 EPA 3050B	EPA 6010B
Thallium	ND	0.50	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Vanadium	38	0.25	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Zinc	160	0.99	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B



California Title 22 Metals						
Lab #:	292706	Project#: 1440.006.01.005				
Client:	PES Environmental, Inc.	Location: 750 West San CArlos Street San JoseCA				
Field ID:	SG-3-4-4.5	Basis: as received				
Lab ID:	292706-002	Diln Fac: 1.000				
Matrix:	Soil	Sampled: 09/21/17				
Units:	mg/Kg	Received: 09/21/17				

Analyte	Result	RL	Batch# Prepared	Analyzed Prep	Analysis
Antimony	ND	2.0	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Arsenic	5.8	1.5	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Barium	140	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Beryllium	0.69	0.10	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Cadmium	ND	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Chromium	49	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Cobalt	6.6	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Copper	24	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Lead	6.1	1.0	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Mercury	0.066	0.017	251990 09/25/17	09/25/17 METHOD	EPA 7471A
Molybdenum	0.59	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Nickel	54	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Selenium	ND	2.0	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Silver	ND	0.26	251932 09/22/17	09/25/17 EPA 3050B	EPA 6010B
Thallium	ND	0.51	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Vanadium	52	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Zinc	60	1.0	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B

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California Title 22 Metals						
Lab #:	292706	Project#: 1440.006.01.005				
Client:	PES Environmental, Inc.	Location: 750 West San CArlos Street San JoseCA				
Field ID:	SB-1-1-1.5	Basis: as received				
Lab ID:	292706-007	Diln Fac: 1.000				
Matrix:	Soil	Sampled: 09/21/17				
Units:	mg/Kg	Received: 09/21/17				

Analyte	Result	RL	Batch# Prepared	Analyzed Prep	Analysis
Antimony	ND	2.0	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Arsenic	17	1.5	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Barium	190	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Beryllium	0.73	0.10	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Cadmium	0.45	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Chromium	48	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Cobalt	9.6	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Copper	31	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Lead	7.4	1.0	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Mercury	0.091	0.016	251990 09/25/17	09/25/17 METHOD	EPA 7471A
Molybdenum	ND	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Nickel	61	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Selenium	ND	2.0	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Silver	ND	0.26	251932 09/22/17	09/25/17 EPA 3050B	EPA 6010B
Thallium	ND	0.52	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Vanadium	49	0.26	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Zinc	75	1.0	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B



	California T	itle 22 Metals
Lab #:	292706	Project#: 1440.006.01.005
Client:	PES Environmental, Inc.	Location: 750 West San CArlos Street San JoseCA
Field ID:	SB-1-4-4.5	Basis: as received
Lab ID:	292706-008	Diln Fac: 1.000
Matrix:	Soil	Sampled: 09/21/17
Units:	mg/Kg	Received: 09/21/17

Analyte	Result	RL	Batch# Prepared	Analyzed Prep	Analysis
Antimony	ND	1.9	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Arsenic	5.4	1.4	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Barium	340	0.23	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Beryllium	0.69	0.093	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Cadmium	3.0	0.23	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Chromium	50	0.23	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Cobalt	7.5	0.23	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Copper	23	0.23	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Lead	69	0.93	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Mercury	0.038	0.017	251990 09/25/17	09/25/17 METHOD	EPA 7471A
Molybdenum	0.90	0.23	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Nickel	58	0.23	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Selenium	ND	1.9	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Silver	ND	0.23	251932 09/22/17	09/25/17 EPA 3050B	EPA 6010B
Thallium	ND	0.46	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Vanadium	47	0.23	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B
Zinc	180	0.93	251932 09/22/17	09/23/17 EPA 3050B	EPA 6010B



	California T	itle 22 Metals
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA
Client:	PES Environmental, Inc.	Prep: EPA 3050B
Project#:	1440.006.01.005	Analysis: EPA 6010B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC902005	Batch#: 251932
Matrix:	Soil	Prepared: 09/22/17
Units:	mg/Kg	

Analyte	Result	RL	Analyzed	
Antimony	ND	2.0	09/23/17	
Arsenic	ND	1.5	09/23/17	
Barium	ND	0.25	09/23/17	
Beryllium	ND	0.10	09/23/17	
Cadmium	ND	0.25	09/23/17	
Chromium	ND	0.25	09/23/17	
Cobalt	ND	0.25	09/23/17	
Copper	ND	0.25	09/23/17	
Lead	ND	1.0	09/23/17	
Molybdenum	ND	0.25	09/23/17	
Nickel	ND	0.25	09/23/17	
Selenium	ND	2.0	09/23/17	
Silver	ND	0.25	09/25/17	
Thallium	ND	0.50	09/23/17	
Vanadium	ND	0.25	09/23/17	
Zinc	ND	1.0	09/23/17	

 $\begin{array}{ll} \text{ND= Not Detected} \\ \text{RL= Reporting Limit} \end{array}$ 



	California T	itle 22 Metals
Lab #: Client:	292706 PES Environmental, Inc.	Location: 750 West San CArlos Street San JoseCA Prep: EPA 3050B
Project#:	1440.006.01.005	Analysis: EPA 6010B
Matrix:	Soil	Batch#: 251932
Units:	mg/Kg	Prepared: 09/22/17
Diln Fac:	1.000	Analyzed: 09/23/17

Type: BS Lab ID: QC902006

Analyte	Spiked	Result	%REC	Limits
Antimony	50.51	52.96	105	80-120
Arsenic	50.51	50.72	100	80-120
Barium	50.51	49.81	99	80-120
Beryllium	25.25	24.22	96	80-120
Cadmium	50.51	49.79	99	80-120
Chromium	50.51	51.15	101	80-120
Cobalt	50.51	46.70	92	80-120
Copper	50.51	49.45	98	80-120
Lead	50.51	51.99	103	80-120
Molybdenum	50.51	47.55	94	80-120
Nickel	50.51	46.10	91	80-120
Selenium	50.51	49.50	98	80-120
Silver	5.051	4.516 b	89	80-120
Thallium	50.51	51.80	103	80-120
Vanadium	50.51	51.20	101	80-120
Zinc	50.51	49.08	97	80-120

Type: BSD Lab ID: QC902007

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	51.55	53.79	104	80-120	0	20
Arsenic	51.55	51.46	100	80-120	1	20
Barium	51.55	50.39	98	80-120	1	20
Beryllium	25.77	24.62	96	80-120	0	20
Cadmium	51.55	50.67	98	80-120	0	20
Chromium	51.55	52.01	101	80-120	0	20
Cobalt	51.55	48.48	94	80-120	2	20
Copper	51.55	50.41	98	80-120	0	20
Lead	51.55	52.54	102	80-120	1	20
Molybdenum	51.55	48.51	94	80-120	0	20
Nickel	51.55	46.83	91	80-120	0	20
Selenium	51.55	49.87	97	80-120	1	20
Silver	5.155	4.608 b	89	80-120	0	22
Thallium	51.55	52.65	102	80-120	0	20
Vanadium	51.55	52.21	101	80-120	0	20
Zinc	51.55	50.23	97	80-120	0	20



	California !	Title 22 Metals
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA
Client:	PES Environmental, Inc.	Prep: METHOD
Project#:	1440.006.01.005	Analysis: EPA 7471A
Analyte:	Mercury	Diln Fac: 1.000
Type:	BLANK	Batch#: 251990
Lab ID:	QC902215	Prepared: 09/25/17
Matrix:	Soil	Analyzed: 09/25/17
Units:	mg/Kg	

Result	RL	
ND	0.017	

ND= Not Detected
RL= Reporting Limit



	California !	Title 22 Metals
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA
Client:	PES Environmental, Inc.	Prep: METHOD
Project#:	1440.006.01.005	Analysis: EPA 7471A
Analyte:	Mercury	Batch#: 251990
Matrix:	Soil	Prepared: 09/25/17
Units:	mg/Kg	Analyzed: 09/25/17
Diln Fac:	1.000	

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC902216	0.1667	0.1626	98	80-126		
BSD	QC902217	0.1695	0.1640	97	80-126	1	45



	California	Title 22 Metals
Lab #:	292706	Location: 750 West San CArlos Street San JoseCA
Client:	PES Environmental, Inc.	Prep: METHOD
Project#:	1440.006.01.005	Analysis: EPA 7471A
Analyte:	Mercury	Diln Fac: 1.000
Field ID:	ZZZZZZZZZ	Batch#: 251990
MSS Lab ID:	292350-001	Sampled: 09/11/17
Matrix:	Soil	Received: 09/12/17
Units:	mg/Kg	Prepared: 09/25/17
Basis:	as received	Analyzed: 09/25/17

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC902218	0.4730	0.1724	0.7207	144	61-157		
MSD	QC902219		0.1639	0.5903	72	61-157	19	57





# **Enthalpy Analytical**

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

#### Laboratory Job Number 292880 ANALYTICAL REPORT

PES Environmental, Inc.

Project : 1440.006.01.005

7665 Redwood Boulevard

Location: 750 West San Carlos Street San JoseCA

Date: <u>09/29/2017</u>

Novato, CA 94945

Level : II

Sample ID Lab ID SG-3-1-1.5 292880-001 SB-1-4-4.5 292880-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:

Patrick McCarthy Project Manager patrick.mccarthy@enthalpy.com

(510) 204-2236

CA ELAP# 2896, NELAP# 4044-001



#### CASE NARRATIVE

Laboratory number: 292880

PES Environmental, Inc. Client:

Project:

1440.006.01.005 750 West San Carlos Street San JoseCA 09/26/17 09/21/17 Location:

Request Date: Samples Received:

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 09/26/17. The samples were received cold and intact.

#### Metals (EPA 6010B):

No analytical problems were encountered.



### Detections Summary for 292880

Results for any subcontracted analyses are not included in this summary.

Client : PES Environmental, Inc.

Project : 1440.006.01.005

Location: 750 West San Carlos Street San JoseCA

Client Sample ID: SG-3-1-1.5 Laboratory Sample ID: 292880-001

No Detections

Client Sample ID: SB-1-4-4.5 Laboratory Sample ID: 292880-002

No Detections

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Chromium						
Lab #:	292880	Location: 750 West San Carlos Street San JoseCA				
Client:	PES Environmental, Inc.	Prep: WET				
Project#:	1440.006.01.005	Analysis: EPA 6010B				
Analyte:	Chromium	Sampled: 09/21/17				
Matrix:	WET Leachate	Received: 09/21/17				
Units:	mg/L	Prepared: 09/29/17				
Diln Fac:	10.00	Analyzed: 09/29/17				
Batch#:	252164					

Field ID	Type Lab ID	Result	RL
SG-3-1-1.5	SAMPLE 292880-001	ND	0.25
SB-1-4-4.5	SAMPLE 292880-002	ND	0.25
	BLANK QC902903	ND	0.25



Chromium						
Lab #:	292880	Location: 750 West San Carlos Street San Jose	сA			
Client:	PES Environmental, Inc.	Prep: WET				
Project#:	1440.006.01.005	Analysis: EPA 6010B				
Analyte:	Chromium	Batch#: 252164				
Field ID:	ZZZZZZZZZ	Sampled: 09/15/17				
MSS Lab ID:	292489-037	Received: 09/15/17				
Matrix:	WET Leachate	Prepared: 09/29/17				
Units:	mg/L	Analyzed: 09/29/17				

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac
BS	QC902904		0.1000	0.09523	95	80-120			1.000
BSD	QC902905		0.1000	0.09656	97	80-120	1	20	1.000
MS	QC902906	0.5064	0.5000	0.8977	78	76-124			10.00
MSD	QC902907		0.5000	0.9868	96	76-124	9	25	10.00

# **DISTRIBUTION**

# SUPPLEMENTAL SUBSURFACE INVESTIGATION REPORT 750 WEST SAN CARLOS STREET SAN JOSE, CALIFORNIA

## **OCTOBER 5, 2017**

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