

**RECEIVED**

By Alameda County Environmental Health 2:17 pm, Jun 27, 2017

June 26, 2017

Ms. Dilan Roe  
Chief-Land Water Division  
Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502

Subject: Soil and Groundwater Investigation Report  
Main Street Property  
927 Main Street  
Pleasanton, California 94566  
ACDEH Fuel Leak Case No. RO0003199  
GeoTracker Global ID No. T10000008158

Dear Ms. Dilan:

Equity Enterprises is pleased to present the enclosed report, prepared by Environmental Risk Assessors, presenting the findings of investigations at 927 Main Street in Pleasanton, California. This report is submitted pursuant to Alameda County Department of Environmental Health's letter dated April 26, 2017.

I have read and acknowledge the content, recommendations, and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the State Water Resource Control Board's GeoTracker website.

Please feel free to call me at 925-484-3636 if you have any questions.

Sincerely,



Brad Hirst  
Equity Enterprises



Environmental Risk Assessors

## Soil and Groundwater Investigation Report

Main Street Property  
927 Main Street  
Pleasanton, California 94566

June 26, 2017

Prepared for:  
Equity Enterprises  
4460 Black Avenue, Suite L  
Pleasanton, CA 94566

Prepared by:  
Environmental Risk Assessors  
1420 East Roseville Parkway  
#140-262  
Roseville, CA 95661

ACDEH Fuel Leak Case No. RO0003199

GeoTracker Global ID No. T10000008158

ERA Project No. 01-2016-1300-001





## Environmental Risk Assessors

June 26, 2017

Mr. Bradley A. Hirst  
Equity Enterprises  
4460 Black Avenue, Suite L  
Pleasanton, California 94566

**SUBJECT:** Soil and Groundwater Investigation  
Main Street Property  
927 Main Street  
Pleasanton, California 94566  
ERA Project No. 01-2016-1300-001

Dear Mr. Hirst,

Environmental Risk Assessors (ERA) is pleased to present this Soil and Groundwater Investigation (SSI) Report for the above-referenced property (the Site). Our scope of work and findings are presented in the attached report.

It has been a pleasure working with you on this project. Please do not hesitate to contact me at (916) 677-9897 and via email at [litafreeman@gmail.com](mailto:litafreeman@gmail.com) if you have any questions or comments regarding this assessment.

Sincerely,

Environmental Risk Assessors

Lita D. Freeman, PG  
Professional Geologist



Tel 916-677-9897  
[litafreeman@gmail.com](mailto:litafreeman@gmail.com)

1420 East Roseville Parkway  
Suite 140-262  
Roseville, California 95661

<b>1. EXECUTIVE SUMMARY</b>	<b>1</b>
1.1 Site Description	1
1.2 Background	1
1.3 Investigations	1
1.4 Findings	2
1.5 Conclusions	5
1.6 Recommendations	7
<b>2. INTRODUCTION</b>	<b>7</b>
2.1 Objective and Purpose	8
2.2 Site Description	8
2.3 Qualifications	8
<b>3. BACKGROUND</b>	<b>9</b>
3.1 Site History	9
3.2 Previous Investigations	9
3.2.1 Soil Gas	9
3.2.2 Soil 10	
3.2.3 Groundwater	10
<b>4. FIELD INVESTIGATION</b>	<b>11</b>
4.1 Pre-Field Activities	11
4.1.1 Health and Safety	11
4.1.2 Permitting	11
4.2 Field Activities	11
4.2.1 Utility Clearance	11
4.2.2 Sampling Activities	12
4.2.2.1 Soil Gas Sampling	12
4.2.2.2 Indoor Air and Ambient Air Sampling	12
4.2.2.3 Soil Sampling	13
4.2.2.4 Groundwater Sampling	14
4.2.3 Borehole Abandonment and Investigation-Derived Waste Handling	14
4.3 Analysis, Results, and Evaluation	14

4.3.1	Soil Gas Analysis and Results	15
4.3.2	Indoor Air and Ambient Air Analysis and Results	15
4.3.3	Soil Analysis and Results	15
4.3.4	Groundwater Analysis and Results	16
4.4	EVALUATION	17
4.4.1	Soil Gas Results Evaluation	17
4.4.2	Indoor Air and Ambient Air Results Evaluation	18
4.4.3	Soil Results Evaluation	18
4.4.4	Groundwater Results Evaluation	18
4.5	DEVIATIONS FROM THE WORK PLAN	18
<b>5.</b>	<b>PRELIMINARY CONCEPTUAL SITE MODEL</b>	<b>19</b>
5.1	Geology and Hydrogeology	19
5.2	Surface Water Bodies	19
5.3	Nearby Wells	19
5.4	Constituents of Concern: Light-Non Aqueous Phase Liquids (LNAPL)	19
5.5	Potential Sources: On-site, Off-site	19
5.6	Nature and Extent of Environmental Impacts: Soil Vapor, Soil, and Groundwater	20
	5.6.1 Petroleum Hydrocarbon Distribution in Soil Vapor	20
	5.6.2 Petroleum Hydrocarbon Distribution in Soil	20
	5.6.3 Petroleum Hydrocarbon Distribution in Groundwater	21
5.7	Migration Pathways: Potential Conduits	22
5.8	Potential Receptors: On-site, Off-site	22
<b>6.</b>	<b>POTENTIAL DATA GAPS</b>	<b>23</b>
<b>7.</b>	<b>LOW THREAT UST CLOSURE POLICY</b>	<b>23</b>
7.1	GENERAL CRITERIA	23
7.2	MEDIA-SPECIFIC CRITERIA - GROUNDWATER	25
7.3	MEDIA SPECIFIC CRITERIA –VAPOR INTRUSION TO INDOOR AIR	25
7.4	MEDIA SPECIFIC CRITERIA – DIRECT CONTACT AND OUTDOOR AIR EXPOSURE	26
<b>8.</b>	<b>CONCLUSIONS</b>	<b>27</b>

<b>9. RECOMMENDATIONS</b>	<b>29</b>
<b>10. LIMITATIONS</b>	<b>29</b>
10.1 Limitations and Exceptions	29
10.2 Special Terms and Conditions	30
10.3 User Reliance	30
<b>11. REFERENCES</b>	<b>30</b>

### Tables

1	General Site Information ( <i>embedded in text</i> )
2	Soil Gas, Indoor Air, and Ambient Air Samples Analytical Summary
3	Soil Samples Organics Analytical Summary
4	Groundwater Samples Organics Analytical Summary
5	Field Observations Summary ( <i>embedded in text</i> )
6	Exposure Parameters for Indoor Air Risks and Hazards Estimation
7	Excess Lifetime Cancer Risks and Noncancer Hazards Estimation
8	LTCP Compounds and Limits ( <i>embedded in text</i> )

### Figures

1	Site Location Map
2	Site Plan
3	Site Plan with Sampling Locations
4	Soil Results: VOCs, 0- to 10-Foot Depth Interval
5	Soil Results: Hydrocarbons, 0- to 5-Foot Depth Interval
6	Soil Results: Hydrocarbons, 5- to 10-Foot Depth Interval
7	TPHg Groundwater Isoconcentration Contour Map
8	Benzene – MTBE Concentrations in Groundwater

### Appendices

A	Alameda County Department of Environmental Health Letter Dated April 26, 2017
B	Tables and Figures from ERA's 2015 and 2016 Reports

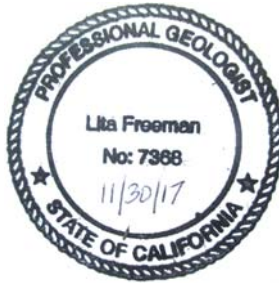
# Environmental Risk Assessors

## Table of Contents

- C Site Photographs
- D Zone 7 Soil Boring Permit
- E Soil Boring Logs
- F Laboratory Analytical Report and Chain-of-Custody Documentation

**CERTIFICATION**

Report Prepared By:



June 26, 2017

Lita D. Freeman, P.G.  
Principal Geoplogist  
California Professional Geologist No. 7368

Date

\* All information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a California Professional Geologist of Environmental Risk Assessors.

A professional geologist's certification of conditions comprises a declaration of his or her professional judgment. It does not constitute a warranty or guarantee, expressed or implied, nor does it relieve any other party of its responsibility to abide by contract documents, applicable codes, standards, regulations, and ordinances.



## Environmental Risk Assessors

### 1. EXECUTIVE SUMMARY

Environmental Risk Assessors (ERA) is pleased to present this Soil and Groundwater Investigation (SWI) Report (the "Report") for the property located at 927 Main Street, Pleasanton, Alameda County, California (the "Site"; Figure 1) to Equity Enterprises. The SWI was conducted in general accordance with ERA's *Soil and Groundwater Investigation Work Plan* (the "Work Plan"; ERA 2017) conditionally approved by the Alameda County Department of Environmental Health (ACDEH) in the letter dated April 26, 2017 (see Appendix A). The following identification numbers have been assigned to the Site: ACDEH Fuel Leak Case No. RO0003199; and California Environmental Protection Agency (Cal-EPA) State Water Resources Control Board (SWRCB) GeoTracker Global ID No. T10000008158.

#### 1.1 Site Description

The Site consists of approximately 8,115 square feet of land identified as Alameda County Assessor Parcel Number (APN) 946-3370-22. The single-story 2,340-square-foot building located on site was constructed in 1980 and is currently occupied by a Subway sandwich shop and a Hanadi Sushi restaurant (Figure 2). The L-shaped parcel adjoining the Site to the southwest is currently developed with a multi-tenant single-story commercial building.

#### 1.2 Background

Alameda County assessor's records indicate that a large parcel, identified as APN 946-3370-7, was divided into five parcels in 1978. Two of the five parcels are currently identified as 946-3370-22 (927 Main Street; the Site) and 946-3370-19 (915 Main Street; the southwest adjoining property).

Information obtained by Basics Environmental during the Phase I ESA (Basics Environmental 2013) indicated that the Site was formerly occupied by a large rectangular building with a canopy on the building's southeastern corner. The former building, addressed 40 Santa Rita Road, housed an auto repair facility between at least the late 1930s and late 1960s. A gas and oil facility was present at the building's southeastern corner from the late 1930s/early 1940s to the early 1950s. A small rectangular building with a canopy was formerly located on the southwest adjoining property and extended onto the Site's southern portion. This building, addressed 40A Santa Rita Road, was used as a gas and oil facility. In the 1970s a Robo-branded car wash was present on the southwest adjoining property and extended onto the Site. The approximate footprints of the former buildings addressed 40 and 40A Santa Rita Road are shown on Figure 2.

No specific information on former operations (i.e., capacity, type, and location of former underground storage tanks [USTs], pump island locations, auto maintenance areas, hazardous materials use, etc.) was obtained from local regulatory agency files by Basics Environmental. Also, no information regarding removal of USTs or associated sampling was contained within the local regulatory agency files reviewed by Basics Environmental. Anomalies indicative of USTs, backfilled excavations, etc. were not identified during a geophysical survey (CBRE 2016) conducted in 2016 at the Site, the southwest adjoining property, and the north adjoining property (929 Main Street).

#### 1.3 Investigations

Based on the findings of Basics Environmental's Phase I ESA (Basics Environmental 2013), ERA conducted a limited Phase II ESA in November 2015 and prepared a report presenting the findings (ERA 2015). In accordance with ACDEH's request, ERA performed a subsequent investigation in 2016 to evaluate the likely source(s) of the petroleum hydrocarbons identified in groundwater

## Environmental Risk Assessors

beneath the Site and an investigation in 2017 to help delineate the groundwater plume and evaluate naphthalene in soil gas, indoor air, and ambient air. The 2016 investigation results were presented in a report of findings (ERA 2016) and are summarized in this report along with the results of the 2017 investigation. The investigations performed to date consisted of the following:

- Advancing two borings (SB-1 and SB-2) in 2015 to collect soil and groundwater samples;
- Advancing borings at three locations (SB-3 through SB-5) in 2016 to collect a soil gas sample to assess vapor intrusion potential and soil and groundwater samples to assess conditions on the Site and southwest adjoining property;
- Obtaining soil samples from boring SB-3 in 2016 to assess photoionization detector (PID) readings recorded at boring SB-2 and evaluate lithology in the area of boring SB-2;
- Advancing a probe at SB-5A on the eastern side of the Site in 2017 to evaluate naphthalene in soil gas due to the presence of naphthalene in groundwater from boring SB-5 in 2016;
- Collecting samples in 2017 to evaluate select VOCs in indoor air and ambient air due to the presence of naphthalene in groundwater from boring SB-5 in 2016;
- Collecting groundwater from boring SB-2A in 2017 to evaluate the discrepancy of gasoline concentrations in groundwater samples from boring SB-2 in 2015 and boring SB-3 in 2016;
- Collecting soil and groundwater samples from borings SB-6 through SB-9 to delineate the lateral extent of the petroleum hydrocarbon beneath the Site;
- Submitting soil gas samples for volatile organic compounds (VOCs) and methane analysis, indoor air and ambient air samples for VOCs analysis, and soil and groundwater samples for total petroleum hydrocarbons (TPH) quantified as gasoline (TPHg), TPH quantified as diesel (TPHd), TPH quantified as Stoddard solvent (TPHss), VOCs, and/or Leaking Underground Fuel Tank (LUFT) Manual 5 metals analysis; and
- Preparing a report presenting the investigation results.

### 1.4 Findings

Depth to water was reported at 37 to 44 feet below ground surface (bgs) by ETIC Engineering, Inc. at the Mobil service station formerly located to the Site's northeast across Main Street (ETIC 2009a) with local groundwater flow direction inferred to be to the east-northeast; historically, local groundwater flow direction was generally northward. ETIC calculated groundwater gradient as 0.0011. Groundwater was encountered on site at depths of approximately 34 to 38.5 feet bgs.

A site-specific preliminary Conceptual Site Model (CSM) was developed to help identify data gaps to be addressed by data collection. Data gaps identified following the 2016 investigation were:

- The potential source for petroleum hydrocarbons in groundwater beneath the Site had not been identified. This data gap was adequately addressed by collecting and analyzing groundwater samples from on-site borings SB-7 and SB-8, located on the upgradient portion of the Site. Petroleum hydrocarbons were not reported in groundwater samples from these borings at concentrations at or above their respective lab RLs.
- The petroleum hydrocarbons plume beneath the Site had not been delineated. This data gap was adequately addressed by collecting and analyzing groundwater samples from the on-site borings SB-6 through SB-9, located on the downgradient portion of the Site.

## Environmental Risk Assessors

Petroleum hydrocarbons were not reported in groundwater samples from these borings at concentrations at or above their respective lab RLs.

- The potential for vapor intrusion from residual subsurface sources had not been assessed in the area of boring SB-5. This data gap was adequately addressed by collecting and analyzing of a soil gas sample from boring SB-5A, an indoor air sample (927-IA) from inside the on-site building, and an ambient air sample (1-AA) from outside the site building. Similar naphthalene concentrations in indoor air and ambient air were reported.

Information obtained during ERA's water well survey indicated that the nearest active or possibly active well located downgradient of the Site was more than 1,000 feet to the north to northwest.

Comparison of the analytical results for samples collected by ERA to the Tier 1 Environmental Screening Levels (ESLs) established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB 2016) revealed the following:

- Naphthalene and methane were reported in soil gas sample SB-3-SG at, respectively, 11 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ; below its' Tier 1 ESL of  $41 \mu\text{g}/\text{m}^3$ ) and 0.0009 percent (%; below its' Lower Explosive Limit [LEL] of 5%);
- Analysis of soil gas sample SB-5A revealed naphthalene at  $0.61 \mu\text{g}/\text{m}^3$  using TO-15 analysis and less than the laboratory reporting limit (lab RL;  $2 \mu\text{g}/\text{m}^3$ ) using TO-17 analysis; both are below its' ESL ( $41 \mu\text{g}/\text{m}^3$ ); the leak check compound 1,1-difluoroethane (1,1-DFA) was not reported at a concentration at or above its' lab RL ( $11 \mu\text{g}/\text{m}^3$ );
- Analysis of indoor air sample 927-IA and ambient air sample 1-AA revealed naphthalene at concentrations of  $0.11 \mu\text{g}/\text{m}^3$  (927-IA) and  $0.064 \mu\text{g}/\text{m}^3$  (1-AA) which are slightly above and slightly below, respectively, its' Tier 1 ESL for indoor air of  $0.083 \mu\text{g}/\text{m}^3$ ; 1,2-dibromoethane (EDB) at  $0.066 \mu\text{g}/\text{m}^3$  (927-IA) and  $0.053 \mu\text{g}/\text{m}^3$  (1-AA) which are above its' Tier 1 ESL for indoor air of  $0.0047 \mu\text{g}/\text{m}^3$ ; and 1,2-dichloroethane (1,2-DCA) at  $0.082 \mu\text{g}/\text{m}^3$  (927-IA) and  $0.078 \mu\text{g}/\text{m}^3$  (1-AA) which are below its' Tier 1 ESL for indoor air of  $0.11 \mu\text{g}/\text{m}^3$ ;
- Analysis of soil samples revealed TPHd in samples SB-2-2 at 16 milligrams per kilogram [mg/kg] and SB-6-2.5 at 37 mg/kg which are below its' Tier 1 ESL (240 mg/kg); TPHmo in samples SB-6-2.5, SB-7-2.5, SB-8-2.5, SB-8-7.5, SB-9-2.5, and SB-9-7.5 at 11 mg/kg to 75 mg/kg which are below its' Tier 1 ESL (100 mg/kg); TPHg at 0.99 mg/kg in SB-3-32 which is below its' Tier 1 ESL of 100 mg/kg, naphthalene at 0.026 mg/kg in SB-5-36 which is above its' Tier 1 ESL of 0.023 mg/kg, ethylbenzene at 0.022 mg/kg in SB-3-32 which is below its' Tier 1 ESL of 1.4 mg/kg, and xylenes at 0.137 mg/kg in SB-3-32 and 0.022 mg/kg in SB-5-36 which are below its' Tier 1 ESL of 2.3 mg/kg;
- Analysis of groundwater samples collected during site investigations revealed TPHd (at 120 micrograms per liter [ $\mu\text{g}/\text{L}$ ]) in sample SB-1-W at slightly above is' Tier 1 ESL (100  $\mu\text{g}/\text{L}$ ); TPHg (1,400  $\mu\text{g}/\text{L}$ ), TPHd (1,000  $\mu\text{g}/\text{L}$ ), and TPHss (1,400  $\mu\text{g}/\text{L}$ ) in sample SB-2-W above the Tier 1 ESL (100  $\mu\text{g}/\text{L}$  for each); naphthalene (5.3  $\mu\text{g}/\text{L}$ ) in sample SB-2-W above its' Tier 1 ESL (0.12  $\mu\text{g}/\text{L}$ ); ethylbenzene (6.1  $\mu\text{g}/\text{L}$ ) and xylenes (19  $\mu\text{g}/\text{L}$ ) in SB-2-W below their Tier 1 ESLs (13  $\mu\text{g}/\text{L}$  and 20  $\mu\text{g}/\text{L}$ , respectively); toluene (0.57  $\mu\text{g}/\text{L}$ ), ethylbenzene (1.7  $\mu\text{g}/\text{L}$ ), and xylenes (6.6  $\mu\text{g}/\text{L}$ ) in sample SB-3-GW below their Tier 1 ESLs (40  $\mu\text{g}/\text{L}$ , 13  $\mu\text{g}/\text{L}$ , and 20  $\mu\text{g}/\text{L}$ , respectively); TPHg (230  $\mu\text{g}/\text{L}$ ) and TPHss (940  $\mu\text{g}/\text{L}$ ) in sample SB-5-W above their Tier 1 ESLs (100  $\mu\text{g}/\text{L}$  for each); analysis of sample SB-5-W also revealed

## Environmental Risk Assessors

- naphthalene (at 19 µg/L; above its' Tier 1 ESL of 0.12 µg/L), ethylbenzene (at 2.8 µg/L; below its' Tier 1 ESL of 13 µg/L); and xylenes (at 40 µg/L; above its' Tier 1 ESL of 20 µg/L);
- Benzene, MTBE, ethylbenzene, and naphthalene were not reported in shallow soil samples (less than 10 feet depth) or in groundwater samples at concentrations at or above their respective lab RL (which are lower than the ESL for each) except as noted above; and
  - Petroleum hydrocarbons were not reported in the groundwater samples collected from borings SB-6 through SB-9 at concentrations at or above the lab RLs; the lab RL (50 µg/L) for TPHg and TPHd is below the Tier 1 ESL (100 µg/L), the lab RLs (1.2 µg/L and 0.62 µg/L) for EDB and 1,2-DCA are above the Tier 1 ESLs (0.05 µg/L for EDB and 0.5 µg/L for 1,2-DCA), and lab RLs for the remaining VOCs are below their respective Tier 1 ESL.

Additional research was conducted by ERA to help evaluate potential sources of the petroleum hydrocarbons detected beneath the Site. The results of the research are summarized below:

- Review of the SWRCB Geotracker website, the Cal-EPA Department of Toxic Substances Control (DTSC) Envirostor website, and the ACDEH Leaking Underground Fuel Tank/Spills, Leaks Investigation and Cleanup (LUFT/SLIC) website indicated that the former Unocal service station (located approximately 90 feet east of the Site across Main Street) and City of Pleasanton Corporate Yard (located approximately 245 feet south-southeast of the Site) are potential sources for the petroleum hydrocarbons present in groundwater beneath the Site, based on the likely operations, proximity, upgradient location with respect to the site location and inferred local groundwater flow direction, etc.
- Review of aerial photographs contained in AEI's report (AEI 2010) and information in Basics Environmental's report (Basics Environmental 2013) indicated that the property located approximately 125 feet to the south (within the current alignment of Del Valle Parkway) was used as an auto sales lot from at least the mid-1950s until the mid-1980s. The auto sales lot extended westward from Main Street to a point southwest of the Site's western border. No information was obtained by AEI or Basics Environmental indicating that USTs were present at the former auto sales lot; however, operations at this property may have included fueling operations and/or auto repair operations. These operations could be potential sources for the petroleum hydrocarbons present in groundwater beneath the Site based on the location of this property to the south and in an upgradient direction from the Site with respect to the site location and the inferred local groundwater flow direction.
- A geophysical survey performed by CBRE, Inc. (CBRE) around the Site and on the adjoining properties to the south and west in March 2016 reportedly did not identify anomalies indicative of USTs or disturbed soil (i.e., in backfilled tank excavations) (CBRE 2016). Based on these results, no existing USTs appear to be present on or near the Site and no source for an ongoing release is apparent in the surveyed areas.

The SWRCB's Low Threat UST Closure Policy (LTCP) and Technical Justification for Groundwater Media-Specific Criteria were reviewed for comparison to site data. Site-specific data not already presented above are summarized as follows:

- The Site's surface is covered by hardscape (building, sidewalks, pavement). There are currently no plans to change the Site's commercial use and no redevelopment plans.

## Environmental Risk Assessors

- Direct contact with soil and outdoor air exposure does not appear to be a significant environmental or health concern, based on the lack of petroleum hydrocarbons above screening levels in shallow soil, current site conditions, and current commercial site use.
- Comparison of analytical results for soil samples collected from the 0- to 5-foot and 5- to 10-foot depth intervals revealed that benzene, ethylbenzene, and naphthalene were not detected at concentrations at or above the lab RL of 0.005 mg/kg for each of these compounds and that the lab RL was below the limits listed in Table 1 of the LTCP.
- Naphthalene was reported in the indoor air sample and the ambient air sample at similar concentrations (0.11  $\mu\text{g}/\text{m}^3$  in indoor air and 0.064  $\mu\text{g}/\text{m}^3$  in ambient air). Comparison to the Tier 1 ESL (0.083  $\mu\text{g}/\text{m}^3$ ) for naphthalene in indoor air (SFBRWQCB 2016) indicated that naphthalene concentrations reported in indoor air and ambient air samples are slightly above and slightly below its' Tier 1 ESL, respectively. The estimated risks based on exposure to naphthalene in indoor air and use of DTSC's Guidance (DTSC 2011) include an incremental cancer risk of  $1.6 \times 10^{-6}$  and a non-cancer hazard index of 0.034. Ventilation of the on-site building appears sufficient based on the incremental cancer risk, non-cancer hazard index, and the similar concentrations of naphthalene for indoor air and ambient air.
- The Plume Study noted that benzene and MTBE were not detected in groundwater samples at concentrations at or above the laboratory reporting limits and mapped the length of the TPHg plume as approximately 65 feet as measured from the source area to the plume boundary. Based on the short, stabilized plume length of less than 100 feet for TPHg and lack of benzene and MTBE in groundwater which indicates a small or depleted source and/or very high natural attenuation rate, and the lack of receptors (existing water supply well or surface water body) within 250 feet of the Site, the Site satisfies the Class 1 Groundwater Plume Class Criteria.

### 1.5 Conclusions

Potential on-site sources for petroleum hydrocarbons present in soil and groundwater beneath the Site were identified as the gas and oil facility formerly present near the Site's southeastern corner and the car wash formerly present on the Site's southwestern portion. Although documentation was not available, USTs may have been associated with the former facilities. The primary release has been stopped with no USTs currently present on site based on the reported lack of evidence indicating the presence of tanks during construction of the current building and during the recent geophysical survey across the Site. The former gas and oil facility has not been ruled out as a potential source for petroleum hydrocarbons; however, the former car wash does not appear to be a likely source based on lack of petroleum hydrocarbons in the groundwater sample from boring SB-8, located on the Site's southwestern portion in the former car wash area.

Secondary sources (significant residual mass of petroleum hydrocarbons in soil and groundwater) have not been identified based on the available data, as summarized below:

- Petroleum hydrocarbons are not present in shallow soil (less than 10 feet bgs) at concentrations above screening levels (ESLs and/or LTCP limits);
- Benzene, ethylbenzene, and naphthalene are not present in shallow soil at concentrations above limits listed in Table 1 of the LTCP (8.2 mg/kg, 89 mg/kg, and 45 mg/kg, respectively, for soil samples from the 0- to 5-foot depth interval, and 12 mg/kg, 134 mg/kg, and 45 mg/kg, respectively, for soil samples from the 5- to 10-foot depth interval);

## Environmental Risk Assessors

- Analysis of soil samples SB-3-32 and SB-5-36, collected from stained soil intervals during the 2016 investigation, revealed ethylbenzene, xylenes, and naphthalene concentrations below their respective ESLs and/or the lowest limit listed in Table 1 of the LTCP;
- Petroleum hydrocarbons have not been reported in groundwater at concentrations significantly above screening levels (ESLs) except in a small localized area beneath the southeastern corner of the on-site building; analysis of a groundwater sample collected from boring SB-2 (just south of the on-site building) in 2015 revealed TPHg, TPHd, and TPHss at concentrations above the ESL of 100 µg/L for each but analysis of groundwater samples collected from adjacent borings during subsequent investigations (SB-3 in 2016 and SB-2A in 2017) did not reveal petroleum hydrocarbons at concentrations at or above their respective lab RL; analysis of a groundwater sample collected from boring SB-5 (just east of the on-site building) in 2016 revealed TPHg and TPHss at concentrations above the ESL of 100 µg/L for each; the only other petroleum hydrocarbon detection was TPHd reported in the groundwater sample from boring SB-1 in 2015 at a concentration (120 µg/L) slightly above its' ESL (100 µg/L); and
- Petroleum hydrocarbons were not reported in groundwater samples collected from the on-site upgradient borings SB-7 and SB-8 or the downgradient borings SB-6 and SB-9; therefore, the extent of petroleum hydrocarbons in groundwater beneath the Site appears to be delineated with the residual mass of petroleum hydrocarbons in groundwater appears localized to the southeastern corner of the on-site building.

The discrepancy in petroleum hydrocarbons concentrations in groundwater samples collected from borings SB-2 (2015) and SB-3 and SB-2A (2016 and 2017) may be due to collecting the groundwater sample from boring SB-2 when groundwater was in contact with stained soil and collecting the groundwater samples from borings SB-3 and SB-2A when groundwater was not in contact with stained soil. The lack of TPHg in the two most recent groundwater samples (SB-3 and SB-2A) indicates that the only boring in which TPHg was reported during the two recent investigations (2016 and 2017) is SB-5 (TPHg reported at a concentration of 230 µg/L in 2016).

Potential off-site sources for the petroleum hydrocarbons present in groundwater beneath the Site have been identified as the gas and oil facility formerly present on the southwest adjoining property, the auto sales lot formerly located south of the Site, the Unocal service station formerly located east of the Site, and the Pleasanton Corporate Yard formerly located to the Site's southeast.

Although petroleum hydrocarbons were not reported in the groundwater sample collected from boring SB-7 (located southeast and upgradient of the current on-site building), soil with petroleum hydrocarbons staining was noted in this boring at depths of 34 feet bgs and deeper. The presence of stained soil at these depths is likely related to migration of petroleum hydrocarbons in groundwater from an upgradient source because evidence of staining was not noted in shallow soil in this boring during drilling, petroleum hydrocarbons were not reported in shallow soil samples collected from this boring and submitted for analysis, and the stained soil intervals were at or just above the water table. The gas and oil facilities formerly located on the Site and southwest adjoining property would not be likely sources for the stained soil in boring SB-7 due to the upgradient location of this boring from the former on-site facility and lack of soil staining and petroleum hydrocarbons in groundwater in boring SB-4 located in the area of the former gas and oil facility on the southwest adjoining property. In addition, the auto sales lot formerly located south of the Site would not be a likely source for the petroleum hydrocarbons beneath the Site due to lack of

## Environmental Risk Assessors

soil staining and petroleum hydrocarbons in groundwater in boring SB-8 located in a downgradient direction from this former facility. Therefore, the former Unocal service station and former Pleasanton Corporate Yard remain as potential sources for the petroleum hydrocarbons present in groundwater beneath the Site, based on the available data.

Naphthalene was reported in the indoor air sample and the ambient air sample at similar concentrations ( $0.11 \mu\text{g}/\text{m}^3$  in indoor air and  $0.064 \mu\text{g}/\text{m}^3$  in ambient air). Comparison to the Tier 1 ESL ( $0.083 \mu\text{g}/\text{m}^3$ ) for naphthalene in indoor air (SFBRWQCB 2016) indicated that naphthalene concentrations reported in indoor air and ambient air samples are slightly above and slightly below its' Tier 1 ESL, respectively. The estimated risks based on exposure to naphthalene in indoor air and use of DTSC's Guidance (DTSC 2011) include an incremental cancer risk of  $1.6 \times 10^{-6}$  and a non-cancer hazard index of 0.034. Ventilation of the on-site building appears sufficient based on the incremental cancer risk, non-cancer hazard index, and the similar concentrations of naphthalene for indoor air and ambient air.

### 1.6 Recommendations

No further investigation appears warranted at this time based on the following:

- Petroleum hydrocarbons concentrations reported in soil were below applicable ESLs and/or the limits listed in Table 1 of the LTCP;
- TPHg concentrations reported in groundwater are low; TPHg was not reported in the groundwater samples from borings SB-3 and SB-2A in the area south (upgradient) of the current on-site building and TPHg was reported was reported in boring SB-5 at  $230 \mu\text{g}/\text{L}$ ;
- The extent of the petroleum hydrocarbons plume beneath the Site appears to be delineated and the residual mass of petroleum hydrocarbons in groundwater appears localized to the southeastern corner of the on-site building;
- The former on-site gas and oil facility has been identified as a potential source for the petroleum hydrocarbons present at the Site; however, the former Unocal service station (to the east) and former Pleasanton Corporate Yard (to the southeast) have been identified as potential off-site sources; and
- The concentration of naphthalene in indoor air at the Site was similar to the concentration in ambient air; the estimated risks based on exposure to naphthalene in indoor air include an incremental cancer risk of  $1.6 \times 10^{-6}$  and a non-cancer hazard index of 0.034 and indicate that the ventilation of the on-site building appears sufficient.

## 2. INTRODUCTION

ERA has prepared this SWI Report on behalf of Equity Enterprises for the property located at 927 Main Street, Pleasanton, Alameda County, California (Figure 1). The SWI was conducted in general accordance with ERA's Work Plan (ERA 2017) that was conditionally approved by ACDEH in the letter dated April 26, 2017 (see Appendix A). The Site has been listed as a case with the ACDEH and the SWRCB and the following identification numbers have been assigned:

- ACDEH Fuel Leak Case No. RO0003199; and
- GeoTracker Global ID No. T10000008158.

## Environmental Risk Assessors

The findings and conclusions presented in this report are based on data obtained during the field investigation and provided by the analytical laboratory for soil gas, indoor air, ambient air, soil, and groundwater samples collected from on and near the Site.

### 2.1 Objective and Purpose

The ultimate objective for the Site is to obtain regulatory case closure. The purpose of the work performed for this investigation is summarized as follows:

- Assessing potential source(s) of the petroleum hydrocarbons detected in soil and groundwater beneath the Site by advancing borings in select locations and collecting soil and groundwater samples from these borings for analysis;
- Assessing the lateral and vertical extent of petroleum hydrocarbons in soil by advancing borings on and near the Site and collecting soil samples from these borings for analysis;
- Assessing the lateral extent of petroleum hydrocarbons in groundwater by advancing borings in select locations and collecting groundwater samples from these borings for chemical analysis;
- Assessing potential vapor intrusion into the on-site building by collecting soil gas, indoor air, and ambient air samples from the Site for analysis;
- Evaluating site conditions with respect to SWRCB's *Low-Threat Underground Storage Tank Case Closure Policy* (SWRCB 2012a).

### 2.2 Site Description

The Site is addressed 927 Main Street in Pleasanton, Alameda County, California, and consists of one approximately 8,115-square-foot Alameda County parcel of land. The Site is currently developed with one commercial building occupied by two tenants (Figure 2). Site-specific information is presented in Table 1.

Table 1. General Site Information	
<b>Project Name:</b> Main Street Property	<b>Current Development:</b> One 2,340-square-foot building
<b>Address:</b> 927 Main Street, Pleasanton, Alameda County	<b>Assessor Parcel Number (APN):</b> 946-3370-22
<b>Location:</b> Western side of Main Street	<b>Occupants:</b> Subway sandwiches and Hanadi Sushi restaurant

### 2.3 Qualifications

A summary of the ERA personnel who worked on this project follows:

- Ms. Lita Freeman, California Professional Geologist and California Asbestos Consultant, has over 25 years of experience providing site assessment services. This has included evaluating potential property impacts from historical on- and off-site operations, conducting subsurface investigations, and implementing site remediation plans. Ms. Freeman works with property owners, attorneys, and regulators to mitigate and resolve environmental issues.



## Environmental Risk Assessors

### 3. BACKGROUND

#### 3.1 Site History

Alameda County assessor's records indicate that a large parcel, identified as APN 946-3370-7, was divided into five separate parcels in 1978. Two of these five parcels are currently identified as 946-3370-22 (the Site) and 946-3370-19 (the southwest adjoining property).

According to historical information (including the 1943 and 1953 Sanborn Fire Insurance Maps and the 1951 aerial photograph) obtained by Basics Environmental during their Phase I ESA (Basics Environmental 2013), the Site was formerly occupied by a large rectangular building addressed 40 Santa Rita Road. The southeastern corner of the building featured an attached canopy and was used as a gas and oil facility from the late 1930s or early 1940s to the early 1950s. The remainder of the building was used as an auto repair facility from at least the late 1930s until the late 1960s.

During the 1970s, a building housing a Robo-branded car wash was present on the Site's southwestern portion and extended onto the southwest adjoining property.

A small rectangular building with an attached canopy was formerly located on the southwest adjoining property (915 Main Street), as shown in the 1951 aerial photograph and the 1953 Sanborn Fire Insurance Map. This building, addressed 40A Santa Rita Road, was used as a gas and oil facility and extended onto the southern portion of the Site. The southeastern corner of the building featured an attached canopy.

No specific information on former operations (i.e., capacity of former USTs, type and locations of USTs, pump island locations, auto maintenance areas, and use of hazardous materials, etc.), removal of the USTs, or sampling during UST removal operations was obtained by Basics Environmental from the local regulatory agency files reviewed during the Phase I ESA. A geophysical survey conducted in 2016 by CBRE, Inc. (CBRE 2016) at the Site, the southwest adjoining property (915 Main Street), and the north adjoining property (929 Main Street) did not identify anomalies indicative of USTs, backfilled tank excavations, etc. (CBRE 2016). Therefore, the locations of tanks associated with the former gas and oil stations are unknown.

The approximate footprints of the former large rectangular building and canopy (addressed 40 Santa Rita Road) located on the Site and former small rectangular building and canopy (addressed 40A Santa Rita Road) located on the southwest adjoining property are shown on Figure 2.

#### 3.2 Previous Investigations

ERA conducted subsurface investigations in 2015 (ERA 2015) and 2016 (ERA 2016). Copies of tables and figures from ERA's 2015 Limited Phase II ESA report and 2016 SWI Report (ERA 2016) are presented in Appendix B.

##### 3.2.1 Soil Gas

One soil gas sample was collected during the 2016 investigation from boring SB-3, advanced just south of the on-site building, to evaluate the potential presence of volatile organic compounds (VOCs). The VOC of particular concern was naphthalene because this compound was reported in the groundwater sample collected from boring SB-2 in 2015. As shown in Table 2, analysis of the soil gas sample revealed naphthalene at 11  $\mu\text{g}/\text{m}^3$ , which is below its' Tier 1 ESL of 41  $\mu\text{g}/\text{m}^3$ . Methane was also reported in this sample at 0.0009 percent (%), which is below the lower explosive limit of 5%.

## Environmental Risk Assessors

### 3.2.2 Soil

Soil samples were collected from five borings (designated SB-1 through SB-5 on Figure 3) advanced in 2015 and 2016 from the following depth intervals:

- The surface to 5- to 5.5-foot below ground surface (bgs) depth interval from each boring;
- The 5-foot to 10-foot depth interval from borings SB-3 through SB-5; and
- Deeper depth intervals (32 to 36 feet bgs) from borings SB-3 and SB-5.

These samples were analyzed for total petroleum hydrocarbons (TPH) quantified as gasoline (TPHg); TPH quantified as diesel (TPHd); TPH quantified as Stoddard solvent (TPHss); VOCs including benzene, methyl tert-butyl ether (MTBE), and naphthalene; and/or Leaking Underground Fuel Tank (LUFT) Manual 5 metals (cadmium, chromium, lead, nickel, and zinc). VOCs and petroleum hydrocarbons were not reported in soil samples at concentrations at or above their respective lab RL except as follows (see Table 3):

- Naphthalene in sample SB-5-36 at a concentration of 0.026 mg/kg which is slightly above the Tier 1 ESL of 0.023 mg/kg;
- TPHd in sample SB-2-2 at a concentration of 16 milligrams per kilogram (mg/kg) which is below the Tier 1 ESL of 240 mg/kg; and
- TPHg in sample SB-3-32 at a concentration of 0.990 mg/kg which is below the Tier 1 ESL of 100 mg/kg.

Soil samples SB-3-32 and SB-5-36 were collected from intervals exhibiting petroleum hydrocarbon staining (between 31 and 33 feet bgs in boring SB-3 and between 34 and 39 feet bgs in boring SB-5) and near the water table (soil was moist at a depth of 34 feet bgs and wet at a depth of 38 feet bgs in boring SB-3 and soil was moist at a depth of 29 feet bgs and wet at a depth of 37 feet bgs in boring SB-5). The petroleum hydrocarbons reported in these deeper soil samples (32 to 36 feet bgs) are likely related to migration of petroleum hydrocarbons in groundwater because shallow soil in these borings were not stained and the sample depths were at or just above the water table.

The concentrations of metals reported were below their respective Tier 1 ESLs and/or regional background levels (see Table 3 in Appendix B; from ERA's *Soil and Water Investigation Report*, dated October 2016).

### 3.2.3 Groundwater

Groundwater samples collected from each boring were submitted for analyses as follows: TPHg; TPHd; TPHss; VOCs including benzene, MTBE, and naphthalene; and/or LUFT 5 metals.

As shown in Table 4, petroleum hydrocarbons were reported in groundwater samples as follows:

- TPHg in samples SB-2-W (at a concentration of 1,400 µg/L) and SB-5-W (at 230 µg/L) which are above the Tier 1 ESL of 100 µg/L; TPHg was not reported in samples SB-1-W, SB-3-W, or SB-4-W at concentrations at or above the lab RL (50 µg/L);
- TPHd in samples SB-1-W (at 120 µg/L) and SB-2-W (at 1,000 µg/L) which are above the Tier 1 ESL of 100 µg/L; TPHd was not reported in samples SB-3-W, SB-4-W, or SB-5-W at concentrations at or above the lab RL of 50 µg/L;

## Environmental Risk Assessors

- TPHss in samples SB-2-W (at 1,400 µg/L) and SB-5-W (at 940 µg/L) which are above the Tier 1 ESL of 100 µg/L; TPHss was not reported in samples SB-1-W, SB-3-W, or SB-4-W at concentrations at or above the lab RL of 50 µg/L; and
- Naphthalene in samples SB-2-W (at 5.3 µg/L) and SB-5-W (at 19 µg/L) which are above the Tier 1 ESL of 0.12 µg/L; naphthalene was not reported at concentrations at or above the lab RL of 0.5 µg/L for SB-1-W and 1 µg/L for SB-3-W and SB-4-W.

Various VOCs, including ethylbenzene and toluene, were detected in groundwater samples SB-2-W, SB-3-W, and SB-5-W. The concentrations of VOCs were below their respective Tier 1 ESL (see Table 4) with the exception of total xylenes reported in groundwater sample SB-5-W at a concentration of 40 µg/L, which is above its ESL of 20 µg/L. Analysis of the groundwater samples collected from borings SB-1 and SB-2 for metals revealed chromium in sample SB-1-W at a concentration of 0.63 µg/L and nickel in samples SB-1-W and SB-2-W at concentrations of 1.8 µg/L and 4.8 µg/L, respectively.

### 4. FIELD INVESTIGATION

The SWI was conducted to evaluate current conditions by collecting soil gas, indoor air, ambient air, soil, and groundwater samples from select locations for analysis with comparison of the analytical results to established screening levels. The scope of work and results of the SWI are presented below.

Photographs of the Site and site investigation are included in Appendix C.

#### 4.1 Pre-Field Activities

Before field activities associated with the proposed assessment were conducted, the pre-field tasks described below were completed.

##### 4.1.1 Health and Safety

ERA prepared a site-specific *Health and Safety Plan* for the scope of work as required by the Occupational Health and Safety Administration (OSHA) Standard "Hazardous Waste Operations and Emergency Response" guidelines (29 CFR 1910.120). The document was reviewed and signed by ERA personnel and subcontractors performing work at the Site.

##### 4.1.2 Permitting

ERA obtained a soil boring permit from Zone 7 prior to commencing intrusive field activities. ERA coordinated field activities with the Zone 7 and scheduled a Zone 7 inspector to document compliance with permit requirements. The permit number assigned by Zone 7 is 2017048. A copy of the permit is presented in Appendix D.

#### 4.2 Field Activities

##### 4.2.1 Utility Clearance

Before subsurface work was conducted at the Site, the proposed sampling locations were cleared for underground utilities by notifying Underground Services Alert North (USA North) at least 48 hours prior to intrusive field activities. The USA North Ticket Number assigned to the Site is X712400678008. In addition, A-Plus Utility Locating, a private utility locating contractor, cleared each proposed sampling location prior to intrusive field activities. Proposed sampling locations

## Environmental Risk Assessors

were adjusted, as necessary, to maintain a distance of at least 3 feet from identified underground utilities/structures.

### 4.2.2 Sampling Activities

Sampling activities consisted of soil gas, indoor air, ambient air, soil, and groundwater sample collection, as described below.

#### 4.2.2.1 Soil Gas Sampling

A soil gas sample was collected in general accordance with the protocols presented in the *Advisory Active Soil Gas Investigations* prepared by the Cal-EPA DTSC, Los Angeles RWQCB (LARWQCB), and SFBRWQCB (DTSC, LARWQCB, and SFBRWQCB 2015) to assess the potential for vapor intrusion into the site building.

On May 17, 2017, a soil gas sample was collected from a temporary soil gas probe advanced at sampling location SB-5A to a depth of approximately 5 feet below the bottom of the on-site building foundation. The soil gas probe was placed outside the building footprint rather than inside the building because of access constraints. The soil gas sample was collected approximately 2 hours after installing the soil gas probe. The soil gas probe installation method and equilibration time was recorded in the field log book.

Prior to purging or sampling, a shut-in test was conducted to check for leaks in the above-ground sampling system. A leak test was used to evaluate whether ambient air was introduced into the soil gas sample during the collection process. Helium, a gaseous tracer compound, was used along with a shroud placed over the sampling equipment. An ambient air leak of up to 5 percent was deemed acceptable. The VOC 1,1-DFA was used as a leak check compound.

Purging of three purge volumes was performed to remove stagnant air from the sampling system so that a representative sample could be collected from the subsurface. Flow rates between 100 to 200 milliliters per minute (mL/min) and vacuums less than 15 inches of water were maintained during purging and sampling to minimize stripping (partitioning of vapors from pore water to soil gas), to prevent ambient air from diluting the soil gas samples, and to reduce variability between contractors. The helium concentration was maintained at between 18 and 28.5 percent.

Soil gas was collected in an evacuated 1-liter stainless steel Summa canister for TO-15 analysis and in a tube using a syringe for TO-17 analysis. The Summa canister, regulator to control sample collection flow rate into the Summa canister, and tube were provided by McCampbell Analytical, Inc. (McCampbell Analytical) of Pittsburg, California. Beginning and ending vacuum readings for the Summa canister were recorded for the canister as shown in Table 2.

The soil gas samples were transported under chain-of-custody protocols to McCampbell Analytical by ERA's representative.

#### 4.2.2.2 Indoor Air and Ambient Air Sampling

On May 10, 2017, ERA personnel collected indoor air and ambient air samples using 6-liter Summa stainless steel canisters provided by McCampbell Analytical. Indoor air and ambient air sampling was conducted concurrently with the soil gas, soil, and groundwater investigation at the request of Mr. Hirst.

The canister for the indoor air sample (927-IA) was placed in the rear hallway of the Hanadi Sushi restaurant and the canister for the ambient air sample (1-AA) was placed in the landscaping area

## Environmental Risk Assessors

near the southeastern corner of the on-site building. A controller set to a flow rate of 12.5 mL/min was attached to the Summa canisters during sampling to maintain a constant flow. The Summa canisters were placed so that the canister valve was located at a height of approximately 3 to 4 feet above the floor or ground surface to collect air samples from within the breathing zone of the typical on-site worker.

The Summa canisters and regulators to control sample collection flow rate into the Summa canister were provided by McCampbell Analytical. Beginning and ending vacuum readings for the Summa canisters were recorded for the canisters as shown in Table 2.

### 4.2.2.3 Soil Sampling

On May 9 and 10, 2017, ERA personnel provided oversight of a field crew from Cascade Drilling, L.P. (Cascade) of Richmond, California, a California licensed driller, during advancement of the borings using a Geoprobe direct-push drilling rig.

A total of five borings (SB-2A, SB-6, SB-7, SB-8, and SB-9 on Figure 3) were advanced at select on-site locations to collect soil and/or groundwater samples. The boring locations were selected based on available historical information and site observations, as follows:

- Boring SB-2A was advanced on May 9, 2017 to a depth of approximately 40 feet below the asphalt pavement at a location immediately south of the on-site building to collect a groundwater sample to evaluate current concentrations of petroleum hydrocarbons.
- Boring SB-6 was advanced on May 10, 2017 to a depth of approximately 42 feet bgs near the northeastern corner of the on-site building to collect soil and groundwater samples to help define the east-northeast extent of the plume.
- Boring SB-7 was advanced on May 9, 2017 to a depth of approximately 40 feet bgs near the southeastern corner of the on-site building to collect soil and groundwater samples to help define the southeast extent of the plume.
- Boring SB-8 was advanced on May 10, 2017 to a depth of approximately 42 feet bgs near the southwestern corner of the on-site building to collect soil and groundwater samples to help define the southwest extent of the plume.
- Boring SB-9 was advanced on May 9, 2017 to a depth of approximately 40 feet bgs near the northwestern corner of the on-site building to collect soil and groundwater samples to help define the northwest extent of the plume.

Soil samples were screened in the field with a PID and observed for evidence of chemical staining. The soil screening procedures involved measuring approximately 30 grams of soil from a relatively undisturbed soil sample and placing this sample in a sealed plastic bag. The container was warmed in the sun for approximately 20 minutes, then the head space within the bag was tested for total organic vapor, measured in parts per million volume (ppmv). Elevated PID readings were not recorded during the field investigation. PID readings are noted on the boring logs presented in Appendix E.

Evidence of petroleum hydrocarbon-impacted soil (green-colored soil with a petroleum hydrocarbon odor) was noted by ERA's staff in soil borings SB-2, SB-3, SB-5, SB-7 during the subsurface investigations. The intervals of petroleum hydrocarbon-impacted soil generally correspond to the interval of moist to very moist soil in these borings and may represent petroleum

## Environmental Risk Assessors

hydrocarbons migrating in groundwater. The discolored soil is likely related to a “smear” zone of petroleum hydrocarbons based on the apparent correlation between the intervals with discolored soil and the depth to water. Discolored soil intervals are summarized in Table 5 below.

<b>Boring</b>	<b>SB-1</b>	<b>SB-2</b>	<b>SB-3</b>	<b>SB-4</b>	<b>SB-5</b>	<b>SB-6</b>	<b>SB-7</b>	<b>SB-8</b>	<b>SB-9</b>
Discolored soil interval (ft bgs)	--	30 - 34	31 - 33	--	31 - 32	--	34.5 - 36	--	--
	--	--	34 - 36	--	34 - 39	--	39.9 - 40	--	--
Depth to Groundwater	34	35	38	38	37	38	38.5	38.5	38
Total Boring Depth	40	36	40	40	44	42	40	42	40

Soil sampling was conducted during drilling using new acetate sleeves. Soil samples were collected for submittal to the analytical laboratory by cutting the acetate sleeves and capping each end with Teflon squares and plastic end caps. A label with the boring identification number and the bottom depth (e.g., 5 feet bgs) of the sampling interval was placed on each sample.

The soil samples were placed on ice and transported under chain-of-custody protocols to SunStar Laboratories, Inc. (SunStar) of Lake Forest, California, by a laboratory-provided courier.

#### 4.2.2.4 Groundwater Sampling

New polyvinyl chloride (PVC) casing (with slotted casing in the lower 10 feet and blank casing from above the slotted casing to the ground surface) was placed in each boring. Groundwater was allowed to flow into the casing at each location for approximately one hour. Groundwater was not purged prior to sampling because of the anticipated limited quantity of water in each boring. Groundwater samples were collected in laboratory-provided containers appropriate for the requested analysis.

The groundwater samples containers were labeled with the boring identification number, placed on ice, and transported under chain-of-custody protocols to SunStar by a laboratory-provided courier.

#### 4.2.3 Borehole Abandonment and Investigation-Derived Waste Handling

After the sampling activities were complete, each boring was backfilled with cement grout and bentonite in accordance with the Zone 7 permit requirements and the Zone 7 inspector's directions.

Investigation-derived waste (IDW), which was limited to soil cuttings, produced during sampling activities were containerized in one 55-gallon container and left on the Site pending receipt of analytical results and evaluation of appropriate off-site disposal options.

### 4.3 Analysis, Results, and Evaluation

The soil gas, indoor air, ambient air, soil, and groundwater samples were submitted to the project laboratories which are certified by the State of California to perform the requested analyses. The analytical methods, results, and evaluation of this SWI are presented below. Copies of the laboratory analytical report and chain-of-custody documentation are presented in Appendix F.

## Environmental Risk Assessors

### 4.3.1 Soil Gas Analysis and Results

The soil gas sample collected from boring SB-5A was analyzed for the VOCs naphthalene, EDB and 1,2-DCA using Method TO-15 and Method TO-17. The TO-17 analysis was performed by McCampbell Analytical and the TO-15 analysis was performed by Eurofins, McCampbell Analytical's subcontracted laboratory. Copies of McCampbell Analytical's and Eurofin's laboratory reports are presented in Appendix F.

Analysis of the soil gas sample revealed naphthalene at a concentration of 0.61  $\mu\text{g}/\text{m}^3$  using TO-15 analysis and was less than the lab RL of 2  $\mu\text{g}/\text{m}^3$  using TO-17 analysis. EDB and 1,2-DCA were not reported at concentrations at or above their respective lab RL of 7.6  $\mu\text{g}/\text{m}^3$  and 4.0  $\mu\text{g}/\text{m}^3$ , respectively.

The leak check compound 1,1-DFA was not reported at a concentration at or above the lab RL of 11  $\mu\text{g}/\text{m}^3$ .

The results of the soil gas sample are presented in Table 2 and an evaluation of the analytical results is discussed below in Section 4.4.1.

### 4.3.2 Indoor Air and Ambient Air Analysis and Results

The indoor air and ambient air samples collected from the Site were analyzed for naphthalene using Method TO-15. Eurofins performed the analysis.

Naphthalene was reported in the indoor air sample and the ambient air sample at concentrations of 0.11  $\mu\text{g}/\text{m}^3$  and 0.064  $\mu\text{g}/\text{m}^3$ , respectively.

EDB and 1,2-DCA were reported at concentrations of 0.066  $\mu\text{g}/\text{m}^3$  and 0.082  $\mu\text{g}/\text{m}^3$ , respectively, in the indoor air sample 927-IA, and at concentrations of 0.053  $\mu\text{g}/\text{m}^3$  and 0.0078  $\mu\text{g}/\text{m}^3$ , respectively, in the ambient air sample 1-AA.

The results of the indoor air and ambient air samples are presented in Table 2 and an evaluation of the analytical results is discussed below in Section 4.4.2.

### 4.3.3 Soil Analysis and Results

No evidence of staining and no elevated PID readings were noted in shallow soil during drilling. Therefore, soil samples from the planned depth intervals were collected from each boring for analysis except boring SB-9. A soil sample from the 8.0- to 8.5-foot depth interval of boring SB-9 was submitted for analysis as no soil was recovered from the 7.0- to 7.5-foot depth interval.

As noted above in Section 4.2.2.3, discolored soil with a slight petroleum hydrocarbon odor was encountered in boring SB-7 at the 34.5-foot to 36-foot depth interval and the 39.9-foot to 40-foot depth interval. Soil at these depth intervals were moist to saturated and considered to be below the groundwater table. Soil samples were not collected from these intervals for analysis during this investigation because two soil samples (SB-3-32 and SB-5-36) were collected from intervals of stained soil during the 2016 investigation. Analysis of these two soil samples revealed ethylbenzene and xylenes in sample SB-3-32 and naphthalene and xylenes in sample SB-5-36. The concentrations of ethylbenzene and xylenes were below their respective ESLs of 1.4 mg/kg and 2.3 mg/kg and the ethylbenzene concentration was below the lowest LTCP limit of 89 mg/kg. The reported naphthalene concentration (0.026 mg/kg) was slightly above its' ESL (0.023 mg/kg); however, naphthalene was below the LTCP limit of 45 mg/kg. These concentrations may be

## Environmental Risk Assessors

related to a “smear” zone of petroleum hydrocarbons based on the apparent correlation between the intervals with discolored soil and the depth to water (ERA 2016).

Soil samples collected from the following depth intervals were analyzed:

- Boring SB-6: 2.0 to 2.5 feet and 7.0 to 7.5 feet;
- Boring SB-7: 2.0 to 2.5 feet and 7.0 to 7.5 feet;
- Boring SB-8: 2.0 to 2.5 feet and 7.0 to 7.5 feet; and
- Boring SB-9: 2.0 to 2.5 feet and 8.0 to 8.5 feet

The above-noted soil samples were analyzed as follows (see Table 3):

- VOCs with BTEX, MTBE, tert-Butyl Alcohol (TBA), EDC (1,2-DCA), EDB, and naphthalene reported using U.S. Environmental Protection Agency (U.S. EPA) Method 8260B;
- TPHg using U.S. EPA SW8015B (purgeable) without silica gel cleanup; and
- TPHd and TPHmo using U.S. EPA SW8015B (purgeable) without silica gel cleanup.

The analysis of the soil samples revealed the following (see Table 3 and Figures 4, 5, and 6):

- VOCs were not reported in the soil samples analyzed at concentrations at or above the lab RLs of 0.005 mg/kg to 0.05 mg/kg;
- TPHg was not reported in the soil samples analyzed at concentrations at or above the lab RL of 0.5 mg/kg;
- TPHd was not reported in the soil samples analyzed at concentrations at or above the lab RL of 10 mg/kg except for sample SB-6-2.5 in which TPHd was reported at a concentration of 37 mg/kg; and
- TPHmo was reported in six of the soil samples analyzed at concentrations of 11 mg/kg to 75 mg/kg; TPHmo was not reported in samples SB-6-7.5 and SB-7-7.5 at concentrations at or above the lab RL of 10 mg/kg.

The analytical results for the compounds detected in the soil samples are presented in Table 3 and on Figures 4, 5, and 6, and are discussed below in Section 4.4.3.

### 4.3.4 Groundwater Analysis and Results

The groundwater samples were submitted for analyses as noted above for the soil samples using the same methods (see Section 4.3.3).

The analysis of the groundwater samples revealed the following (see Table 4):

- VOCs were not reported in the groundwater samples at concentrations at or above the lab RLs of 0.062 µg/L to 12 µg/L;
- TPHg was not reported in the groundwater samples at concentrations at or above the lab RL of 50 µg/L (see Figure 7);
- TPHd was not reported in the groundwater samples at concentrations at or above the lab RL of 0.0005 µg/L; and
- TPHmo was not reported in the groundwater samples at concentrations at or above the lab



## Environmental Risk Assessors

RL of 0.0005 µg/L.

The lab RLs for groundwater are presented in Table 4, TPHg results are shown on Figure 7, select VOC results are shown on Figure 8, and results are discussed below in Section 4.4.4.

### 4.4 EVALUATION

The concentrations of compounds of concern detected in soil gas, indoor air, ambient air, soil, and groundwater samples were compared to ESLs as established by the SFBRWQCB (SFBRWQCB 2016).

#### 4.4.1 Soil Gas Results Evaluation

Naphthalene was reported in the soil gas sample collected from sampling location SB-5A during this investigation at a concentration of 0.61 µg/m<sup>3</sup> and in the soil gas sample collected from sampling location SB-3 during the 2016 investigation at a concentration of 11 µg/m<sup>3</sup>. These concentrations are below naphthalene's Tier 1 ESL for soil gas of 41 µg/m<sup>3</sup> as established by the SFBRWQCB (SFBRWQCB 2016) and below its' CHHSL of 310 µg/m<sup>3</sup> for commercial/industrial properties as established by the OEHHA (OEHHA 2010).

A risk calculation was completed for indoor air using the soil gas data. It should be noted that the presence of a chemical at concentrations in excess of a CHHSL does not indicate that adverse impacts to human health are occurring, or will occur, but suggests that further evaluation of potential human health concerns is warranted (OEHHA 2010).

Risk calculations were completed for a commercial worker and conservatively used an indoor air concentration of 0.0305 µg/m<sup>3</sup> which was calculated based on the maximum soil gas concentration of 0.61 µg/m<sup>3</sup> for naphthalene (from sampling location SB-5A) and an attenuation factor of 0.05 (see Tables 6 and 7). The soil gas concentration from sampling location SB-5A was used in the calculation because both TO-15 and TP-17 analysis was performed on this sample and only TO-15 analysis was performed on the soil gas sample from sampling location SB-3 to confirm the naphthalene concentrations.

Exposure parameters for a commercial worker used in the calculation are presented in Table 6 and include an exposure frequency of 250 days/year, an exposure duration of 25 years, and an averaging time of 70 years for carcinogens. An 8-hour work day was also assumed in the calculation. Inhalation reference concentrations and unit risks are presented in Table 6 and include California specific values. The risk calculation is presented in Table 7. The estimated risks based on exposure to VOCs in indoor air include an incremental cancer risk of  $1.6 \times 10^{-6}$  and a non-cancer hazard index of 0.034.

DTSC's Guidance (DTSC 2011) indicates that predicted risks between  $1 \times 10^{-6}$  and  $1 \times 10^{-4}$  should be evaluated further including monitoring or additional data collection. The risk estimates are considered upper bound estimates of risk; it is very likely that the true risks are less than those predicted. In general, the U.S. EPA considers excess cancer risks that are below about 1 chance in 1,000,000 ( $1 \times 10^{-6}$ ) to be so small as to be negligible, and risks above  $1 \times 10^{-4}$  to be sufficiently large that some sort of remediation is desirable ([http://www.epa.gov/region8/r8risk/hh\\_risk.html](http://www.epa.gov/region8/r8risk/hh_risk.html)). Excess cancer risks that range between  $1 \times 10^{-6}$  and  $1 \times 10^{-4}$  are generally considered to be acceptable but is evaluated on a case-by-case basis.

## Environmental Risk Assessors

### 4.4.2 Indoor Air and Ambient Air Results Evaluation

As noted above in Section 4.3.2, naphthalene was reported in the indoor air sample and the ambient air sample at concentrations of 0.11  $\mu\text{g}/\text{m}^3$  and 0.064  $\mu\text{g}/\text{m}^3$ , respectively. The Tier 1 ESL for naphthalene in indoor air is 0.083  $\mu\text{g}/\text{m}^3$  (SFBRWQCB 2016). The concentration of naphthalene reported in the indoor air sample was slightly above its' Tier 1 ESL and the concentration of naphthalene reported in the ambient air sample was slightly below its' Tier 1 ESL.

### 4.4.3 Soil Results Evaluation

Comparison of the analytical results to the ESLs for soil (SFBRWQCB 2016) indicated the following (see Table 3):

- The lab RL of 0.005 mg/kg for the VOCs EDB and 1,2-DCA is above the Tier 1 ESL of 0.00033 mg/kg for EDB and 0.0045 mg/kg for 1,2-DCA; the lab RLs for the remaining VOCs are below their respective Tier 1 ESL;
- The lab RL of 0.5 mg/kg for TPHg is below its' Tier 1 ESL of 100 mg/kg;
- The lab RL of 10 mg/kg for TPHd and the reported TPHd concentrations of 37 mg/kg in sample SB-6-2.5 are below its' Tier 1 ESL of 240 mg/kg; and
- The lab RL of 10 mg/kg for TPHmo and the reported TPHmo concentrations of 11 mg/kg to 75 mg/kg for six samples are below its' Tier 1 ESL of 100 mg/kg.

### 4.4.4 Groundwater Results Evaluation

Comparison of the analytical results to the ESLs for groundwater (SFBRWQCB 2016) indicated the following (see Table 4):

- The lab RLs of 1.2  $\mu\text{g}/\text{L}$  and 0.62  $\mu\text{g}/\text{L}$  for the VOCs EDB and 1,2-DCA are above the Tier 1 ESL of 0.05  $\mu\text{g}/\text{L}$  for EDB and 0.5  $\mu\text{g}/\text{L}$  for 1,2-DCA; the lab RLs for the remaining VOCs are below their respective Tier 1 ESL;
- The lab RL of 50  $\mu\text{g}/\text{L}$  is below the Tier 1 ESL for TPHg of 100  $\mu\text{g}/\text{L}$ ;
- The lab RL of 50  $\mu\text{g}/\text{L}$  is below the Tier 1 ESL for TPHd of 100  $\mu\text{g}/\text{L}$ ; and
- The sum of the lab RLs for TPHd and TPHmo (150  $\mu\text{g}/\text{L}$ ) was compared to the TPHd ESL per Note 2 (SFBRWQCB 2016); the sum is above the TPHd ESL of 100  $\mu\text{g}/\text{L}$ . However, the main constituents of concern at the Site are gasoline and diesel based on the reported use as a fueling facility.

## 4.5 DEVIATIONS FROM THE WORK PLAN

This investigation was conducted in general accordance with ERA's *Soil and Groundwater Investigation Work Plan* (the "Work Plan"; ERA 2017) conditionally approved by ACDEH in the letter dated April 26, 2017. Deviations from the Work Plan were:

- ERA personnel collected indoor air and ambient air samples concurrently with the soil gas, soil, and groundwater investigation at the request of Mr. Hirst;
- A soil sample from the 8.0- to 8.5-foot depth interval of boring SB-9 was submitted for analysis as no soil was recovered from the 7.0- to 7.5-foot depth interval; and
- Mr. Darrick Sun, Trustee of the Sun Family Trust, informed Mr. Hirst and Ms. Freeman that

## Environmental Risk Assessors

separate arrangements would be made to collect samples from borings SB-9 and SB-10 and that the analytical results would be provided upon their receipt; the results had not been received as of the date of this report but will be summarized in an addendum upon receipt and review by ERA.

### 5. PRELIMINARY CONCEPTUAL SITE MODEL

The Conceptual Site Model (CSM) documents the physical setting, chemicals of potential concern (COPCs), COPC sources, COPC distribution in soil gas, soil, and/or groundwater (including plume stability), potential migration pathways, and potential receptors/exposure pathways. Data collected during the previous investigations, which indicate a release of petroleum hydrocarbons has impacted the Site, were used to develop a site-specific preliminary CSM. The purpose of the preliminary CSM was to help identify data gaps and to aid in the evaluation of the site data.

Data obtained during this investigation, including groundwater sampling results from borings SB-6 through SB-9, were used to refine the preliminary CSM, as discussed below.

#### 5.1 Geology and Hydrogeology

Additional information on local geology and hydrogeology was not obtained during this investigation. Data obtained while advancing borings SB-6 through SB-9 confirmed the site-specific geology and hydrogeology information obtained during the previous investigations.

#### 5.2 Surface Water Bodies

As noted in ERA's previous report (ERA 2015), Arroyo Del Valle is the nearest surface water body. This creek is located approximately 325 feet south of the Site across Del Valle Parkway.

#### 5.3 Nearby Wells

No additional information on nearby water-supply wells was obtained by ERA during this investigation. As noted previously, the nearest active well is more than 400 feet south and upgradient of the Site with respect to the site location and inferred local groundwater flow direction. The nearest active or possibly active well located in a downgradient direction was more than 1,000 feet north to northwest from the Site.

#### 5.4 Constituents of Concern: Light-Non Aqueous Phase Liquids (LNAPL)

Based on the historical site use and the available soil and groundwater quality data, the primary chemicals of potential concern (COPC) at the Site are petroleum hydrocarbons, specifically TPHg, TPHd and naphthalene. Benzene and MTBE have not been detected in soil and groundwater samples collected from the Site.

#### 5.5 Potential Sources: On-site, Off-site

A former on-site building was reportedly used as an auto repair facility from at least the late 1930s until the late 1960s with a gas and oil facility present from the late 1930s or early 1940s to the early 1950s. A small rectangular building, used as a gas and oil facility, extended onto the southern portion of the Site from the south adjacent property. The primary sources of petroleum hydrocarbons would likely be USTs, if any, and other storage containers associated with the gas and oil facilities. The buildings were removed before construction of the current on-site building and

## Environmental Risk Assessors

no USTs are currently present on site based on the reported lack of evidence indicating the presence of tanks during construction of the current building and during the recent geophysical survey across the Site.

Secondary sources at the Site would be residual mass of petroleum hydrocarbons in soil and groundwater beneath the Site. Analysis of soil samples collected to date and analyzed for petroleum hydrocarbons revealed TPHd in two shallow samples (SB-2-2 and SB-6-2.5), TPHmo in six shallow samples (SB-6-2.5, SB-7-2.5, SB-8-2.5, SB-8-7.5, SB-9-2.5, and SB-9-8.5), and TPHg was reported in one deep sample (SB-3-32). Based on the available data, the low concentrations of TPHd (16 mg/kg) and TPHmo (up to 75 mg/kg) in shallow soil, and the TPHg detection in a soil sample collected from below the water table, the likelihood of a significant residual mass of petroleum hydrocarbons in soil across accessible areas of the Site appears low. The highest concentrations of petroleum hydrocarbons in groundwater were reported in groundwater samples collected from borings SB-2 and SB-5, located south and east, respectively, of the on-site building. Petroleum hydrocarbons were not reported in the groundwater samples collected from borings advanced to the on-site building's east-northeast (SB-6), southeast (SB-7), southwest (SB-8), and northwest (SB-9). Based on the available data, the residual mass of petroleum hydrocarbons in groundwater appears localized to the southeastern corner of the on-site building.

Potential off-site sources for the petroleum hydrocarbons present in groundwater beneath the Site have been identified as the gas and oil facility formerly present on the southwest adjoining property, the auto sales lot formerly located south of the Site, the Unocal service station formerly located east of the Site, and the Pleasanton Corporate Yard formerly located to the Site's southeast.

### **5.6 Nature and Extent of Environmental Impacts: Soil Vapor, Soil, and Groundwater**

#### *5.6.1 Petroleum Hydrocarbon Distribution in Soil Vapor*

Two soil gas samples have been collected from the Site to evaluate potential vapor intrusion into the on-site building. The soil gas samples were collected from a depth of approximately 5 feet below the foundation level of the on-site building at sampling location SB-3, located in the pavement area immediately south of the on-site building, and sampling location SB-5A, located in the landscaping area immediately east of the on-site building.

Analysis of the soil gas sample from SB-3 revealed the presence of naphthalene at a concentration of 11  $\mu\text{g}/\text{m}^3$  and methane at 0.0009%. Naphthalene was reported at a concentration of 0.61  $\mu\text{g}/\text{m}^3$  in the soil gas sample from SB-5A.

The concentrations of naphthalene are below the Tier 1 ESL of 41  $\mu\text{g}/\text{m}^3$  for naphthalene in soil gas as established by the SFBRWQCB (SFBRWQCB 2016). The methane concentration was below the lower explosive limit of 5%.

#### *5.6.2 Petroleum Hydrocarbon Distribution in Soil*

The site investigation results indicated the presence of petroleum hydrocarbons in soil, as follows:

- TPHg in soil sample SB-3-32 at a concentration of 0.99 mg/kg which is below the Tier 1 ESL of 100 mg/kg (SFBRWQCB 2016);
- TPHd in soil samples SB-2-2 and SB-6-2.5 at concentrations of 16 mg/kg and 37 mg/kg, respectively, which are below its' Tier 1 ESL of 240 mg/kg (SFBRWQCB 2016);

## Environmental Risk Assessors

- TPHmo in soil samples SB-6-2.5 (24 mg/kg), SB-7-2.5 (11 mg/kg), SB-8-2.5 (14 mg/kg), SB-8-7.5 (12 mg/kg), SB-9-2.5 (22 mg/kg), and SB-9-8.5 (75 mg/kg) which are below its' Tier 1 ESL of 100 mg/kg (SFBRWQCB 2016);
- Naphthalene was detected in soil sample SB-5-36 at a concentration of 0.026 mg/kg which is slightly above its' Tier 1 ESL of 0.023 mg/kg (SFBRWQCB 2016);
- Ethylbenzene was detected in soil sample SB-3-32 at a concentration of 0.022 mg/kg which is below its' Tier 1 ESL of 1.4 mg/kg (SFBRWQCB 2016); and
- Total xylenes were detected in soil samples SB-3-32 and SB-5-36 at concentrations of 0.137 mg/kg and 0.022 mg/kg, respectively, which are below its' Tier 1 ESL of 2.3 mg/kg (SFBRWQCB 2016).

Benzene, ethylbenzene, naphthalene, and MTBE have not been reported in shallow (less than 110 feet bgs) soil samples at concentrations at or above their respective lab RL.

### 5.6.3 Petroleum Hydrocarbon Distribution in Groundwater

The investigation results indicated the presence of petroleum hydrocarbons in shallow groundwater, as follows:

- TPHd detected at a concentration of 120 µg/L in the groundwater from boring SB-1 which is slightly above its' Tier 1 ESL of 100 µg/L (SFBRWQCB 2016);
- TPHg (at a concentration of 1,400 µg/L), TPHd (at a concentration of 1,000 µg/L), and TPHss (at a concentration of 1,400 µg/L) detected in the groundwater sample from boring SB-2 which are above the Tier 1 ESL of 100 µg/L for each (SFBRWQCB 2016);
- Naphthalene (at a concentration of 5.3 µg/L) detected in the groundwater sample from boring SB-2 which is above its' ESL of 0.12 µg/L (SFBRWQCB 2016);
- Ethylbenzene (at a concentration of 6.1 µg/L) detected in the groundwater sample from boring SB-2 which is below its' ESL of 13 µg/L (SFBRWQCB 2016);
- Total xylenes (at a concentration of 19 µg/L) detected in the groundwater sample from boring SB-2 which is below its' ESL of 20 µg/L (SFBRWQCB 2016);
- Toluene (at a concentration of 0.57 µg/L) detected in the groundwater sample from boring SB-3 which is below its' ESL of 40 µg/L (SFBRWQCB 2016);
- Ethylbenzene (at a concentration of 1.7 µg/L) detected in the groundwater sample from boring SB-3 which is below its' ESL of 13 µg/L (SFBRWQCB 2016);
- Total xylenes (at a concentration of 6.6 µg/L) detected in the groundwater sample from boring SB-3 which is below its' ESL of 20 µg/L (SFBRWQCB 2016);
- TPHg (at a concentration of 230 µg/L) and TPHss (at a concentration of 940 µg/L) detected in the groundwater sample from boring SB-5 which are above the Tier 1 ESL of 100 µg/L for each (SFBRWQCB 2016);
- Naphthalene was reported in the groundwater sample from boring SB-5 at a concentration of 19 µg/L which is above its' ESL of 0.12 µg/L;
- Ethylbenzene (at 2.8 µg/L) detected in groundwater sample from boring SB-5 was below its' Tier 1 ESL of 13 µg/L; and

## Environmental Risk Assessors

- Total xylenes (at 40 µg/L) detected in groundwater sample from boring SB-5 was above its' Tier 1 ESL of 20 µg/L.

Benzene, ethylbenzene, naphthalene, and MTBE have not been reported in groundwater samples at concentrations at or above their respective lab RL.

One groundwater monitoring well, designated MW-8, was installed on the western side of Main Street for the investigation at the former Mobil-branded service station (ETIC 2009a). Well MW-8 was installed approximately 120 feet north of the Site and in a downgradient direction from the Site with respect to the site location and inferred local groundwater flow direction. Well MW-8 was sampled by ETIC during three events between October 1990 and July 1993. Analysis of groundwater samples collected during the initial event in October 1990 revealed TPHg at a concentration of 900 µg/L, benzene at 3 µg/L, toluene at 5 µg/L, ethylbenzene at 7 µg/L, and xylenes at 62 µg/L. TPHd was not detected in groundwater samples collected from well MW-8 during the initial event in October 1990. Only TPHg (at 270 µg/L) and xylenes (at 1.3 µg/L) were detected in the groundwater samples collected from well MW-8 in July 1992. Petroleum hydrocarbons were not detected in the groundwater samples collected from well MW-8 in July 1993. This well was not sampled during subsequent events.

While detailed groundwater quality data over time are unavailable, the decrease in TPHd concentrations (1,000 µg/L in SB-2 to 120 µg/L in SB-1 to non-detect in MW-8) and lack of petroleum hydrocarbon detections in groundwater samples from borings SB-6 through SB-9 suggest the presence of a residual, local, and stable plume in groundwater beneath the Site.

### 5.7 Migration Pathways: Potential Conduits

Migration pathways related to the migration of petroleum hydrocarbons in groundwater include backfill material associated with underground utilities such as sewer lines, water lines, and stormwater lines. However, groundwater beneath the Site is deeper than typical underground utilities.

Based on the depth of groundwater beneath the Site of more than 30 feet, which would be at least 20 feet deeper than the bottom of typical utility trenches, migration of petroleum hydrocarbons in groundwater along utility trenches across the Site would be unlikely.

### 5.8 Potential Receptors: On-site, Off-site

To the extent that commercial use of the Site continues in the future, the ground surface will remain entirely covered with hardscape (building foundations, pavement, etc.) and landscaping areas. Hence, the potential for direct exposure to residual petroleum hydrocarbons in site soils would be limited to utility workers. The potential for short-term inhalation of vapors would be limited to utility workers and the potential for long-term inhalation of vapors would be limited to site occupants (workers in the on-site businesses).

Since the Site is served by public utilities (rather than an on-site water-supply well) and depth to groundwater is more than 30 feet bgs, direct exposure pathways to petroleum hydrocarbons in groundwater are considered incomplete.

No surface water is present on site.

The available information indicates that the petroleum hydrocarbons appear to be limited to the site boundaries. Therefore, off-site workers and residents would be unlikely to be impacted by the present of petroleum hydrocarbons migrating in groundwater from the Site.

## Environmental Risk Assessors

### 6. POTENTIAL DATA GAPS

Based on a review of available data and the CSM prepared for the Site, potential data gaps have not been identified based on the data collected during the site investigations.

### 7. LOW THREAT UST CLOSURE POLICY

Closure Criteria in the Low Threat UST Closure Policy are organized as follows:

- General Criteria
- Media Specific Criteria-Groundwater
- Media Specific Criteria – Petroleum Vapor Intrusion to Indoor Air
- Media Specific Criteria – Direct Contact and Outdoor Air Exposure
- Additional Criteria

Site-specific data obtained to date were used to address each criteria, as summarized below.

The following presents a brief summary of the results with respect to media-specific criteria as described in the LTCP.

#### 7.1 GENERAL CRITERIA

The general criteria relate to the site use, presence of free product, sources, and completeness of the Site understanding. As evidenced in the data presented in the CSM, a sufficiently good understanding of site conditions, on- and offsite receptors, and site history has been established. These general criteria and a discussion of how the Site is consistent with these criteria are presented below.

***The unauthorized release is located within the service area of a public water system:***

The Site is located within the following service area: *Zone 7 Water Agency*

***The unauthorized release consists only of petroleum:***

The former use of the Site (927 Main Street, formerly 40 Santa Rita Road) included:

- An auto repair from at least the late 1930s until the late 1960s; and
- A gas and oil station from the late 1930s/early 1940s to the early 1950s.

The existing commercial building was reportedly constructed in 1980 and is currently occupied by Subway sandwiches and Hanadi Sushi restaurant. The southwest adjoining property (917 Main Street; formerly 40A Santa Rita Road), was used as a gas and oil facility. The gas and oil building extended onto the southern portion of the Site.

Analytical data collected to date has shown no indication of contaminant releases other than petroleum (Tables 3 and 4). No evidence has been obtained that indicates the Site was used for activities which would have resulted in non-petroleum releases.

***The unauthorized (“primary”) release from the UST system has been stopped:***

No specific information on former operations (i.e., capacity of former USTs, type and locations of USTs, pump island locations, auto maintenance areas, and use of hazardous materials, etc.) has

## Environmental Risk Assessors

been obtained to date. No information regarding the removal of the USTs or associated sampling was contained within the local regulatory agency files reviewed by Basics Environmental during their Phase I ESA. However, structures including USTs would likely have been removed during site redevelopment in 1980. Anomalies indicative of USTs, backfilled excavations, etc. were not identified during a geophysical survey (CBRE 2016) conducted in 2016 at the Site, the southwest adjoining property, and the north adjoining property (929 Main Street).

Based on these results, no existing USTs appear to be present on or near the Site and no source for an ongoing release is apparent in the surveyed areas.

***Free product has been removed to the maximum extent possible:***

No free product was noted during the site investigations.

***A conceptual site model (CSM) that assesses the nature, extent, and mobility of the release has been developed:***

The CSM prepared for the Site is summarized in Section 6. CSM elements are:

- Geology and Hydrogeology
- Surface Water Bodies
- Nearby Wells
- Constituents of Concern: Light-Non Aqueous Phase Liquids (LNAPL), TPHg, benzene, MTBE
- Potential Sources: On-site, Off-site
- Nature and Extent of Environmental Impacts: Soil Vapor, Soil, Shallow Groundwater, Deeper Groundwater
- Migration Pathways: Potential Conduits (underground utilities)
- Potential Receptors: On-site, Off-site (workers, residents, water wells, surface water)

***Secondary source has been removed to the extent practicable:***

No specific information on removal of potentially-impacted soil, quantity of excavated soil, disposal facility, etc. has been obtained to date.

***Soil and groundwater have been tested for MTBE and results reported in accordance with Health and Safety Code 25296.15:***

Soil and groundwater samples collected have been analyzed for MTBE. MTBE has not been detected in soil and groundwater samples analyzed during the site investigations.

***Nuisance as defined by the Water Code section 13050 does not exist at this site:***

Health and Safety Code section 25296.15 prohibits closing a UST case unless the soil, groundwater, or both, as applicable have been tested for MTBE and the results of that testing are known to the Regional Water Quality Control Board. The exception to this requirement is where a regulatory agency determines that the UST that leaked has only contained diesel or jet fuel. Before closing a UST case pursuant to this policy, the requirements of section 25296.15, if applicable, shall be satisfied. *A nuisance as defined by the water code does not exist at this Site.*



## Environmental Risk Assessors

### 7.2 MEDIA-SPECIFIC CRITERIA - GROUNDWATER

Groundwater data collected from the Site are utilized to evaluate media-specific criteria, specifically groundwater.

**Plume Study:** Comparison of the groundwater analytical results to the compounds noted in Table 1 of the Technical Justification for Groundwater Media-Specific Criteria indicated the following:

- TPHg was detected in groundwater samples from borings SB-2 and SB-5 at concentrations of 1,400 µg/L and 230 µg/L, respectively (see Table 4 and Figure 7); the TPHg 100 µg/L isoconcentration contour is presented on Figure 7;
- Benzene was not detected in groundwater samples at concentrations at or above the lab RL of 0.5 µg/L; based on the lack of benzene detections in groundwater (see Table 4 and Figure 8) a benzene isoconcentration contour is not presented on Figure 8; and
- MTBE was not detected in groundwater samples at concentrations at or above the lab RLs of 0.5 to 1 µg/L; based on the lack of MTBE detections in groundwater (see Table 4 and Figure 8) an MTBE isoconcentration contour is not presented on Figure 8.

**Plume Length:** The length of the TPHg plume is estimated to be approximately 65 feet as measured from the source area to the plume boundary (100 µg/L isoconcentration contour) as shown on Figure 7.

**Well Survey:** Based on available information obtained during ERA's water well survey, the nearest active well is more than 400 feet south and upgradient of the Site with respect to the site location and inferred local groundwater flow direction. The nearest active or possibly active well located in a downgradient direction was more than 1,000 feet north to northwest from the Site.

**Surface Water:** The nearest surface water body, the creek named Arroyo Del Valle, is located approximately 325 feet south of the Site across Del Valle Parkway.

**Low Threat Groundwater Class:** Based on the short, stabilized plume length of less than 100 feet for TPHg and lack of benzene and MTBE in groundwater which indicates a small or depleted source and/or very high natural attenuation rate, and the lack of receptors (existing water supply well or surface water body) within 250 feet of the Site, the Site satisfies the Class 1 Groundwater Plume Class Criteria.

### 7.3 MEDIA SPECIFIC CRITERIA –VAPOR INTRUSION TO INDOOR AIR

Soil gas and soil data collected from the Site are utilized to evaluate vapor intrusion to indoor air.

**Soil:** Analysis of soil samples collected from the Site have not revealed the presence of benzene (lab RL of 0.005 mg/kg), MTBE (lab RLs of 0.005 mg/kg to 0.020 mg/kg), or toluene (lab RL of 0.005 mg/kg). Naphthalene (lab RL of 0.005 mg/kg) was detected in soil sample SB-5-36 at a concentration of 0.026 mg/kg, ethylbenzene (lab RL of 0.005 mg/kg) was detected in soil sample SB-3-32 at a concentration of 0.022 mg/kg, and xylenes (lab RL of 0.005 mg/kg) was detected in soil samples SB-3-32 and SB-5-36 at concentrations of 0.137 mg/kg and 0.022 mg/kg, respectively. The soil samples with reported detections of naphthalene, ethylbenzene, and xylenes were collected from intervals of discolored (greenish) soil (see discussion in Section 4.2.2.3).

## Environmental Risk Assessors

Overall, weathered petroleum hydrocarbons were not present in soil samples collected from depths of less than 32 feet bgs.

**Soil Gas:** Two soil gas samples were collected from a depth of approximately 5 feet below the foundation level of the on-site building at sampling locations SB-3 and SB-5A. The soil gas sample from sampling location SB-3 was collected from the pavement area immediately south of the on-site building and the soil gas sample from sampling location SB-5A was collected from the landscaping area immediately east of the on-site building. Analysis of the soil gas sample from sampling location SB-3 revealed the presence of naphthalene at a concentration of 11  $\mu\text{g}/\text{m}^3$  and methane at 0.0009%. Analysis of the soil gas sample from sampling location SB-5A (analyzed using U.S. EPA Methods TO-15 and TO-17) revealed the presence of naphthalene at a concentration of 0.61  $\mu\text{g}/\text{m}^3$ .

The naphthalene concentrations are below the ESL of 41  $\mu\text{g}/\text{m}^3$  for naphthalene in soil gas as established by the SFBRWQCB (SFBRWQCB 2016). The methane concentration was below the lower explosive limit of 5%.

**Petroleum Vapor Intrusion to Indoor Air:** Naphthalene was reported in the indoor air sample (927-IA) and the ambient air sample (1-AA) at similar concentrations (0.11  $\mu\text{g}/\text{m}^3$  in indoor air and 0.064  $\mu\text{g}/\text{m}^3$  in ambient air). Comparison to the Tier 1 ESL (0.083  $\mu\text{g}/\text{m}^3$ ) for naphthalene in indoor air (SFBRWQCB 2016) indicated that naphthalene concentrations reported in samples are slightly above and slightly below its' Tier 1 ESL.

Based on the similar concentrations of naphthalene for indoor air and ambient air, and the low levels of methane (below LEL) in soil gas, petroleum vapor intrusion to indoor air does not appear to be a significant environmental or health concern at the Site.

### 7.4 MEDIA SPECIFIC CRITERIA – DIRECT CONTACT AND OUTDOOR AIR EXPOSURE

Soil data collected from the Site are utilized to evaluate vapor intrusion to indoor air.

**Soil:** During the subsurface investigations, soil samples were collected from the 0- to 5-foot depth interval and the 5- to 10-foot depth interval for petroleum hydrocarbon analysis, including benzene, ethylbenzene, and naphthalene (as presented in Table 1 of the LTCP). Table 8 below presents the limits for benzene, ethylbenzene, and naphthalene concentrations at commercial/industrial properties as noted in the LTCP.

Table 8. LTCP Compounds and Limits (units: mg/kg)		
Compound	0- to 5-foot depth interval	5- to 10-foot depth interval
Benzene	8.2	12
Ethylbenzene	89	134
Naphthalene	45	45

As noted above in Section 4.3.3, benzene, ethylbenzene, and naphthalene were not reported in shallow (less than 10 feet bgs) soil samples at concentrations at or above the lab RLs. The lab RL of 0.005 mg/kg for each of the compounds is well below the limits presented above in Table 8 for each depth interval.

## Environmental Risk Assessors

**Site Conditions/Use:** The surface across the Site is covered by the on-site building, concrete sidewalk, asphalt pavement, and landscaping areas. Currently, the Site is used for commercial purposes and there are no redevelopment plans.

**Direct Contact and Outdoor Air Exposure:** Based on the low levels of petroleum hydrocarbons in shallow soil, VOCs concentrations in ambient air similar to other San Francisco Bay Area communities, current site conditions, and current commercial use of the Site, direct contact with soil and outdoor air exposure does not appear to be a significant environmental or health concern at the Site.

### 8. CONCLUSIONS

Potential on-site sources for petroleum hydrocarbons present in soil and groundwater beneath the Site have been identified as the gas and oil facility formerly present near the Site's southeastern corner and the car wash formerly present on the Site's southwestern portion. Although documentation was not available, USTs may have been associated with the former facilities. The primary release has been stopped with no USTs currently present on site based on the reported lack of evidence indicating the presence of tanks during construction of the current building and during the recent geophysical survey across the Site. The former gas and oil facility has not been ruled out as a potential source for the petroleum hydrocarbon; however, the former car wash does not appear to be a likely source based on lack of petroleum hydrocarbons in the groundwater sample from boring SB-8, located on the Site's southwestern portion in the former car wash area.

Secondary sources (significant residual mass of petroleum hydrocarbons in soil and groundwater) have not been identified based on the available data, as summarized below:

- Petroleum hydrocarbons are not present in shallow soil (less than 10 feet bgs) at concentrations above screening levels (ESLs and/or LTCP limits);
- Benzene, ethylbenzene, and naphthalene are not present in shallow soil at concentrations above limits listed in Table 1 of the LTCP (8.2 mg/kg, 89 mg/kg, and 45 mg/kg, respectively, for soil samples from the 0- to 5-foot depth interval, and 12 mg/kg, 134 mg/kg, and 45 mg/kg, respectively, for soil samples from the 5- to 10-foot depth interval)
- Analysis of soil samples SB-3-32 and SB-5-36, collected from stained soil intervals during the 2016 investigation revealed ethylbenzene, xylenes, and naphthalene concentrations below their respective ESLs and/or the lowest limit listed in Table 1 of the LTCP;
- Petroleum hydrocarbons have not been reported in groundwater at concentrations significantly above screening levels (ESLs) except in a small localized area beneath the southeastern corner of the on-site building; analysis of a groundwater sample collected from boring SB-2 (just south of the on-site building) in 2015 revealed TPHg, TPHd, and TPHss at concentrations above the ESL of 100 µg/L for each but analysis of groundwater samples collected from adjacent borings during subsequent investigations (SB-3 in 2016 and SB-2A in 2017) did not reveal petroleum hydrocarbons at concentrations at or above their respective lab RL; analysis of a groundwater sample collected from boring SB-5 (just east of the on-site building) in 2016 revealed TPHg and TPHss at concentrations above the ESL of 100 µg/L for each; the only other petroleum hydrocarbon detection was TPHd reported in the groundwater sample from boring SB-1 in 2015 at a concentration (120 µg/L) slightly above its' ESL (100 µg/L); and

## Environmental Risk Assessors

- Petroleum hydrocarbons were not reported in groundwater samples collected from the on-site upgradient borings SB-7 and SB-8 or the downgradient borings SB-6 and SB-9; therefore, the extent of petroleum hydrocarbons in groundwater beneath the Site appears to be delineated with the residual mass of petroleum hydrocarbons in groundwater appears localized to the southeastern corner of the on-site building.

The discrepancy between petroleum hydrocarbon concentrations in groundwater samples collected from borings SB-2 (2015) and SB-3 and SB-2A (2016 and 2017) could be related to the following:

- Seasonal variations; the groundwater sample from boring SB-2 was collected in November 2015 (4Q15), the groundwater sample from boring SB-3 was collected in August 2016 (3Q16); and the groundwater sample from boring SB-2A was collected in May 2017 (2Q17);
- Changes in groundwater levels; the soil at 34 feet bgs in boring SB-2 was noted as “moist” while soil at 38 feet bgs in boring SB-3 was “wet”;
- Petroleum hydrocarbon staining noted in these borings; moist soil present in boring SB-2 corresponded to the depth interval where petroleum hydrocarbon staining was observed (from approximately 30 to 34 feet bgs) while unsaturated soil present in boring SB-3 corresponded to the depth intervals where petroleum hydrocarbon staining was observed (from approximately 31 to 33 feet bgs and 34 to 36 feet bgs); and
- Nature of the sample collection method (grab samples with sediment).

Based on the above-noted information, the discrepancy in petroleum hydrocarbons concentrations in borings SB-2 and SB-3 may be due to collecting the groundwater sample from boring SB-2 when groundwater was in contact with stained soil and collecting the groundwater samples from borings SB-3 and SB-2A when groundwater was not in contact with stained soil. The lack of TPHg in the two most recent groundwater samples (SB-3 and SB-2A) indicates that the only boring in which TPHg was reported during the two recent investigations is SB-5 (TPHg reported at a concentration of 230 µg/L in 2016).

Potential off-site sources for the petroleum hydrocarbons present in groundwater beneath the Site have been identified as the gas and oil facility formerly present on the southwest adjoining property, the auto sales lot formerly located south of the Site, the Unocal service station formerly located east of the Site, and the Pleasanton Corporate Yard formerly located to the Site’s southeast.

Although petroleum hydrocarbons were not reported in the groundwater sample collected from boring SB-7 (located southeast and upgradient of the current on-site building), soil with petroleum hydrocarbons staining was noted in this boring at depths of 34 feet bgs and deeper. The presence of stained soil at these depths is likely related to migration of petroleum hydrocarbons in groundwater from an upgradient source because evidence of staining was not noted in shallow soil in this boring during drilling, petroleum hydrocarbons were not reported in shallow soil samples collected from this boring and submitted for analysis, and the stained soil intervals were at or just above the water table. The gas and oil facilities formerly located on the Site and southwest adjoining property would not be likely sources for the stained soil in boring SB-7 due to the upgradient location of this boring from the former on-site facility and lack of soil staining and petroleum hydrocarbons in groundwater in boring SB-4 located in the area of the former gas and oil facility on the southwest adjoining property. In addition, the auto sales lot formerly located south of the Site would not be a likely source for the petroleum hydrocarbons beneath the Site due to lack of

## Environmental Risk Assessors

soil staining and petroleum hydrocarbons in groundwater in boring SB-8 located in a downgradient direction from this former facility. Therefore, the former Unocal service station and former Pleasanton Corporate Yard are potential sources for the petroleum hydrocarbons present in groundwater beneath the Site, based on the available data.

Naphthalene was reported in the indoor air sample and the ambient air sample at similar concentrations ( $0.11 \mu\text{g}/\text{m}^3$  in indoor air and  $0.064 \mu\text{g}/\text{m}^3$  in ambient air). Comparison to the Tier 1 ESL ( $0.083 \mu\text{g}/\text{m}^3$ ) for naphthalene in indoor air (SFBRWQCB 2016) indicated that naphthalene concentrations reported in indoor air and ambient air samples are slightly above and slightly below its' Tier 1 ESL, respectively. The estimated risks based on exposure to naphthalene in indoor air and use of DTSC's Guidance (DTSC 2011) include an incremental cancer risk of  $1.6 \times 10^{-6}$  and a non-cancer hazard index of 0.034. Ventilation of the on-site building appears sufficient based on the incremental cancer risk, non-cancer hazard index, and the similar concentrations of naphthalene for indoor air and ambient air.

### 9. RECOMMENDATIONS

No further investigation appears warranted at this time based on the following:

- Petroleum hydrocarbons concentrations reported in soil were below applicable ESLs and/or the limits listed in Table 1 of the LTCP;
- TPHg concentrations reported in groundwater are low; TPHg was not reported in the groundwater samples from borings SB-3 and SB-2A in the area south (upgradient) of the current on-site building and TPHg was reported was reported in boring SB-5 at  $230 \mu\text{g}/\text{L}$ ;
- The extent of the petroleum hydrocarbons plume beneath the Site appears to be delineated and the residual mass of petroleum hydrocarbons in groundwater appears localized to the southeastern corner of the on-site building;
- The former on-site gas and oil facility has been identified as a potential source for the petroleum hydrocarbons present at the Site; however, the former Unocal service station (to the east) and former Pleasanton Corporate Yard (to the southeast) have been identified as potential off-site sources; and
- The concentration of naphthalene in indoor air at the Site was similar to the concentration in ambient air; the estimated risks based on exposure to naphthalene in indoor air include an incremental cancer risk of  $1.6 \times 10^{-6}$  and a non-cancer hazard index of 0.034 and indicate that the ventilation of the on-site building appears sufficient.

### 10. LIMITATIONS

#### 10.1 Limitations and Exceptions

The opinions and recommendations presented in this Report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by ERA and the party for whom this report was originally prepared. This Report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. No representation, warranty, or guarantee, express or implied, is intended or given. To the extent that ERA relied upon any information prepared by other parties not

## Environmental Risk Assessors

under contract to ERA, ERA makes no representation as to the accuracy or completeness of such information.

This Report is expressly for the sole and exclusive use of the parties for which this Report was originally prepared for a particular purpose. Only the parties for which this Report was originally prepared and/or other specifically named parties, may make use of and rely upon the information in this Report. Reuse of this Report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties without proper authorization, shall be at the user's sole risk.

The findings presented in this Report apply solely to site conditions existing at the time when ERA's assessment was performed. It must be recognized, however, that a Limited Phase II ESA is conducted for the purpose of evaluating the potential for contamination through limited investigative activities and in no way represents a conclusive or complete site characterization. Conditions in other parts of the project site may vary from those at the locations where data were collected. ERA's ability to interpret investigation results is related to the availability of the data and the extent of the investigation activities. Therefore, 100 percent confidence in limited Phase II ESA conclusions cannot reasonably be achieved.

Nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and applicable laws, codes, regulations, or standards.

### 10.2 Special Terms and Conditions

The scope of work for this Limited Phase II ESA was presented in ERA's proposal dated November 2, 2015. The scope of work for this assessment did not include tasks not specifically noted in the proposal.

### 10.3 User Reliance

This Report is for the exclusive use of the parties for which it was prepared, their agents, and assignees, and for such other parties as ERA agrees may rely on the Report. Use of this Report by any other party shall be at such party's sole risk.

## 11. REFERENCES

AEI Consultants. 2010. *Phase I Environmental Site Assessment Update, 927 Main Street, Pleasanton, California 94566*. June 15.

American Society for Testing and Materials (ASTM). 2010. *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. June.

Basics Environmental, Inc. 2013. *Phase I Environmental Site Assessment, 927 Main Street, Pleasanton, California*. December 5.

California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). 2016. *Environmental Screening Levels, Tier 1 ESLs*. February.

CBRE, Inc. 2016. *Geophysical Survey, 915 Main Street, Pleasanton, California*. March 30.

Environmental Risk Assessors. 2015. *Limited Phase II Environmental Site Assessment Report, Main Street Property, 927 Main Street, Pleasanton, California 94566*. November 27.

## Environmental Risk Assessors

- . 2016. *Soil and Groundwater Investigation Report, Main Street Property, 927 Main Street, Pleasanton, California 94566*. October 10.
- . 2017. *Soil and Groundwater Investigation Work Plan, Main Street Property, 927 Main Street, Pleasanton, California 94566*. April 14.
- ETIC Engineering, Inc. (ETIC). 2009a. *Report of Groundwater Monitoring, Third Quarter 2009, Former Mobil Station 04H6J, 1024 Main Street, Pleasanton, California*. September 9.
- . 2009b. *Soil Vapor Sampling Work Plan, Former Mobil Station 04H6J, 1024 Main Street, Pleasanton, California*. May 5.
- . 2010. *Detailed Well Survey Report, Former Mobil Station 04H6J, 1024 Main Street, Pleasanton, California*. January 29.

## TABLES



**Table 2**  
**Soil Gas, Indoor Air, and Ambient Air Samples Analytical Summary**  
**Main Street Property**  
**927 Main Street**  
**Pleasanton, California**

Analyte (units: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter for VOCs; percent for methane)	Tier 1 Soil Gas ESL	Tier 1 Indoor Air ESL	Sample ID			
			SB-3 Soil Gas Sample Date: 7-22-16	SB-5A Soil Gas Sample Date: 5-17-17	927-IA Indoor Air Sample Date: 5-10-17	1-AA Ambient Air Sample Date: 5-10-17
1,2-Dibromoethane (EDB)	2.3	0.0047	NA	<7.6 / <2	<b>0.066 J</b>	<b>0.053 J</b>
1,2-Dichloroethane (1,2-DCA)	54	0.11	NA	<4 / <2	<b>0.082 J</b>	<b>0.078 J</b>
Naphthalene	41	0.083	11	0.61 J / <2	0.11 J	0.064 J
Methane	NE	NE	<b>0.0009</b>	-	-	-

**Notes:**

ESL = Environmental Screening Levels as established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Tier 1 ESLs, February 2016.

1. Soil gas sample SB-3, indoor air sample 927-IA, and ambient air sample 1-AA analyzed using U.S. Environmental Protection Agency (U.S. EPA) Method TO-15.

2. Soil gas sample SB-5A analyzed using U.S. EPA Method TO-15 and U.S. EPA Method TO-17 (denoted by 7.6 J/<1000).

NA or - = Not Analyzed for noted compound.

NE = Not Established

J = Estimated value / E = Exceeds instrument calibration range

**Bold** = Compound reported at noted concentration.

Sample ID / Canister Serial Number	Beginning Vacuum Reading (in. Hg)	Final Vacuum Reading (in. Hg)
SB-3 / 1926-1909	-10	-5
SB-5A / RO872-2500	-29	-5
927-IA / 0233-1946	-29.5	-7
1-AA / 0229-1942	-30	-7.5

**Table 3**  
**Soil Samples Organics Analytical Summary**  
**Main Street Property**  
**927 Main Street**  
**Pleasanton, California**

On-Site Location/ Comments	Sample ID	Sample Depth (feet bgs) <sup>1</sup>	Petroleum Hydrocarbons <sup>2</sup> units: mg/kg				VOCs <sup>3</sup> units: mg/kg								
			TPHg <sup>2</sup>	TPHd <sup>2</sup>	TPHmo <sup>2</sup>	TPHs <sup>2</sup>	Benzene	MTBE	Naphthalene	Toluene	Ethylbenzene	Xylenes	EDB	1,2-DCA	TBA
<b>ESL for Shallow Soil<sup>4</sup></b>			100	240	100	100	0.044	0.023	0.023	2.9	1.4	2.3	0.00033	0.0045	0.075
North of Former Gas Station Building	SB-1-5.5	5.0 - 5.5	<1	<1	NA	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.004	<0.004	<0.05
South of Former Gas Station Building	SB-2-2	1.5 - 2.0	<1	<b>16</b>	NA	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.004	<0.004	<0.05
South of Former Gas Station Building	SB-3-10	9.5 - 10.0	<0.5	<10	<10	<10	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	NA	NA	NA
South of Former Gas Station Building	SB-3-32	31.5 - 32.0	<b>0.99</b>	<10	<10	<10	<0.005	<0.020	<0.005	<0.005	<b>0.022</b>	<b>0.137</b>	NA	NA	NA
Area of Former Southern Canopy	SB-4-3	2.5 - 3.0	<0.5	<10	<10	<10	<0.005	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA
Area of Former Southern Canopy	SB-4-7.5	7.0 - 7.5	<0.5	<10	<10	<10	<0.005	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA
Area of Former Northern Canopy	SB-5-4.5	4.0 - 4.5	<0.5	<10	<10	<10	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	NA	NA	NA
Area of Former Northern Canopy	SB-5-8	7.5 - 8.0	<0.5	<10	<10	<10	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	NA	NA	NA
Area of Former Northern Canopy	SB-5-36	35.5 - 36.0	<0.5	<10	<10	<10	<0.005	<0.020	<b>0.026</b>	<0.005	<0.005	<b>0.022</b>	NA	NA	NA
East-Northeast Corner of Site Building	SB-6-2.5	2.0 - 2.5	<0.5	<b>37</b>	<b>24</b>	NA	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05
East-Northeast Corner of Site Building	SB-6-7.5	7.0 - 7.5	<0.5	<10	<10	NA	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05
Southeast Corner of Site Building	SB-7-2.5	2.0 - 2.5	<0.5	<10	<b>11</b>	NA	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05
Southeast Corner of Site Building	SB-7-7.5	7.0 - 7.5	<0.5	<10	<10	NA	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05
Southeast Corner of Site Building	SB-8-2.5	2.0 - 2.5	<0.5	<10	<b>14</b>	NA	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05
Southeast Corner of Site Building	SB-8-7.5	7.0 - 7.5	<0.5	<10	<b>12</b>	NA	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05
Northwest Corner of Site Building	SB-9-2.5	2.0 - 2.5	<0.5	<10	<b>22</b>	NA	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05
Northwest Corner of Site Building	SB-9-8.5	8.0 - 8.5	<0.5	<10	<b>75</b>	NA	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05

**Notes:**

Units: mg/kg = milligrams per kilogram

1. bgs = below ground surface

2. TPHg, TPHd, TPHmo, TPHs = Total petroleum hydrocarbons (TPH) quantified as gasoline (TPHg), diesel (TPHd), motor oil (TPHmo), and Stoddard solvent (TPHs) were analyzed using U.S. EPA Method 8015B/C.

3. Volatile organic compounds (VOCs) were analyzed using U.S. EPA Method 8260B.

4. ESL = Environmental Screening Levels as established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Tier 1 ESLs, February 2016.

MTBE = Methyl tert-butyl ether

EDB=1,2-Dibromoethane

1,2-DCA = 1,2-Dichloroethane

1,2-DCE = 1,2-Dichloroethene

TBA = Tert butyl alcohol

NE = Not established

<0.5 = Not detected at stated concentration

**Bold** = Compound detected

**Bold** = Compound reported at concentration above ESL or laboratory reporting limit above ESL

**Table 4**  
**Groundwater Samples Organics Analytical Summary**  
**Main Street Property**  
**927 Main Street**  
**Pleasanton, California**

On-Site Location/ Comments	Sample ID	Petroleum Hydrocarbons <sup>1</sup> units: µg/L				VOCs <sup>2</sup> units: µg/L								
		TPHg <sup>1</sup>	TPHd <sup>1</sup>	TPHmo <sup>1</sup>	TPHss <sup>1</sup>	Benzene	MTBE	Naphthalene	Toluene	Ethylbenzene	Xylenes	EDB	1,2-DCA	TBA
<b>ESL for Groundwater<sup>3</sup></b>		100	100	See Note 2 <sup>4</sup>	100	1	5	0.12	40	13	20	0.05	0.5	1.2
North of Former Gas Station Building	SB-1-W	<50	<b>120</b>	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
South of Former Gas Station Building	SB-2-W	<b>1,400</b>	<b>1,000</b>	NA	<b>1,400</b>	<0.5	<0.5	<b>5.3</b>	<0.5	<b>6.1</b>	<b>19</b>	<0.5	<0.5	<2.0
South of Former Gas Station Building	SB-3-W	<50	<50	<100	<50	<0.5	<1.0	<1.0	<b>0.57</b>	<b>1.7</b>	<b>6.6</b>	NA	NA	NA
Area of Former Southern Canopy	SB-4-W	<50	<50	<100	<50	<0.5	NA	<1.0	<0.5	<0.5	<0.5	NA	NA	NA
Area of Former Northern Canopy	SB-5-W	<b>230</b>	<50	<100	<b>940</b>	<0.5	<1.0	<b>19</b>	<0.5	<b>2.8</b>	<b>40</b>	NA	NA	NA
South of Former Gas Station Building	SB-2A-GW	<50	<50	<100	NA	<0.62	<1.2	<1.2	<0.62	<0.62	<1.2	<1.2	<0.62	<12
East-Northeast Corner of Site Building	SB-6-GW	<50	<50	<100	NA	<0.62	<1.2	<1.2	<0.62	<0.62	<1.2	<1.2	<0.62	<12
Southeast Corner of Site Building	SB-7-GW	<50	<50	<100	NA	<0.62	<1.2	<1.2	<0.62	<0.62	<1.2	<1.2	<0.62	<12
Southeast Corner of Site Building	SB-8-GW	<50	<50	<100	NA	<0.62	<1.2	<1.2	<0.62	<0.62	<1.2	<1.2	<0.62	<12
Northwest Corner of Site Building	SB-9-GW	<50	<50	<100	NA	<0.62	<1.2	<1.2	<0.62	<0.62	<1.2	<1.2	<0.62	<12

**Notes:**

Units: µg/L = micrograms per liter

1. TPHg, TPHd, TPHmo, TPHss = Total petroleum hydrocarbons (TPH) quantified as gasoline (TPHg), diesel (TPHd), motor oil (TPHmo), and Stoddard solvent (TPHss) were analyzed using U.S. EPA Method 8015B/C.

2. Volatile organic compounds (VOCs) were analyzed using U.S. EPA Method 8260B.

3. ESL = Environmental Screening Levels as established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Tier 1 ESLs, February 2016.

4. SFBRWQCB Tier 1 Environmental Screening Levels (SFBRWQCB, 2016) Note 2 states: TPH motor oil is not soluble. TPH motor oil detections in water most likely are petroleum degradates or less likely NAPL. If the detections are degradates, add TPH motor oil and TPH diesel results and compare to TPH diesel criterion. The noted ESL was established for TPH-d.

MTBE = Methyl tert-butyl ether

EDB=1,2-Dibromoethane

1,2-DCA = 1,2-Dichloroethane

1,2-DCE = 1,2-Dichloroethene

TBA = Tert butyl alcohol

NE = Not established

<50 = Not detected at stated concentration

**Bold** = Compound detected

**Bold** = Compound reported at concentration above ESL or laboratory reporting limit above ESL

**Table 6**  
**Exposure Parameters for Indoor Air Risks and Hazards Estimation**  
**Main Street Property**  
**927 Main Street**  
**Pleasanton, California**

Parameter	Symbol	Unit	Value	Source
Indoor Air Concentration	$C_{\text{indoor air}}$	$\mu\text{g}/\text{m}^3$	Chemical Specific	Analytical Data
Exposure Frequency - Worker	$EF_w$	days/year	250	DTSC, 2014
Exposure Duration - Worker	$ED_w$	year	25	DTSC, 2014
Exposure Time - Worker	$ET_w$	---	0.33	8 hours/day x 1 day/24 hours
Averaging Time - Adult (carcinogen)	$AT_c$	years	70	DTSC, 2014
Inhalation Unit Risk for Naphthalene	IUR	$(\mu\text{g}/\text{m}^3)^{-1}$	$3.4 \times 10^{-5}$	DTSC, 2014
Inhalation Reference Concentration for Naphthalene	RfC	$\mu\text{g}/\text{m}^3$	0.003	DTSC, 2014

Notes:

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

California Environmental Protection Agency (Cal-EPA) Department of Toxic Substances Control. 2014. Human and Ecological Risk Office. The Johnson and Ettinger Model. March.

**Table 7**  
**Excess Lifetime Cancer Risks and Noncancer Hazards Estimation**  
**Main Street Property**  
**927 Main Street**  
**Pleasanton, California**

Compound	Maximum Indoor Air Concentration (µg/m <sup>3</sup> )	Worker Excess Lifetime Cancer Risk	Worker Noncancer Hazard Quotient
Naphthalene	0.0305 <sup>1</sup>	1.6 x 10 <sup>-6</sup>	0.034

Equations:

$$\text{Risk} = \frac{C_{\text{indoor air}} \times ET_W \times EF_W \times ED_W \times IUR}{AT_C \times 365 \text{ days/year} \times 24 \text{ hours/day}}$$

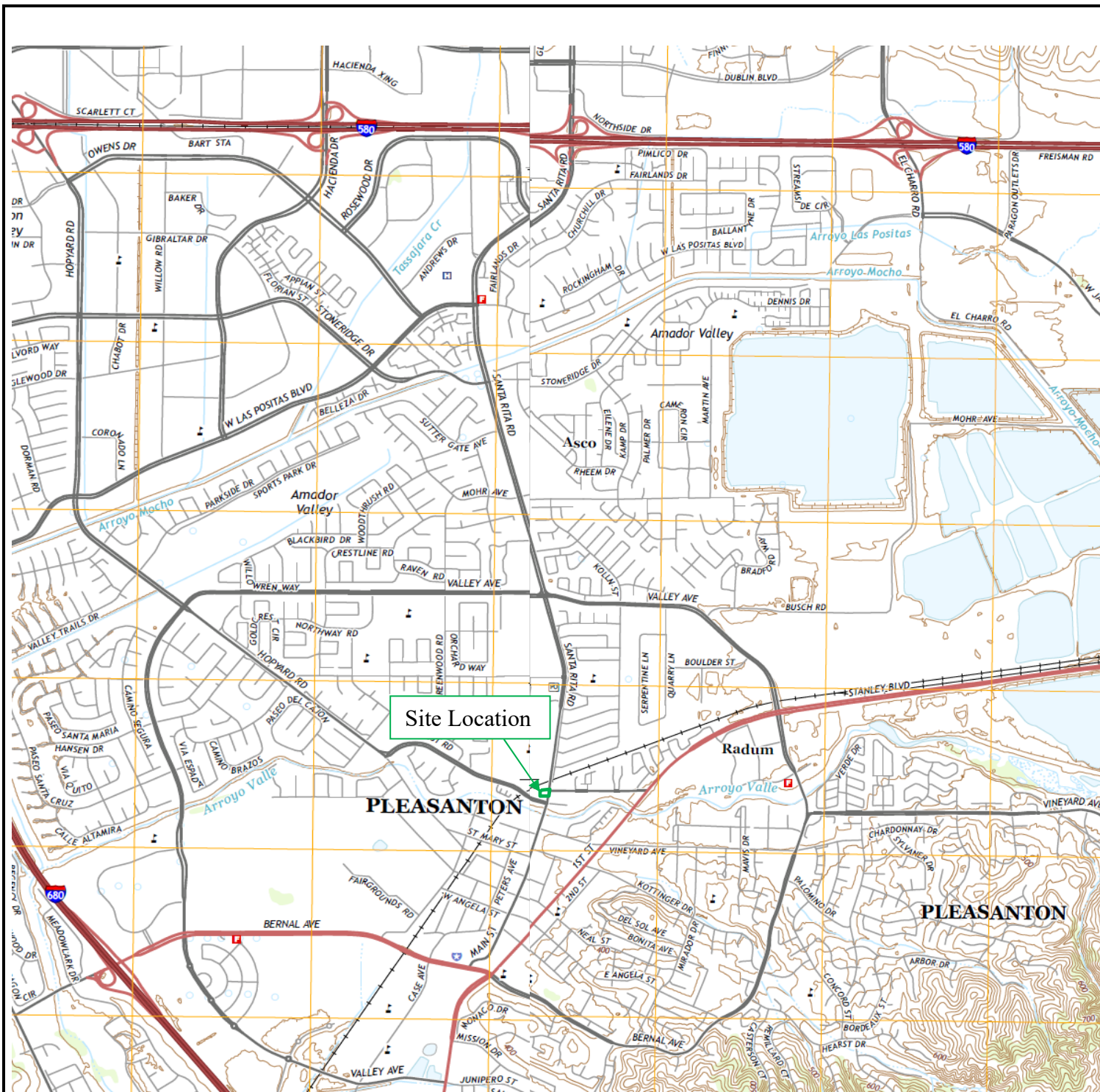
$$\text{Hazard Quotient} = \frac{C_{\text{indoor air}} \times ET_W \times EF_W \times ED_W}{AT_C \times 365 \text{ days/year} \times 24 \text{ hours/day} \times RfC}$$

**Notes:**

µg/m<sup>3</sup> = micrograms per cubic meter

1. C indoor air = α x Soil Gas Concentration; Naphthalene C<sub>indoor air</sub> = 0.0305 µg/m<sup>3</sup> using attenuation factor (α) of 0.05 for an existing commercial building and maximum naphthalene concentration in soil gas for SB-5A of 0.61 µg/m<sup>3</sup> using α of 0.05 for an existing commercial building. Source: California Environmental Protection Agency (Cal-EPA) Department of Toxic Substances Control. 2011. Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air. October

## FIGURES



USGS Dublin and Livermore, California Quadrangle Topographic Maps, 2015

<b>Legend</b> Site (boundaries approximate)	<b>Scale</b> feet (approximate)	North



**Site Location Map**

**Soil and Groundwater Investigation Report**

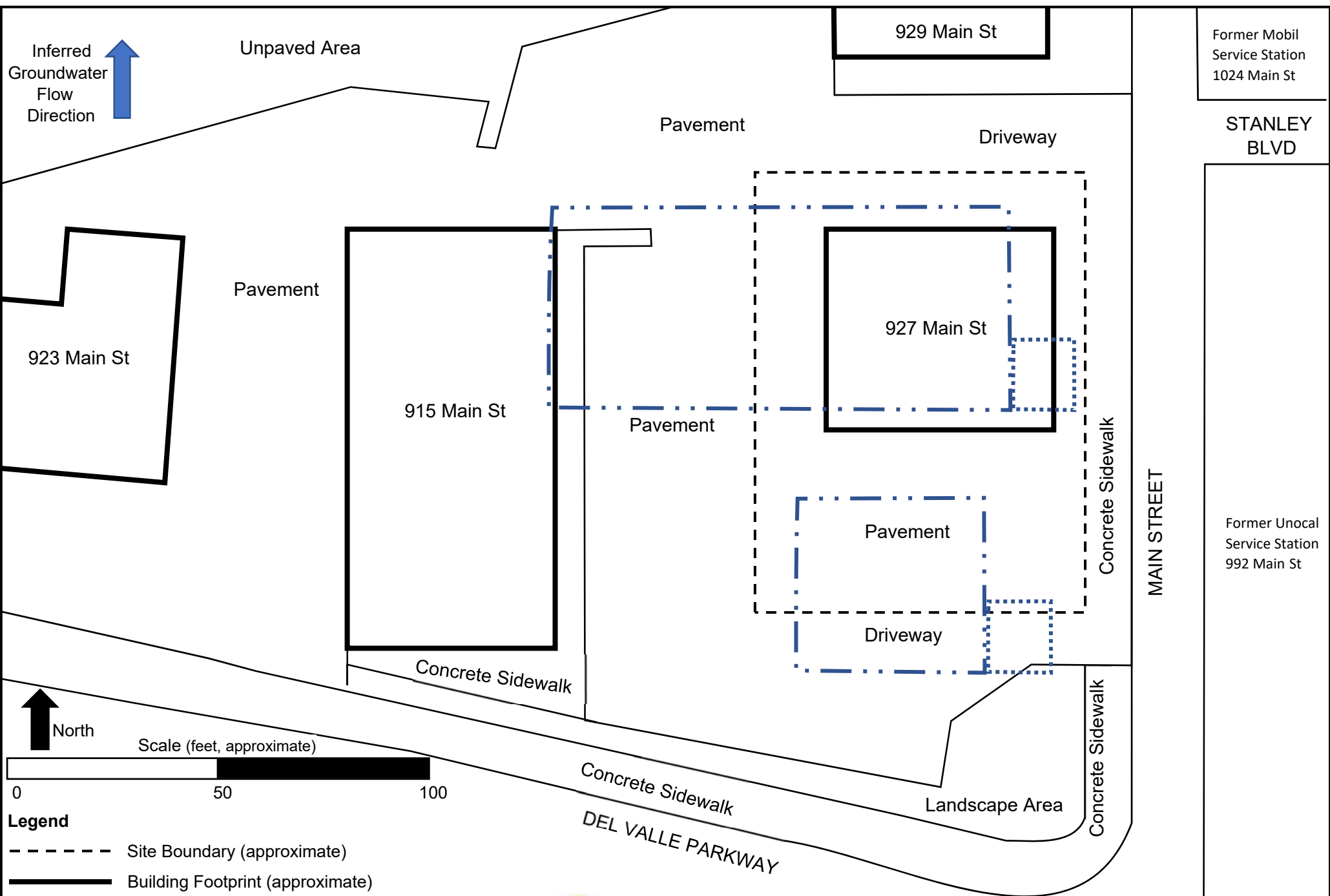
927 Main Street, Pleasanton, Alameda County, California

PN: 01-2016-1300-001

Date: June 26, 2017

EP: Lita Freeman

**Figure 1**



Inferred Groundwater Flow Direction

North

Scale (feet, approximate)  
 0 50 100

- Legend**
- - - - Site Boundary (approximate)
  - Building Footprint (approximate)
  - . . . Former Building Footprint (approximate)
  - . . . . Former Dispenser Canopy Footprint (approximate)



**Site Plan**

**Soil and Groundwater Investigation Report**

927 Main Street, Pleasanton, Alameda County, California

PN: 01-2016-1300-001  
 Date: June 26, 2017  
 EP: Lita Freeman

**Figure 2**

Former Mobil Service Station  
 1024 Main St

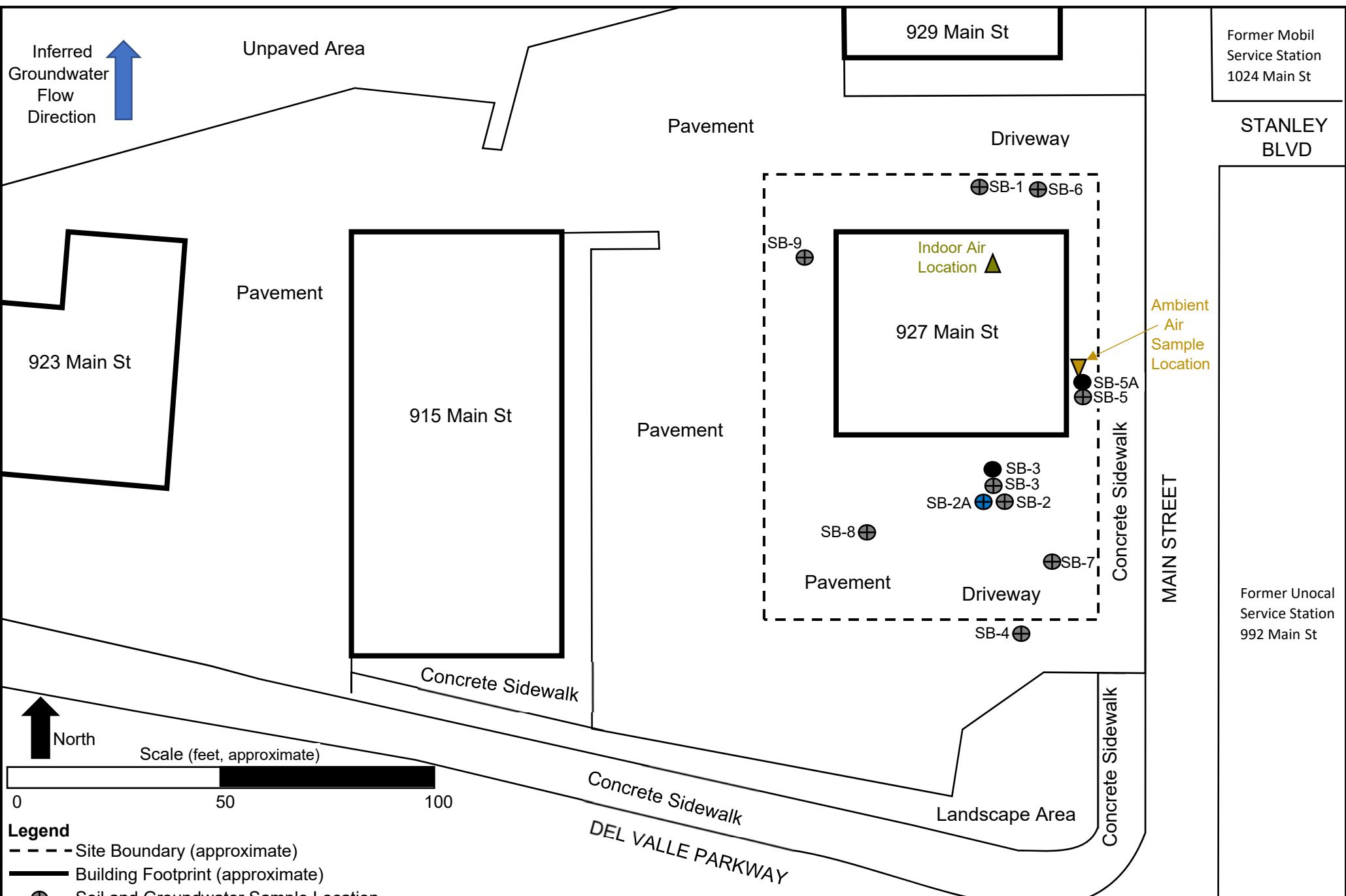
**STANLEY BLVD**

Former Unocal Service Station  
 992 Main St

MAIN STREET

DEL VALLE PARKWAY





Former Mobil Service Station  
1024 Main St

STANLEY BLVD

Former Unocal Service Station  
992 Main St

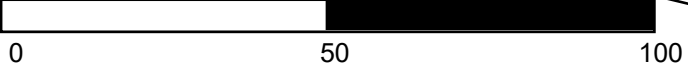
Ambient Air Sample Location

MAIN STREET

Inferred Groundwater Flow Direction

North

Scale (feet, approximate)

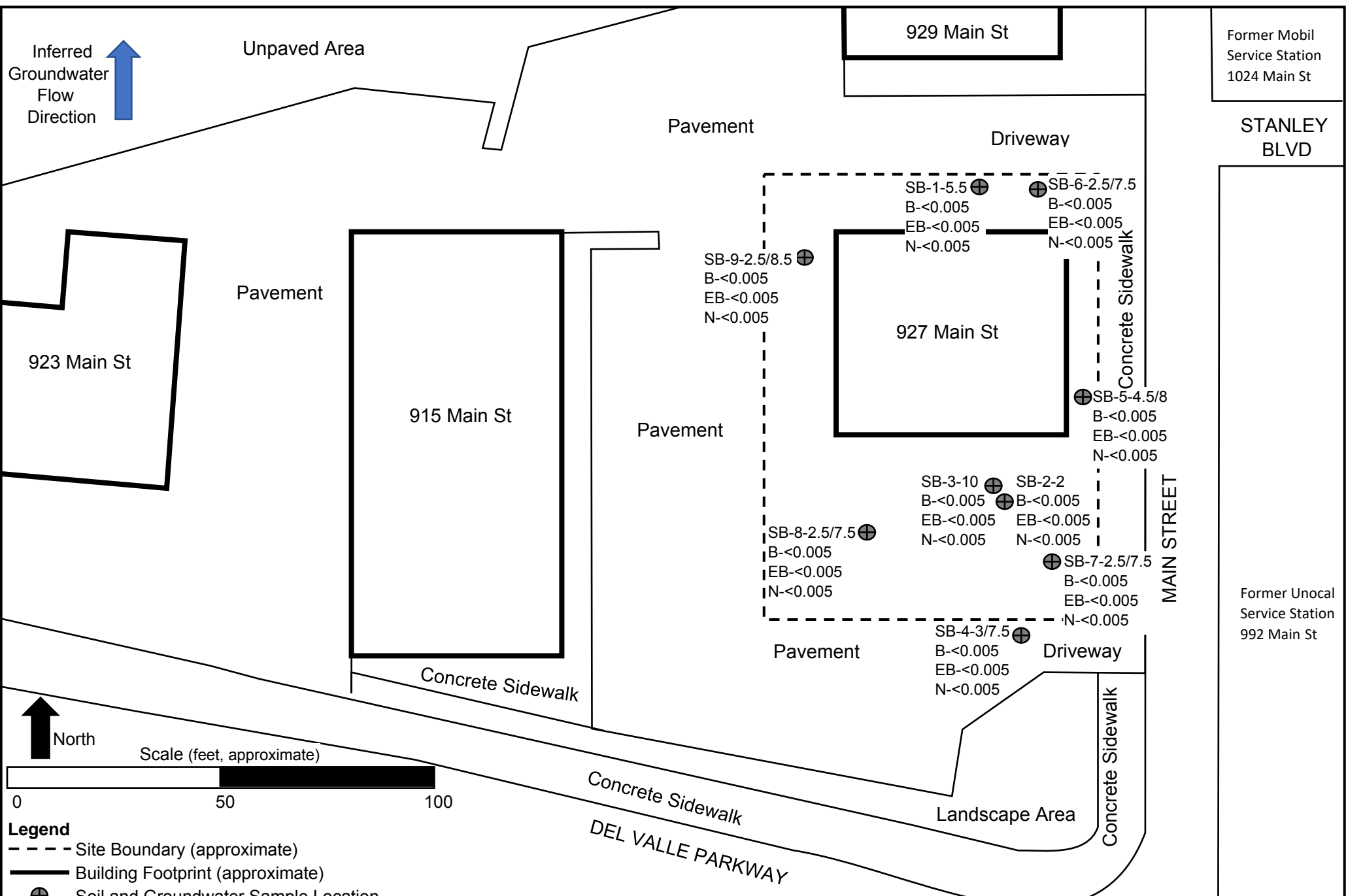


**Legend**

- - - Site Boundary (approximate)
- ▭ Building Footprint (approximate)
- ⊕ Soil and Groundwater Sample Location
- ⊕ Groundwater Sample Location
- Soil Gas Sample Location



<b>Site Plan with Sampling Locations</b> <b>Soil and Groundwater Investigation Report</b> 927 Main Street, Pleasanton, Alameda County, California	PN: 01-2016-1300-001
	Date: June 26, 2017
	EP: Lita Freeman
<b>Figure 3</b>	



Former Mobil Service Station  
1024 Main St

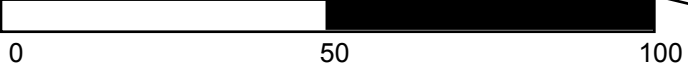
STANLEY BLVD

Former Unocal Service Station  
992 Main St

Inferred Groundwater Flow Direction

North

Scale (feet, approximate)

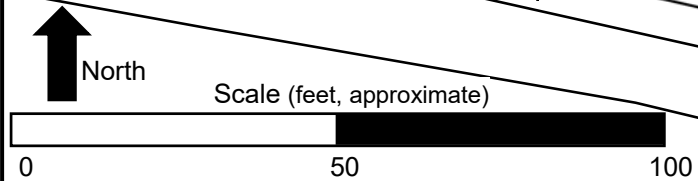
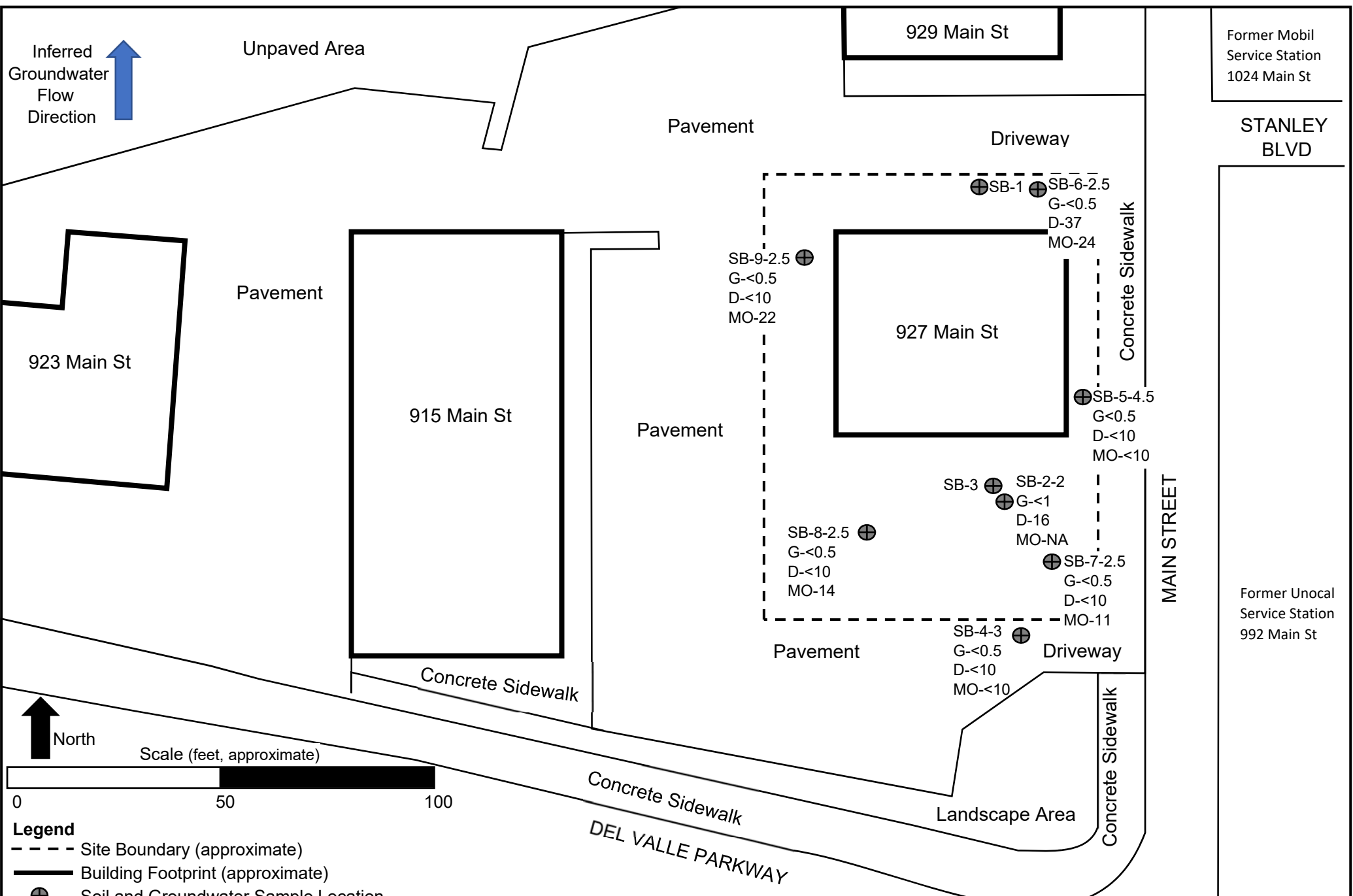


**Legend**

- - - Site Boundary (approximate)
- ▭ Building Footprint (approximate)
- ⊕ Soil and Groundwater Sample Location
- SB-6-2.5/7.5 Sample ID: Boring and Sample Depth (2- to 2.5- and 7- to 7.5-foot depths)
- B Benzene, Ethylbenzene, Naphthalene; units=milligrams per kilogram (mg/kg); NA=Not Analyzed for noted compound
- EB
- N



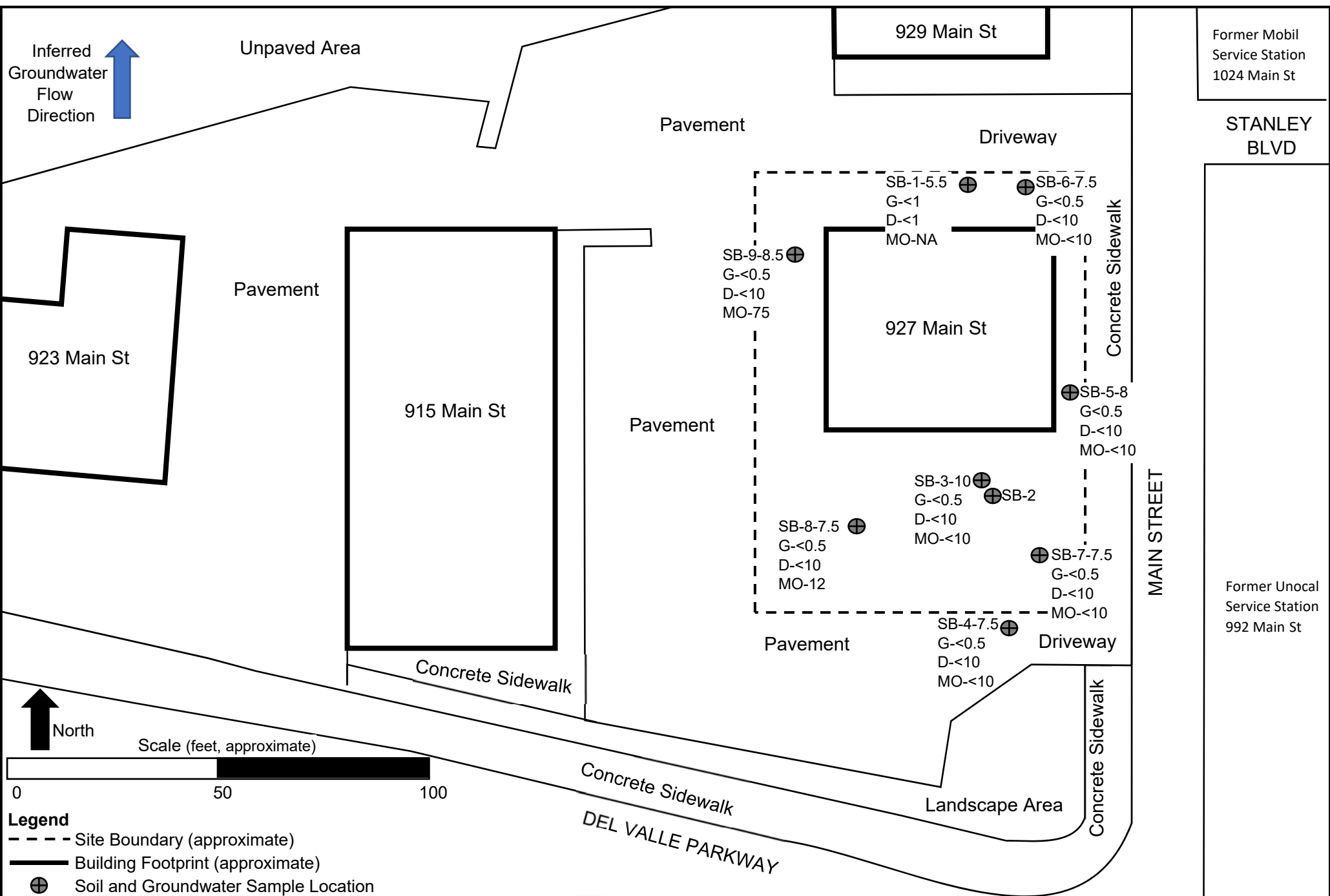
<b>Soil Results: VOCs, 0- to 10-Foot Depth Interval</b> <b>Soil and Groundwater Investigation Report</b> 927 Main Street, Pleasanton, Alameda County, California	PN: 01-2016-1300-001
	Date: June 26, 2017
	EP: Lita Freeman
<b>Figure 4</b>	



- Legend**
- - - - Site Boundary (approximate)
  - ▭ Building Footprint (approximate)
  - ⊕ Soil and Groundwater Sample Location
  - SB-2-2 Sample ID: Boring and Sample Depth (1.5- to 2-foot depth)
  - G Total Petroleum Hydrocarbons (TPH) Quantified as Gasoline, Diesel, Motor Oil; units=milligrams per kilogram (mg/kg); NA=Not Analyzed for noted compound
  - D
  - MO



<b>Soil Results: Hydrocarbons, 0- to 5-Foot Depth Interval</b>	PN: 01-2016-1300-001
	Date: June 26, 2017
<b>Soil and Groundwater Investigation Report</b>	EP: Lita Freeman
927 Main Street, Pleasanton, Alameda County, California	<b>Figure 5</b>



**Legend**

- - - Site Boundary (approximate)
- ▭ Building Footprint (approximate)
- ⊕ Soil and Groundwater Sample Location

SB-3-10 Sample ID: Boring and Sample Depth (9.5- to 10-foot depth)

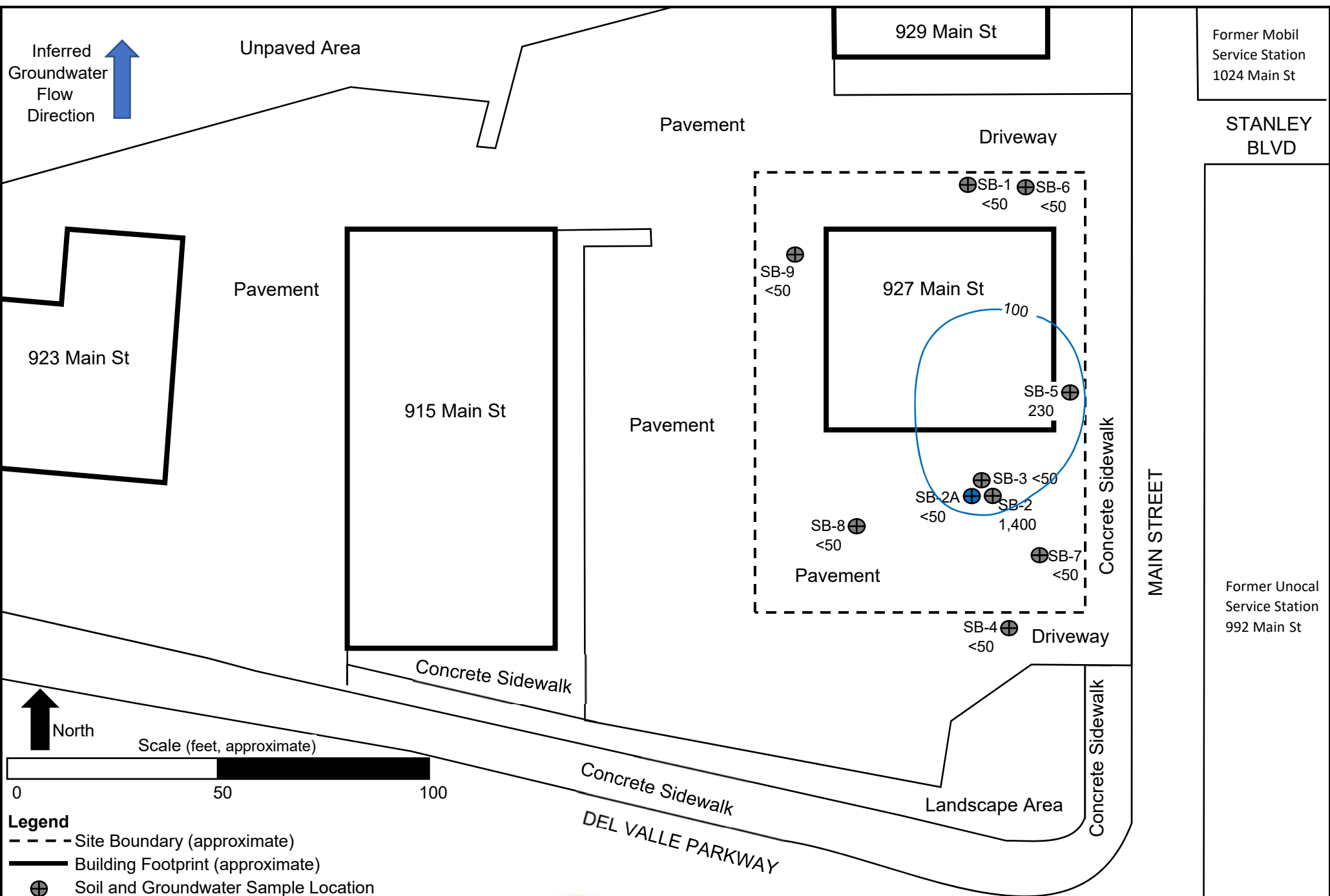
G Total Petroleum Hydrocarbons (TPH) Quantified as

D Gasoline, Diesel, Motor Oil; units=milligrams per kilogram

MO (mg/kg); NA=Not Analyzed for noted compound



<b>Soil Results: Hydrocarbons – 5- to 10-Foot Depth Interval</b> <b>Soil and Groundwater Investigation Report</b> 927 Main Street, Pleasanton, Alameda County, California	PN: 01-2016-1300-001
	Date: June 26, 2017
	EP: Lita Freeman
	<b>Figure 6</b>

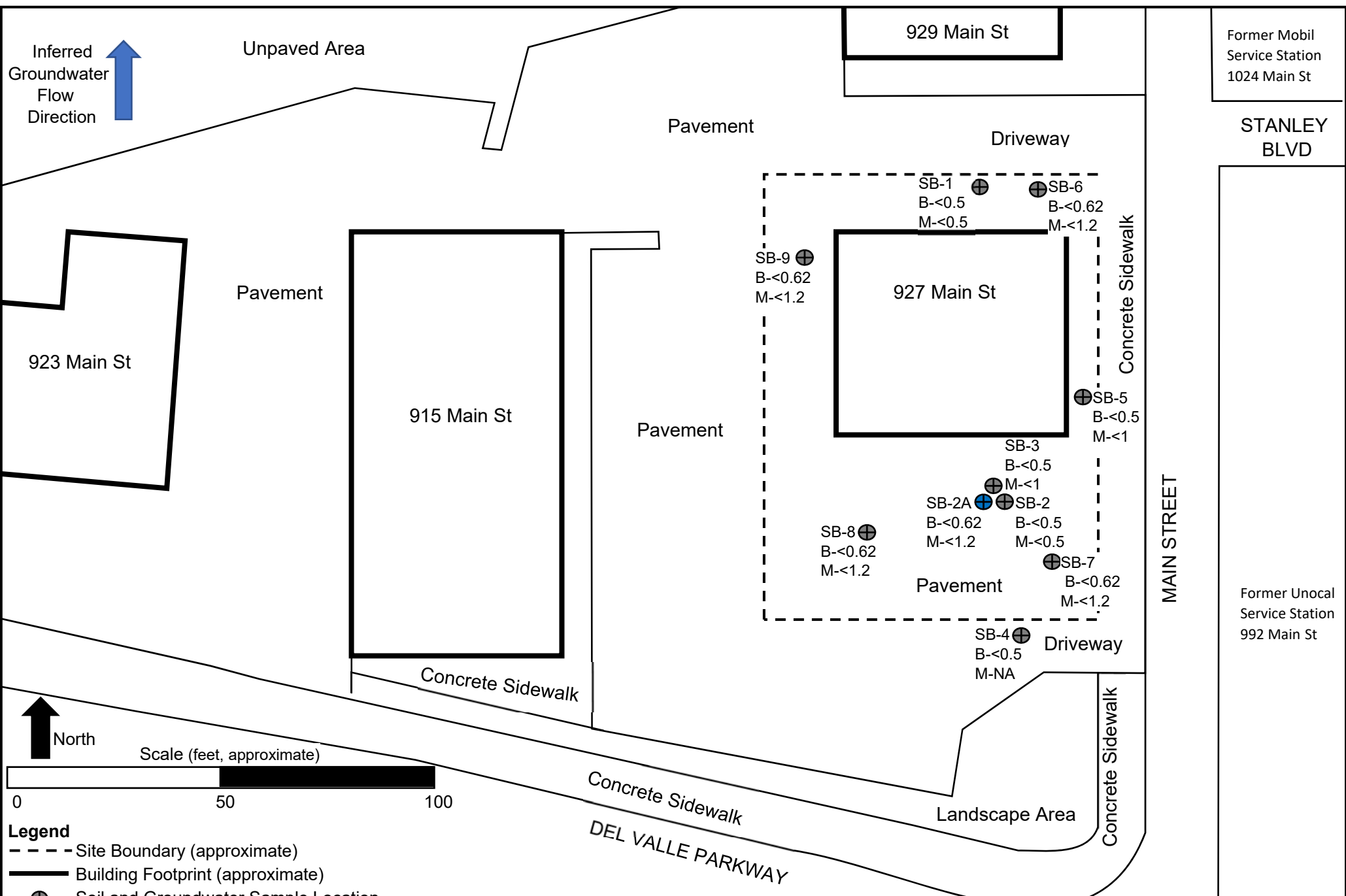


**Legend**

- - - Site Boundary (approximate)
- ▭ Building Footprint (approximate)
- ⊕ Soil and Groundwater Sample Location
- ⊕ Groundwater Sample Location
- Isoconcentration Contour – Total Petroleum Hydrocarbons Quantified as Gasoline (TPHg); units = micrograms per liter (µg/L); contour is 100 µg/L; SB-2A and SB-3 not used in contouring



<b>TPHg Groundwater Isoconcentration Contour Map</b> <b>Soil and Groundwater Investigation Report</b> 927 Main Street, Pleasanton, Alameda County, California	PN: 01-2016-1300-001
	Date: June 26, 2017
	EP: Lita Freeman
<b>Figure 7</b>	



**Legend**

- - - Site Boundary (approximate)
- ▭ Building Footprint (approximate)
- ⊕ Soil and Groundwater Sample Location
- ⊕ Groundwater Sample Location
- B Benzene, Methyl Tert-Butyl Ether (MTBE); units = micrograms per liter (µg/L); NA=Not Analyzed for noted compound
- M



<b>Benzene – MTBE Concentrations in Groundwater</b> <b>Soil and Groundwater Investigation Report</b> 927 Main Street, Pleasanton, Alameda County, California	PN: 01-2016-1300-001
	Date: June 26, 2017
	EP: Lita Freeman
<b>Figure 8</b>	

**Appendix A**

Alameda County Department of  
Environmental Health (ACDEH)

Letter Dated April 26, 2017

ALAMEDA COUNTY  
**HEALTH CARE SERVICES  
AGENCY**

REBECCA GEBHART, Interim Director



DEPARTMENT OF ENVIRONMENTAL HEALTH  
LOCAL OVERSIGHT PROGRAM (LOP)  
For Hazardous Materials Releases  
1131 HARBOR BAY PARKWAY, SUITE 250  
ALAMEDA, CA 94502  
(510) 567-6700  
FAX (510) 337-8335

April 26, 2017

Bradley A & Sandra L Hirst, Trustees  
& Bradley Hirst et al.  
c/o Equity Enterprises  
4460 Black Avenue, Suite L  
Pleasanton, CA 94566-6142  
(Sent via email to [brad@equityenterprises.net](mailto:brad@equityenterprises.net))

Paul C and Alice T Sun, Trustees  
PO Box 117941  
Burlingame, CA 94011-7941  
(Sent via email to [dsun@dsunlaw.com](mailto:dsun@dsunlaw.com))

C & H Development Co  
43 Panoramic Way  
Walnut Creek, CA 94566-8218

Morey and Ethel Gross and Peggy Lane  
915 Main Street  
Pleasanton, CA 94566-8218

David B. Wheeler  
927 Main Street  
Pleasanton, CA 94566-6072

Santa Rita Investment Company  
915 Main Street  
Pleasanton, CA 94566-8218

C & H Development Co  
Bradley A. and Sandra L Hirst, Trustees  
43 Panoramic Way  
Walnut Creek, CA 94595-1605

Autogal, Inc.  
Agent: The Prentice-Hall Corporation System, Inc.  
2711 Centerville Road Suite 400  
Wilmington, DE 19808

Subject: Conditional Work Plan Approval for Fuel Leak Case No. RO0003199 and GeoTracker Global ID T10000008158, Main Street Property, 927 Main Street, Pleasanton, CA 94566

Dear Responsible Parties:

Alameda County Department of Environmental Health (ACDEH) has reviewed the case file, including the "Soil and Groundwater Investigation Work Plan," (Work Plan), dated April 14, 2017, and submitted by Environmental Risk Assessors.

The proposed scope of work is conditionally approved and may be implemented provided that the technical comments below are addressed and incorporated during the proposed site investigation activities. Submittal of a revised Work Plan is not required unless an alternate scope of work outside that described in the Work Plan and technical comments below is proposed.

**TECHNICAL COMMENTS**

- 1) **Soil Sampling and Field Indicators.** Besides collecting soil samples at the proposed pre-defined depths, ACDEH requests that additional soil samples be collected at signs of contamination such as photoionization detections, staining, odor, and major lithologic changes.



- 2) **Soil Gas Sampling.** We request that the soil gas sample be collected at least five feet below the bottom of the foundation of the adjacent west building. In addition to naphthalene analysis by U.S. EPA Method TO-15, please analyze for naphthalene using Method TO-17 in conformance with DTSC guidance for naphthalene vapor analysis (Appendix D, Active Soil Gas Investigations, July 2015, DTSC).
- 3) **Indoor Air and Ambient Air Sampling.** At this time, the need for indoor air and ambient air sampling has not been established, but is approved within this scope of work contingent upon submittal and review of soil vapor results by ACDEH. Final approval may be provided after the review of the soil vapor results.

### SUBMITTAL ACKNOWLEDGEMENT STATEMENT

Please note that ACDEH has updated its Attachment 1 with regard to report submittals to ACDEH. ACDEH will now be requiring a Submittal Acknowledgement Statement, replacing the Perjury Statement, as a cover letter that is to be signed by the Responsible Party (RP). The language for the Submittal Acknowledgement Statement is as follows:

*"I have read and acknowledge the content, recommendations, and and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the State Water Resource Control Board's GeoTracker website."*

Please include this in your submittals to ACDEH.

### TECHNICAL REPORT REQUEST

Please upload the work plan to the ACDEH ftp site (Attention: Anne Jurek), and to the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

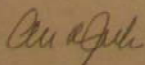
- **June 26, 2017** – Site Investigation Report  
File to be named: SWI\_R\_yyyy-mm-dd RO3199

This report is being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

My last day at ACDEH as a case worker will be May 5, 2017. You will be informed by me or Paresh Khatri ([paresh.khatri@acgov.org](mailto:paresh.khatri@acgov.org)) as to who the new case worker will be as soon as that has been determined.

If you have any questions, please call me at (510) 567-6721 or send me an electronic mail message at [anne.jurek@acgov.org](mailto:anne.jurek@acgov.org). Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>

Sincerely,



Digitally signed by Anne Jurek  
DN: cn=Anne Jurek, o=AC  
Email=anne.jurek@acgov.org, c=US  
Date: 2017.06.26 17:01:13 -0700

Anne Jurek, California GIT 731  
Professional Technical Specialist II

Attachment: Responsible Party(ies) Legal Requirements/Obligations  
Enclosure: ACDEH Electronic Report Upload (ftp) Instructions

cc: Lita Freeman, Environmental Risk Assessors, 1420 East Roseville Parkway, Roseville, CA 95661 (Sent via E-mail to: [litafreeman@gmail.com](mailto:litafreeman@gmail.com))

Anne Jurek, ACDEH (Sent via E-mail to: [anne.jurek@acgov.org](mailto:anne.jurek@acgov.org))

Paresh Khatri, ACDEH (Sent via E-mail to: [paresh.khatri@acgov.org](mailto:paresh.khatri@acgov.org))

GeoTracker, eFile

**Appendix B**

Tables and Figures from  
ERA's 2015 and 2016 Reports

## TABLES

**Table 2  
Soil and Groundwater Samples Organics Analytical Summary**

**Main Street Property  
927 Main Street  
Pleasanton, California**

On-Site Location/ Comments	Sample ID	Sample Depth (feet bgs) <sup>1</sup>	Matrix	Petroleum Hydrocarbons <sup>2</sup> Soil: mg/kg; Groundwater: µg/L			VOCs <sup>3</sup> Soil: mg/kg; Groundwater: µg/L					
				TPHg <sup>3</sup>	TPHd <sup>3</sup>	TPHss <sup>3</sup>	Benzene	MTBE	Naphthalene	Toluene	Ethylbenzene	Xylenes
<b>ESL for Shallow Soil</b>				100	240	100	0.044	0.023	0.023	2.9	1.4	2.3
North of Former Gas Station Building	SB-1-5.5	5.0 - 5.5	Soil	<1	<1	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
South of Former Gas Station Building	SB-2-2	1.5 - 2.0	Soil	<1	<b>16</b>	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
South of Former Gas Station Building	SB-3-10	9.5 - 10.0	Soil	<0.5	<10	<10	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005
South of Former Gas Station Building	SB-3-32	31.5 - 32.0	Soil	<b>0.99</b>	<10	<10	<0.005	<0.020	<0.005	<0.005	<b>0.022</b>	<b>0.137</b>
Area of Former Southern Canopy	SB-4-3	2.5 - 3.0	Soil	<0.5	<10	<10	<0.005	NA	<0.005	<0.005	<0.005	<0.005
Area of Former Southern Canopy	SB-4-7.5	7.0 - 7.5	Soil	<0.5	<10	<10	<0.005	NA	<0.005	<0.005	<0.005	<0.005
Area of Former Northern Canopy	SB-5-4.5	4.0 - 4.5	Soil	<0.5	<10	<10	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005
Area of Former Northern Canopy	SB-5-8	7.5 - 8.0	Soil	<0.5	<10	<10	<0.005	<0.020	<0.005	<0.005	<0.005	<0.005
Area of Former Northern Canopy	SB-5-36	35.5 - 36.0	Soil	<0.5	<10	<10	<0.005	<0.020	<b>0.026</b>	<0.005	<0.005	<b>0.022</b>
<b>ESL for Groundwater</b>				100	100	100	1	5	0.12	40	13	20
North of Former Gas Station Building	SB-1-W	NA	Ground-water	<50	<b>120</b>	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
South of Former Gas Station Building	SB-2-W	NA	Ground-water	<b>1,400</b>	<b>1,000</b>	<b>1,400</b>	<0.5	<0.5	<b>5.3</b>	<0.5	<b>6.1</b>	<b>19</b>
South of Former Gas Station Building	SB-3-W	NA	Ground-water	<50	<50	<50	<0.5	<1	<1	<b>0.57</b>	<b>1.7</b>	<b>6.6</b>
Area of Former Southern Canopy	SB-4-W	NA	Ground-water	<50	<50	<50	<0.5	NA	<1	<0.5	<0.5	<0.5
Area of Former Northern Canopy	SB-5-W	NA	Ground-water	<b>230</b>	<50	<b>940</b>	<0.5	<1	<b>19</b>	<0.5	<b>2.8</b>	<b>40</b>

**Notes:**

Units: Soil: mg/kg = milligrams per kilogram, Groundwater: µg/L = micrograms per liter

1. bgs = below ground surface

2. TPHg, TPHd, TPHss = Total petroleum hydrocarbons (TPH) quantified as gasoline, quantified as diesel, and TPH quantified as Stoddard solvent were analyzed using U.S. EPA Method 8015B/C.

3. Volatile organic compounds (VOCs) were analyzed using U.S. EPA Method 8260B.

ESL = Environmental Screening Levels as established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Tier 1 ESLs, February 2016.

SFBRWQCB Tier 1 Environmental Screening Levels (SFBRWQCB, 2016) Note 2 states: TPH motor oil is not soluble. TPH motor oil detections in water most likely are petroleum degradates or less likely NAPL. If the detections are degradates, add TPH motor oil and TPH diesel results and compare to TPH diesel criterion. The noted ESL was established for TPH-d.

MTBE = Methyl tert-butyl ether

NE = Not established

<1 = Not detected at stated concentration

**Bold** = Compound detected

**Bold** = Compound detected above ESL

**Table 3**  
**Soil and Groundwater Samples Inorganics Analytical Summary**  
**Main Street Property**  
**927 Main Street**  
**Pleasanton, California**

On-Site Location/ Comments	Sample ID	Sample Depth (feet bgs) <sup>1</sup>	Matrix	Metals (soil: mg/kg, GW: µg/L)				
				Cadmium	Chromium	Lead	Nickel	Zinc
<b>Analytes</b>								
<b>ESL for Soil</b>				0.00006	See Below	80	83	23,000
North of Former Gas Station Building	SB-1-5.5	5.0 - 5.5	Soil	<0.25	<b>260</b>	<b>10</b>	<b>240</b>	<b>60</b>
North End of Former Canopy	SB-2-2	1.5 - 2.0	Soil	<b>0.36</b>	<b>130</b>	<b>61</b>	<b>80</b>	<b>110</b>
<b>ESL for Groundwater</b>				0.25	50	2.5	8.2	81
North of Former Gas Station Building	SB-1-W	NA	Groundwater	<0.25	<b>0.63</b>	<0.5	<b>1.8</b>	<15
North End of Former Canopy	SB-2-W	NA	Groundwater	<0.25	<0.5	<0.5	<b>4.8</b>	<15

**Notes:**

Units: Soil: mg/kg = milligrams per kilogram; Groundwater: µg/L = micrograms per liter

1. bgs = below ground surface

ESL = Environmental screening levels (ESLs) for soil as established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board Tier 1 Environmental Screening Levels (SFBRWQCB 2016), February 2016.

NA = Not Applicable

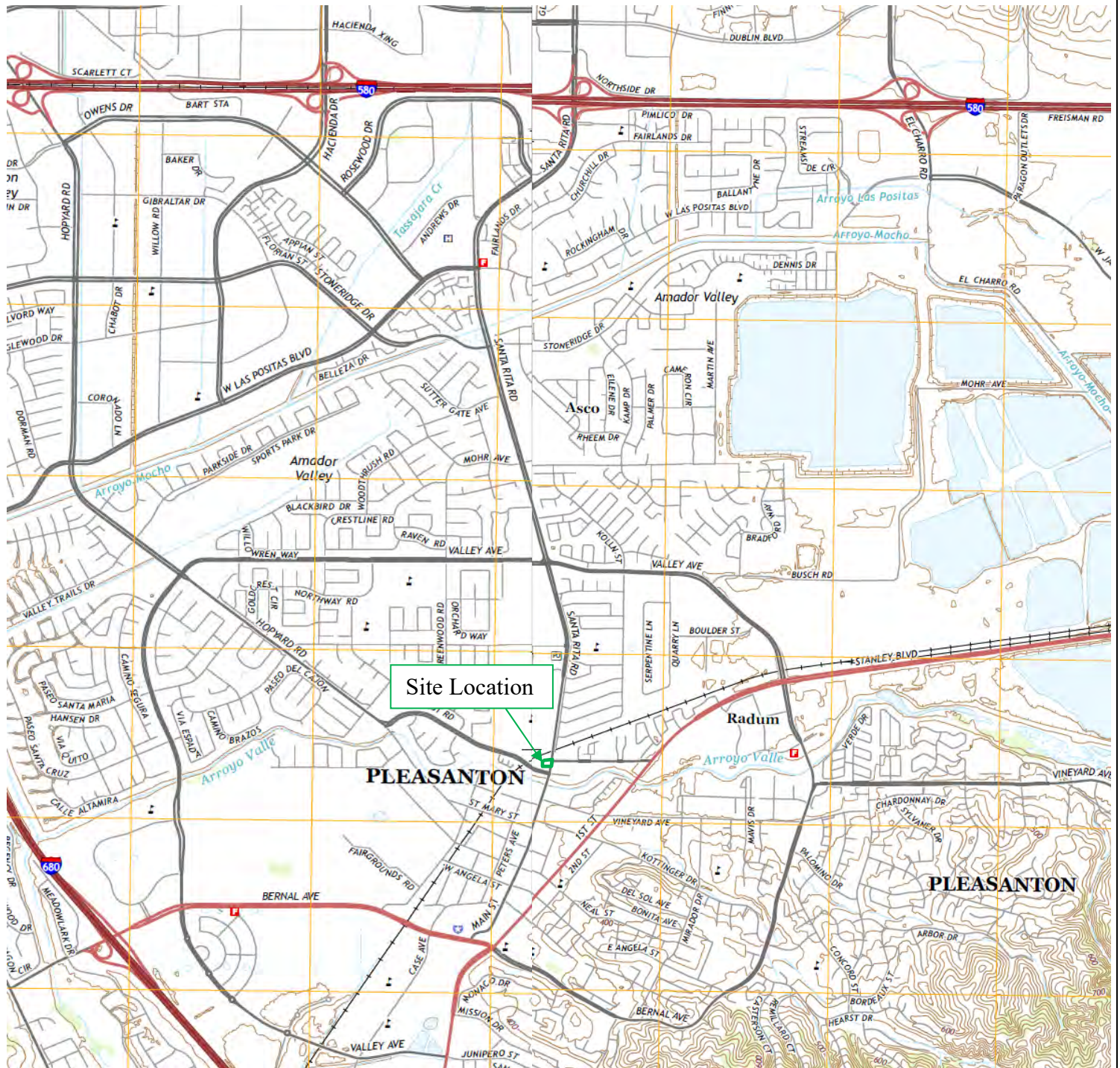
<0.25 = Not detected at stated concentration

**Bold** = Compound detected

**Bold** = Compound detected above ESL

Chromium III ESL = 120,000  
Chromium VI ESL = 1.3

## FIGURES



USGS Dublin and Livermore, California Quadrangle Topographic Maps, 2015

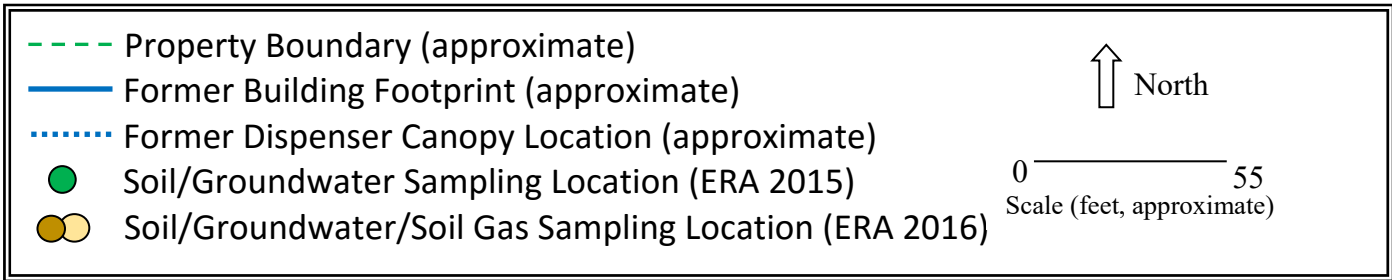
<p>Legend</p> <p>— Site (boundaries approximate)</p>
--



<b>Site Location Map</b>	
<b>SOIL AND GROUNDWATER INVESTIGATION</b>	
927 Main Street, Pleasanton, California	

PN: 01-2016-1300-001
Date: October 10, 2016
EP: Lita Freeman
<b>Figure 1</b>





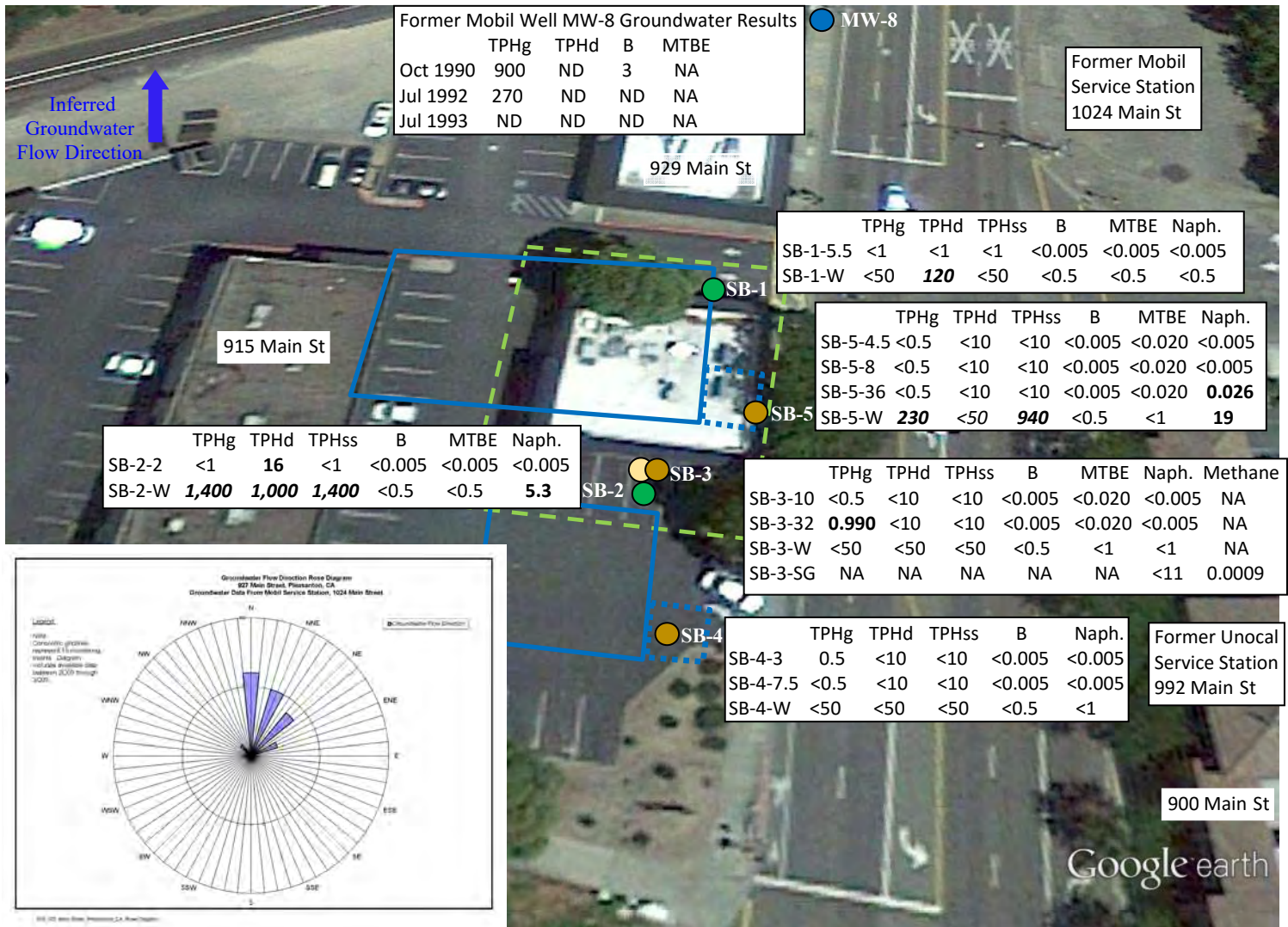
**Site Plan**

**SOIL AND GROUNDWATER INVESTIGATION**

927 Main Street, Pleasanton, California

PN: 01-2016-1300-001  
Date: October 10, 2016  
EP: Lita Freeman

**Figure 2**



TPHg = Total Petroleum Hydrocarbons quantified as gasoline

TPHd = TPH quantified as diesel

TPHss = TPH quantified as Stoddard solvent

B = Benzene

MTBE = Methyl tert-butyl ether

Naph. = Napthalene

SB-1-5.5 = Soil sample from boring SB-1 at 5.0-5.5 depth interval

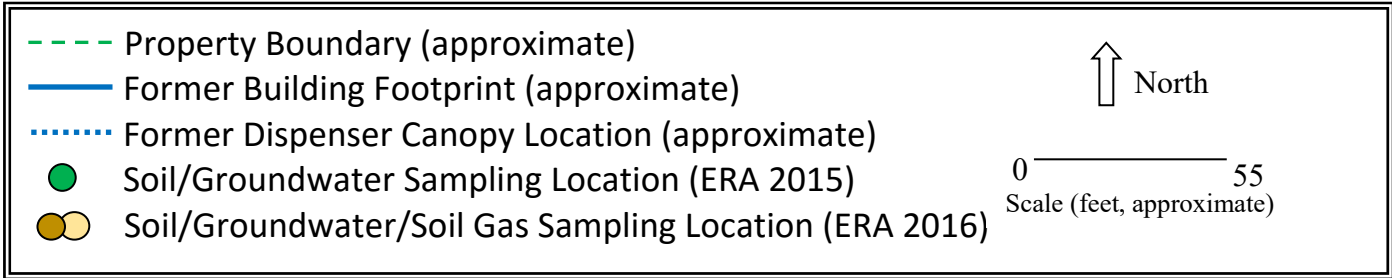
SB-1-W = Groundwater sample from boring SB-1

**120** = Noted analyte detected at stated concentration

<1/NA = Noted analyte not detected at concentration at or above stated laboratory reporting limit/Not Analyzed

	TPHg	TPHd	TPHss	B	MTBE	Soil in mg/kg
SB-1-5.5	<1	<1	<1	<0.005	<0.005	Soil in mg/kg
SB-1-W	<50	<b>120</b>	<50	<0.5	<0.5	Groundwater in µg/L

units: Soil: mg/kg = milligrams per kilogram  
 Groundwater: µg/L = micrograms per liter  
 Soil Gas (Naph.): µg/m<sup>3</sup> = micrograms per cubic meter  
 Soil Gas (Methane): % = Percent



**Soil and Groundwater Samples Results Summary**

**SOIL AND GROUNDWATER INVESTIGATION**

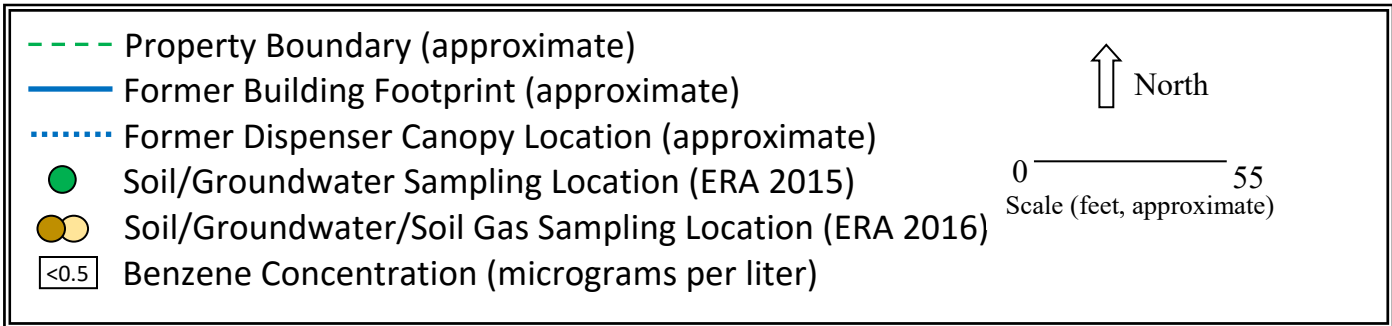
927 Main Street, Pleasanton, California

PN: 01-2016-1300-001

Date: October 10, 2016

EP: Lita Freeman

**Figure 3**



### Benzene Concentrations in Groundwater

PN: 01-2016-1300-001

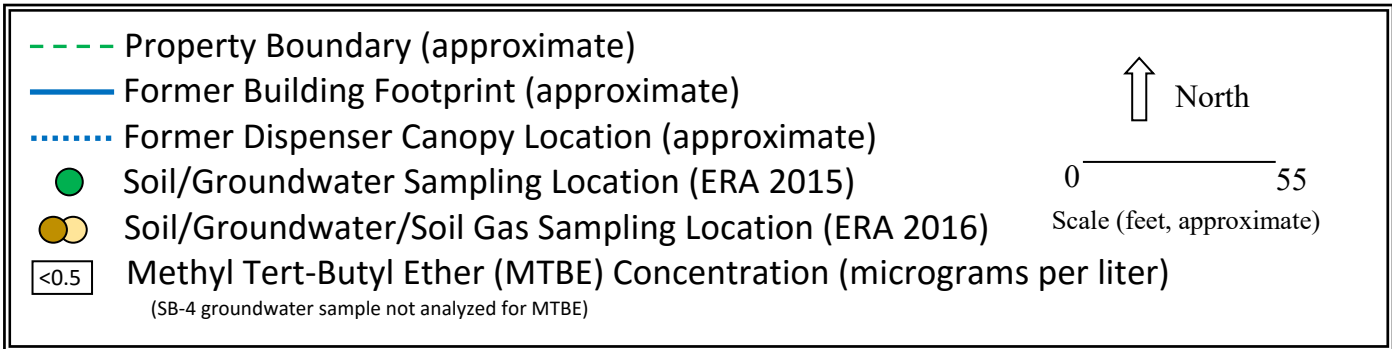
Date: October 10, 2016

#### SOIL AND GROUNDWATER INVESTIGATION

EP: Lita Freeman

927 Main Street, Pleasanton, California

**Figure 4**



### MTBE Concentrations in Groundwater

#### SOIL AND GROUNDWATER INVESTIGATION

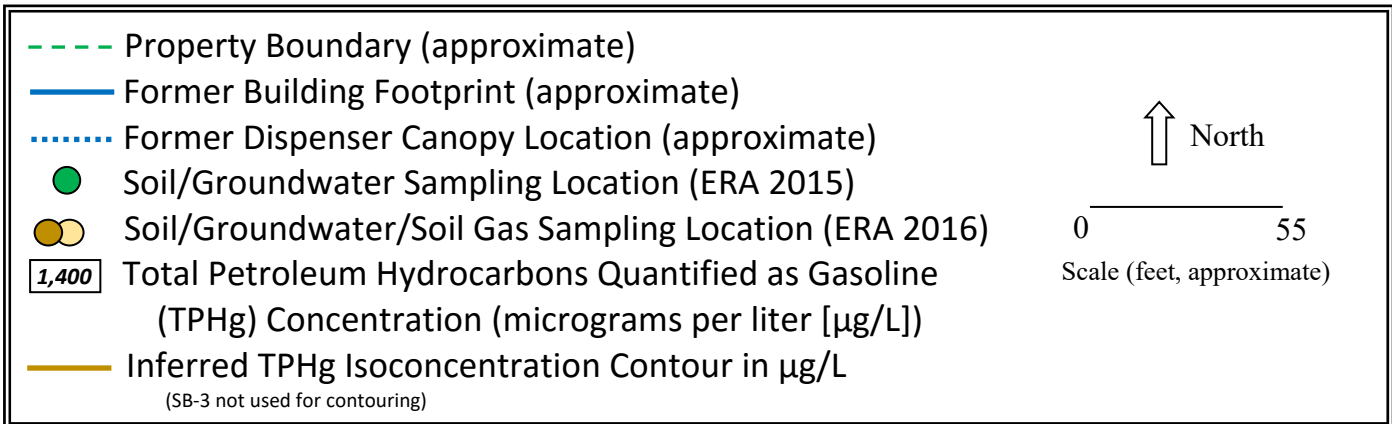
927 Main Street, Pleasanton, California

PN: 01-2016-1300-001

Date: October 10, 2016

EP: Lita Freeman

**Figure 5**



**TPHg Groundwater  
Isoconcentration Contour Map**

**SOIL AND GROUNDWATER INVESTIGATION**

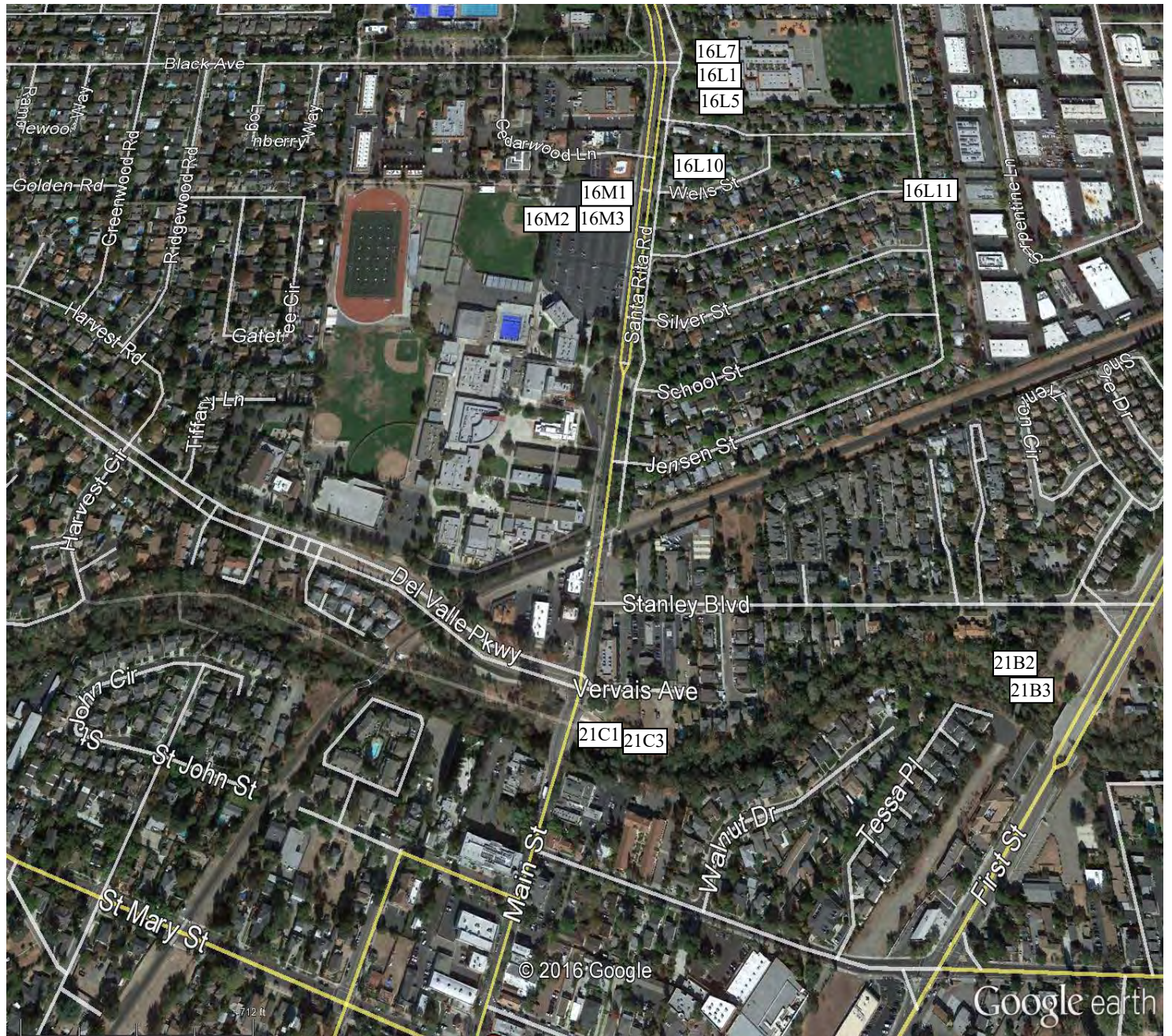
927 Main Street, Pleasanton, California

PN: 01-2016-1300-001

Date: October 10, 2016

EP: Lita Freeman

**Figure 6**



Well Location Source: ETIC, 2010, Detailed Well Survey Report



### Well Survey Results

#### SOIL AND GROUNDWATER INVESTIGATION

927 Main Street, Pleasanton, California

PN: 01-2016-1300-001

Date: October 10, 2016

EP: Lita Freeman

**Figure 7**

## TABLES

**Table 2**  
**Soil and Groundwater Samples Organics Analytical Summary**  
**Main Street Property**  
**927 Main Street**  
**Pleasanton, California**

On-Site Location/ Comments	Sample ID	Sample Depth (feet bgs) <sup>1</sup>	Matrix	Petroleum Hydrocarbons <sup>2</sup>			VOCs <sup>3</sup>										
				TPHg <sup>3</sup>	TPHd <sup>3</sup>	TPHss <sup>3</sup>	Bromochloro- methane	n-Butyl benzene	sec-Butyl benzene	Chloroform	Ethylbenzene	Isopropylbenzene	Naphthalene	n-Propyl benzene	1,2,4- Trimethylbenzene	1,3,5- Trimethylbenzene	Xylenes
<b>ESL for Shallow Soil</b>				500	110	500	1.5	NE	NE	2.4	3.3	NE	1.2	NE	NE	NE	2.3
North of Former Gas Station Building	SB-1-5.5	5.0 - 5.5	Soil	<1	<1	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
North End of Former Canopy	SB-2-2	1.5 - 2.0	Soil	<1	<b>16</b>	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<b>ESL for Groundwater</b>				100	100	100	80	NE	NE	80	30	NE	6.1	NE	NE	NE	20
North of Former Gas Station Building	SB-1-W	NA	Ground-water	<50	<b>120</b>	<50	<b>1.3</b>	<0.5	<0.5	<b>5.5</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
North End of Former Canopy	SB-2-W	NA	Ground-water	<b>1,400</b>	<b>1,000</b>	<b>1,400</b>	<b>1.3</b>	<b>4.9</b>	<b>1.1</b>	<b>5.8</b>	<b>6.1</b>	<b>1.1</b>	<b>5.3</b>	<b>4.5</b>	<b>28</b>	<b>7.2</b>	<b>19</b>

**Notes:**

Units: Soil: mg/kg = milligrams per kilogram, Groundwater: µg/L = micrograms per liter

1. bgs = below ground surface

2. TPHg, TPHd, TPHss = Total petroleum hydrocarbons (TPH) quantified as gasoline, quantified as diesel, and TPH quantified as Stoddard solvent were analyzed using U.S. EPA Method 8015B/C.

3. Volatile organic compounds (VOCs) were analyzed using U.S. EPA Method 8260B.

ESL for Shallow Soil = Environmental Screening Levels for shallow soil as established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB, Shallow Soil Screening Levels (<3 m bgs) Commercial/Industrial Land Use (groundwater is a current or potential drinking water resource), Table A-2, December 2013).

ESL for Groundwater = Environmental Screening Levels for groundwater as established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB, Groundwater Screening Levels (groundwater is a current or potential drinking water resource), Table F-1a, December 2013).

NE = Not established

<1 = Not detected at stated concentration

**Bold** = Compound detected

**Bold** = Compound detected above ESL



**Table 3  
Soil and Groundwater Samples Inorganics Analytical Summary  
Main Street Property  
927 Main Street  
Pleasanton, California**

On-Site Location/ Comments	Sample ID	Sample Depth (feet bgs) <sup>1</sup>	Matrix	Metals (soil: mg/kg, GW: µg/L)				
				Cadmium	Chromium	Lead	Nickel	Zinc
<b>Analytes</b>								
<b>ESL for Shallow Soil</b>				12	2,500	320	150	600
North of Former Gas Station Building	SB-1-5.5	5.0 - 5.5	Soil	<0.25	<b>260</b>	<b>10</b>	<b>240</b>	<b>60</b>
North End of Former Canopy	SB-2-2	1.5 - 2.0	Soil	<b>0.36</b>	<b>130</b>	<b>61</b>	<b>80</b>	<b>110</b>
<b>ESL for Groundwater</b>				0.25	50	2.5	8.2	81
North of Former Gas Station Building	SB-1-W	NA	Groundwater	<0.25	<b>0.63</b>	<0.5	<b>1.8</b>	<15
North End of Former Canopy	SB-2-W	NA	Groundwater	<0.25	<0.5	<0.5	<b>4.8</b>	<15

**Notes:**

Units: Soil: mg/kg = milligrams per kilogram; Groundwater: µg/L = micrograms per liter

1. bgs = below ground surface

ESL for Shallow Soil = Environmental Screening Levels for shallow soil as established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB, Shallow Soil Screening Levels (<3 m bgs) Commercial/Industrial Land Use (groundwater is a current or potential drinking water resource), Table A-2, December 2013).

ESL for Groundwater = Environmental Screening Levels for groundwater as established by the California Environmental Protection Agency, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB, Groundwater Screening Levels (groundwater is a current or potential drinking water resource), Table F-1a, December 2013).

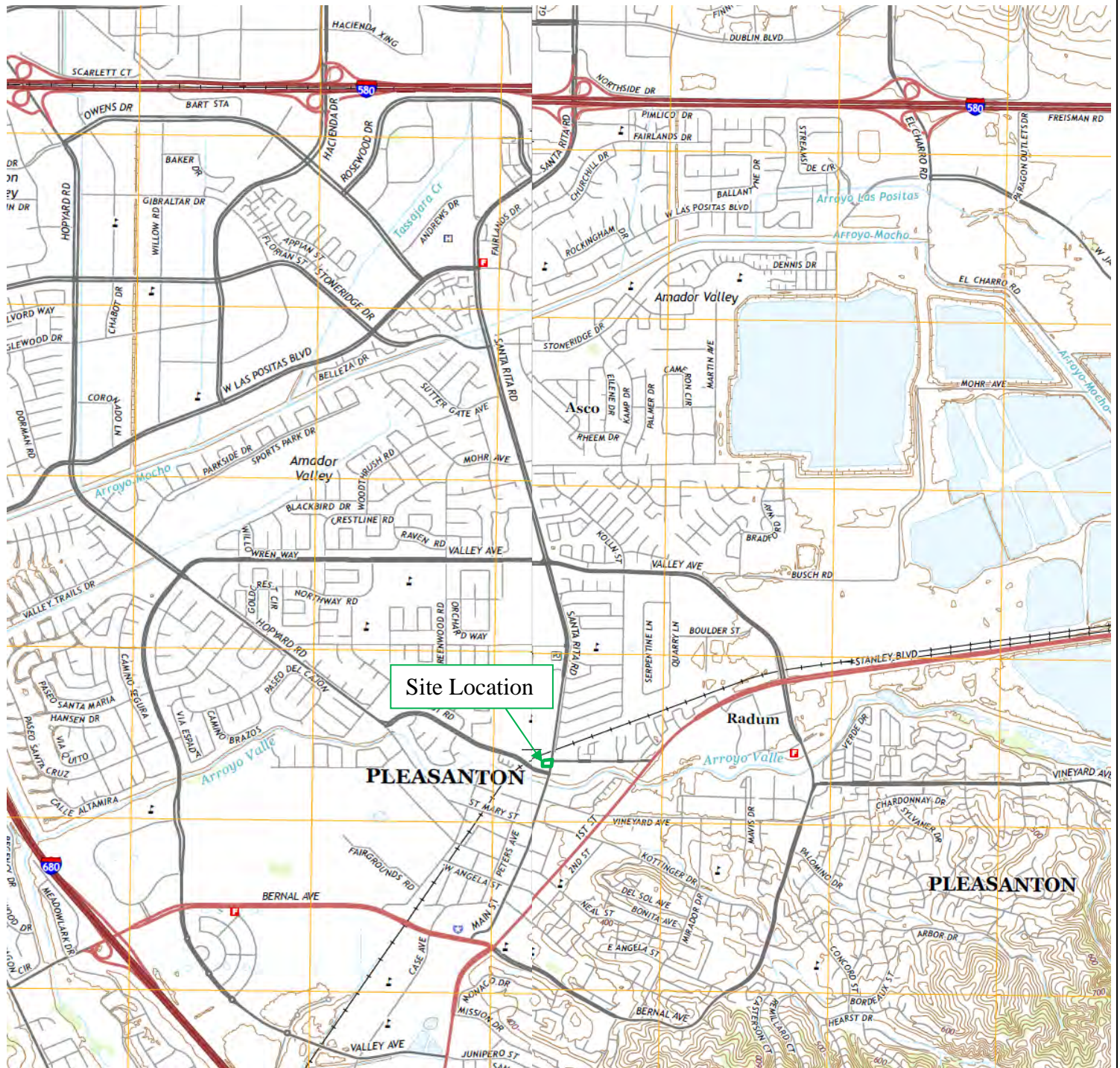
NA = Not Applicable

<0.25 = Not detected at stated concentration

**Bold** = Compound detected

**Bold** = Compound detected above ESL

## FIGURES



USGS Dublin and Livermore, California Quadrangle Topographic Maps, 2015

<p>Legend</p> <p>— Site (boundaries approximate)</p>
--



**Site Location Map**

**LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT**

927 Main Street, Pleasanton, California

PN: 01-2015-500-007  
 Date: November 27, 2015  
 EP: Lita Freeman

**Figure 1**



<ul style="list-style-type: none"> <li><span style="color: green;">- - - -</span> Approximate Property Boundary</li> <li><span style="color: red;">. . . . .</span> Former Gas Station Building</li> <li><span style="color: red;">- - -</span> Former Canopy Over Dispensers</li> <li><span style="color: green;">●</span> Sampling Location</li> </ul>	<p>↑ North</p> <p>0 _____ 75</p> <p>Scale (feet, approximate)</p>
--	---



<b>Site Plan</b>
<b>LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT</b>
927 Main Street, Pleasanton, California

PN: 01-2015-500-007
Date: November 27, 2015
EP: Lita Freeman
<b>Figure 2</b>

## **Appendix C**

### Site Photographs

Photographic Log  
927 Main Street  
Pleasanton, California 94566  
ERA Project No. 01-2016-1300-001

**Photograph: 1**

**Description:**

Photo depicts the east (on right facing sidewalk and Main Street) and south (on left facing on-site parking area) elevations of the on-site building. View to the northwest from across main driveway off Main Street into the Site. Proposed locations of boring SB-2A at black arrow and boring SB-7 at white arrow.



**Photograph: 2**

**Description:**

Photo depicts the south (on right) and west (on left) elevations of the on-site building. View to the northeast with Main Street in background. Proposed locations of boring SB-8 at black arrow and boring SB-9 at white arrow.



Photographic Log  
927 Main Street  
Pleasanton, California 94566  
ERA Project No. 01-2016-1300-001

**Photograph: 3**

**Description:**

Photo depicts the east (on left facing sidewalk) and north (on right) elevations of the on-site building. View to the south from across northern driveway. Proposed locations of boring SB-5A at black arrow and boring SB-6 at white arrow.



**Photograph: 4**

**Description:**

Photo depicts drilling rig set up on boring SB-2A. Proposed location of boring SB-7 at black arrow. View to northwest.



Photographic Log  
927 Main Street  
Pleasanton, California 94566  
ERA Project No. 01-2016-1300-001

**Photograph: 5**

**Description:**

Photo depicts drilling rig set up on boring SB-6. View to south-southeast.



**Photograph: 6**

**Description:**

Photo depicts drilling rig set up on boring SB-8. View to the southeast.





Photographic Log  
927 Main Street  
Pleasanton, California 94566  
ERA Project No. 01-2016-1300-001

**Photograph: 7**

**Description:**

Photo depicts drilling rig set up on boring SB-9. View to the north.



**Photograph: 8**

**Description:**

Photo depicts purging groundwater at boring SB-2A prior to sampling groundwater.



Photographic Log  
927 Main Street  
Pleasanton, California 94566  
ERA Project No. 01-2016-1300-001

**Photograph: 9**

**Description:**

Photo depicts backfilling boring SB-8.



**Photograph: 10**

**Description:**

Photo depicts Summa canister set up to collect indoor air sample inside the on-site building.



Photographic Log  
927 Main Street  
Pleasanton, California 94566  
ERA Project No. 01-2016-1300-001

**Photograph: 11**

**Description:**

Photo depicts Summa canister set up to collect ambient air sample outside the on-site building.



**Photograph: 12**

**Description:**

Photo depicts setting soil gas probe at sampling location SB-5A.



Photographic Log  
927 Main Street  
Pleasanton, California 94566  
ERA Project No. 01-2016-1300-001

**Photograph: 13**

**Description:**

Photo depicts soil gas sample collection set up with Summa canister at sampling location SB-5A.



**Photograph: 14**

**Description:**

Photo depicts soil gas sample collection using syringe and tube at sampling location SB-5A.



**Appendix D**

Drilling Permit



# APPLICATION FOR DRILLING PERMIT

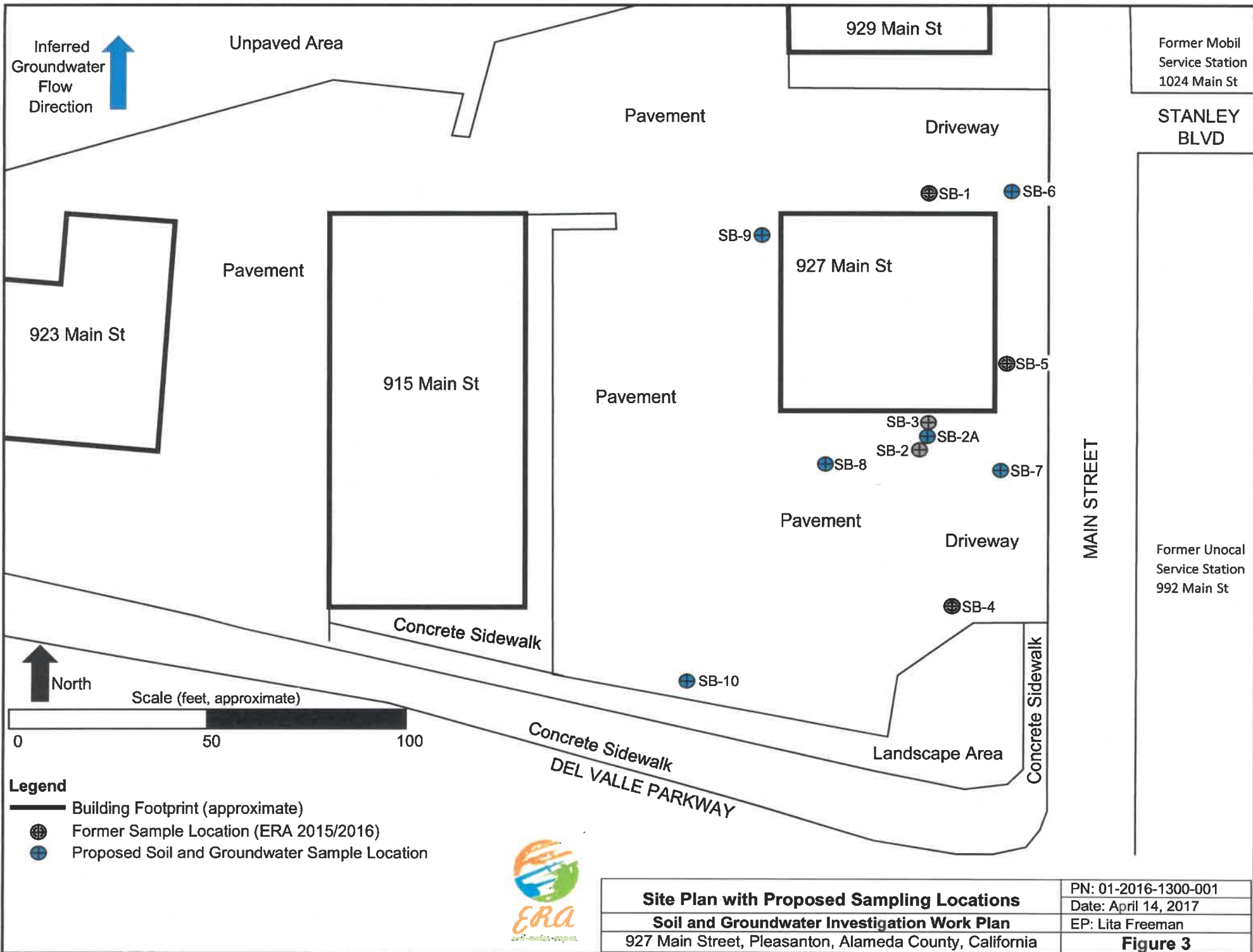
Zone 7 Water Agency  
100 North Canyons Parkway  
Livermore, CA 94551  
(925) 454-5000  
wellpermits@zone7water.com

For Office Use						
Permit No.: 2017048	Permit Date: 05/04/17	Receipt No.: 719728	Well No.: NA			
For Applicant to Complete						
Property Owner: Bradley A & Sandra L Hirst Trust			Applicant: Environmental Risk Assessors			
Address: 4460 Black Ave, Suite L			Address: 1420 East Roseville Parkway, #140-262			
City, State, Zip: Pleasanton, CA 94566			City, State, Zip: Roseville, CA 95661			
Phone: 925-484-3636		Email: brad@equityenterprises.net		Phone: 916-677-9897		Email: litafreeman@gmail.com
Site	Project Location: 927 Main Street, Pleasanton, CA			Assessor's Parcel Number: 946-3370-022-00		
				Latitude: 37.665986		Longitude: -121.87388
Project Type	<input type="checkbox"/> Well Construction (\$397/well) <input type="checkbox"/> Well Destruction (\$397/well) <u>Proposed or Previous Well Use:</u>			<input checked="" type="checkbox"/> Exploratory Borings (\$265/site) <u>Type of Investigation:</u>		<input type="checkbox"/> Remediation System (\$265/site) <u>Type of System:</u>
	<input type="checkbox"/> Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Cathodic Protection <input type="checkbox"/> Geothermal <input type="checkbox"/> Inclinometer		<input type="checkbox"/> Municipal <input type="checkbox"/> Dewatering <input type="checkbox"/> Industrial <input type="checkbox"/> Monitoring <input type="checkbox"/> Other: _____		<input type="checkbox"/> Geotechnical <input checked="" type="checkbox"/> Environmental <input type="checkbox"/> Soil Vapor  <input type="checkbox"/> Other: _____	
Drilling	<u>Drilling Method</u>			Drilling Company: Cascade Drilling		
	<input type="checkbox"/> Mud Rotary <input type="checkbox"/> Air Rotary <input type="checkbox"/> Cable Tool		<input type="checkbox"/> Hollow Stem Auger <input checked="" type="checkbox"/> Direct Push <input type="checkbox"/> Other: _____		Driller's C57 License No.: 938110	
Well Specs.	Owner Well ID	Borehole Diameter	Casing Material	Casing Diameter	Surface Seal Depth	Total Well Depth
For Well Destruction Projects						
Destruction Method: <input type="checkbox"/> Perforate (Mills Knife) <input type="checkbox"/> Pressure Grout <input type="checkbox"/> Drill Out <input type="checkbox"/> Other: _____						
For Exploratory Boring Projects						
Number of Borings: 6	Borehole Diameter: 1.5 inches	Maximum Depth: 40 feet	Estimated Depth-to-Water: 30 feet			
For All Projects						
Estimated Starting Date: 5-9-2017			Estimated Completion Date: 5-10-2017			
* Please attach a Site Plan including all proposed drilling locations, existing wells, significant site features, and adjacent streets *						

I hereby agree to comply with all requirements of this permit (see Page 2) and Alameda County Ordinance No. O-2015-20.

Applicants Signature: Lita D. Freeman Date: 4-28-2017

Approved: Michelle Parent For Office Use Date: 05/04/17



**Site Plan with Proposed Sampling Locations**  
**Soil and Groundwater Investigation Work Plan**  
 927 Main Street, Pleasanton, Alameda County, California

PN: 01-2016-1300-001  
 Date: April 14, 2017  
 EP: Lita Freeman  
**Figure 3**

**Permit Conditions**  
(Circled Permit Requirements Apply)

**A. GENERAL**

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to your proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report (DWR Form 188), signed by the driller. If the report is submitted directly to DWR by the driller electronically, a copy of the report must be submitted to Zone 7.
3. Permit is void if project not begun within 90 days of approval date. Applicant/Client/Owner assumes all liability associated with the execution of this permit. Violation of any requirement/condition may result in an order by Zone 7 to cease work under this permit, correct the violation, potentially re-permit the work and/or other potential actions may be taken against Applicant/Client/Owner.
4. Request an inspection by email ([wellpermits@zone7water.com](mailto:wellpermits@zone7water.com)) at least 24 hours before the start of work.
5. Analytical results of all soil, vapor, groundwater samples, and pump tests collected during the execution of drilling under this permit must be submitted to Zone 7 by the Applicant/Owner within 60 days of sample collection.

**B. WATER SUPPLY WELLS**

1. Minimum surface seal diameter is four inches greater than the well casing diameter and six inches for public wells.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
3. Grout placed by tremie.
4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
5. A sample port is required on the discharge pipe near the wellhead.

**C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**

1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
3. Grout placed by tremie.
4. All top-of-casing elevation surveys must be submitted along with the boring logs and well completion details to Zone 7 within 60 days of well construction.

**D. CONTAMINATION OR ENVIRONMENTAL STUDIES**

1. Include GeoTracker Global ID Number or Envirositor ID Number, if applicable.
2. Backfill boring with cement grout, placed by tremie. All borings must be destroyed within 24 hours of drilling unless special conditions are approved by Zone 7.

**E. GEOTECHNICAL**

1. If groundwater is not encountered, backfill borehole with compacted cuttings or heavy bentonite and upper two feet with compacted material. If groundwater is encountered, and/or in areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings. All borings must be destroyed within 24 hours of drilling unless special conditions are approved by Zone 7.

**F. CATHODIC**

1. Fill hole above anode zone with concrete placed by tremie.

**G. WELL DESTRUCTION. See attached.**

**H. SPECIAL CONDITIONS. See attached.**



**Appendix E**

Boring Logs

PROJECT: 927 Main Street, Pleasanton, California

# Log of Boring

SB-6

PAGE 1 OF 2

Boring location: See Figure 3

Logged by:

Date started: 5/10/2017

Date finished: 5/10/2017

Lita Freeman

Drilling method: Direct Push 7720DT

Hammer weight/drop: NA

Hammer type: NA

## LABORATORY TEST DATA

Sampler: Arturo-Cascade/Lita Freeman-ERA

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft	
	PID (ppmv)	Sample	Blows/ 6"	SPT N-Value <sup>1</sup>									
						Ground Surface Elevation: NM feet <sup>2</sup>							
1						Asphalt (6 inches) / Baserock (4 inches)							
2	0.0	☒			ML	Silt (ML), Brown (7.5 YR 4/6), low plasticity, stiff, dry							
3													
4													
5													
6													
7	0.0	☒											
8					CL/ CH	Silty Clay (CL/CH), Brown (7.5 YR 4/6), medium plasticity, stiff, dry							
9													
10	0.0	☒											
11													
12													
13													
14													
15	0.0	☒											
16													
17													
18													
19													
20	0.0	☒											
21													
22													
23													
24													
25	0.0	☒											
26													
27													
28													
29						- color change to Light Brown (7.5 YR 6/4) at 29 feet bgs							
30													

Boring terminated at a depth of 42 feet below ground surface.  
 Boring backfilled with cement grout.  
 Groundwater encountered at a depth of 38 feet during drilling.



Environmental Risk Assessors

Project No.: 01-2016-1300-001

Figure: E-1

PROJECT: 927 Main Street, Pleasanton, California

# Log of Boring

SB-6

PAGE 2 OF 2

Boring location: See Figure 3

Logged by:

Date started: 5/10/2017

Date finished: 5/10/2017

Lita Freeman

Drilling method: Direct Push 7720DT

Hammer weight/drop: NA

Hammer type: NA

## LABORATORY TEST DATA

Sampler: Arturo-Cascade/Lita Freeman-ERA

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	PID (ppmv)	Sample	Blows/ 6"	SPT N-Value <sup>1</sup>								
						Ground Surface Elevation: NM feet <sup>2</sup>						
31						- moist at 32 feet bgs						
32												
33												
34						-some fine-grained sand lenses between 33 and 35 feet bgs						
35												
36												
37												
38					SC	Clayey Sand (SC), Brown (7.5 YR 4/6), fine-grained to medium-grained sand, saturated						
39												
40					GW	Sandy Gravel (GW), Brown (7.5 YR 4/6), fine-grained to coarse-grained gravel, sub-angular to sub-rounded gravel, fine-grained to coarse-grained sand, saturated						
41												
42						Bottom of Boring = 42 feet						
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												

Boring terminated at a depth of 42 feet below ground surface.  
 Boring backfilled with cement grout.  
 Groundwater encountered at a depth of 38 feet during drilling.



Environmental Risk Assessors

Project No.: 01-2016-1300-001

Figure: E-1

PROJECT: 927 Main Street, Pleasanton, California

# Log of Boring

SB-7

PAGE 1 OF 2

Boring location: See Figure 3

Logged by:

Date started: 5/9/2017

Date finished: 5/9/2017

Lita Freeman

Drilling method: Direct Push 7720DT

Hammer weight/drop: NA

Hammer type: NA

## LABORATORY TEST DATA

Sampler: Arturo-Cascade/Lita Freeman-ERA

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	PID (ppmv)	Sample	Blows/ 6"	SPT N-Value <sup>1</sup>								
Ground Surface Elevation: NM feet <sup>2</sup>												
1						Asphalt (6 inches) / Baserock (4 inches)						
2	0.0	☒			GW	Sandy Gravel (GW), Brown (7.5 YR 4/6), fine-grained to coarse-grained gravel, fine-grained to coarse-grained sand, sub-angular to sub-rounded gravel, dry						
3												
4												
5												
6												
7	0.0	☒			CL/ CH		Silty Clay (CL/CH), Brown (7.5 YR 4/6), medium plasticity, stiff, dry					
8												
9						-lenses of fine-grained to coarse-grained gravel and sand, sub-angular to sub-rounded gravel, dry between 12 feet and 15 feet						
10												
11	0.0	☒										
12												
13						-slightly moist at 20 feet bgs						
14												
15	0.0	☒				-very moist at 30 feet bgs						
16												
17												
18												
19	0.0	☒										
20												
21												
22												
23												
24	0.0	☒										
25												
26												
27												
28												
29												
30												

Boring terminated at a depth of 40 feet below ground surface.  
 Boring backfilled with cement grout.  
 Groundwater encountered at a depth of 38.5 feet during drilling.



Environmental Risk Assessors

Project No.: 01-2016-1300-001

Figure: E-2

PROJECT: 927 Main Street, Pleasanton, California

# Log of Boring

SB-7

PAGE 2 OF 2

Boring location: See Figure 3

Logged by:

Date started: 5/9/2017

Date finished: 5/9/2017

Lita Freeman

Drilling method: Direct Push 7720DT

Hammer weight/drop: NA

Hammer type: NA

## LABORATORY TEST DATA

Sampler: Arturo-Cascade/Lita Freeman-ERA

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	PID (ppmv)	Sample	Blows/ 6"	SPT N-Value <sup>1</sup>								
						Ground Surface Elevation: NM feet <sup>2</sup>						
31						-color change to green with petroleum hydrocarbon odor at 34.5 feet bgs						
32												
33												
34												
35												
36						-color change to brown (7.5 YR 4/6) at 36 feet bgs						
37												
38						-saturated at 38.5 feet bgs						
39						-color change to green with petroleum hydrocarbon odor at 39.9 feet bgs						
40						Bottom of Boring = 40 feet						
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												

Boring terminated at a depth of 40 feet below ground surface.  
 Boring backfilled with cement grout.  
 Groundwater encountered at a depth of 38.5 feet during drilling.



Environmental Risk Assessors

Project No.: 01-2016-1300-001

Figure: E-2

PROJECT: 927 Main Street, Pleasanton, California

# Log of Boring

SB-8

PAGE 1 OF 2

Boring location: See Figure 3

Logged by:

Date started: 5/10/2017

Date finished: 5/10/2017

Lita Freeman

Drilling method: Direct Push 7720DT

Hammer weight/drop: NA

Hammer type: NA

## LABORATORY TEST DATA

Sampler: Arturo-Cascade/Lita Freeman-ERA

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	PID (ppmv)	Sample	Blows/ 6"	SPT N-Value <sup>1</sup>								
						Ground Surface Elevation: NM feet <sup>2</sup>						
1						Asphalt (6 inches) / Baserock (4 inches)						
2	0.0	☒			ML	Silt (ML), Brown (7.5 YR 4/6), low plasticity, stiff, dry						
3												
4												
5												
6												
7	0.0	☒										
8												
9					CL/ CH	Silty Clay (CL/CH), Brown (7.5 YR 4/6), medium plasticity, stiff, dry						
10	0.0	☒										
11												
12												
13												
14												
15	0.0	☒										
16												
17												
18												
19												
20	0.0	☒										
21												
22												
23												
24												
25	0.0	☒										
26												
27												
28						- color change to Light Brown (7.5 YR 6/4) at 27.5 feet bgs						
29												
30												

Boring terminated at a depth of 42 feet below ground surface.  
 Boring backfilled with cement grout.  
 Groundwater encountered at a depth of 38.5 feet during drilling.



Environmental Risk Assessors

Project No.:  
01-2016-1300-001

Figure: E-3

PROJECT: 927 Main Street, Pleasanton, California

# Log of Boring

SB-8

PAGE 2 OF 2

Boring location: See Figure 3

Logged by:

Date started: 5/10/2017

Date finished: 5/10/2017

Lita Freeman

Drilling method: Direct Push 7720DT

Hammer weight/drop: NA

Hammer type: NA

## LABORATORY TEST DATA

Sampler: Arturo-Cascade/Lita Freeman-ERA

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	PID (ppmv)	Sample	Blows/ 6"	SPT N-Value <sup>1</sup>								
						Ground Surface Elevation: NM feet <sup>2</sup>						
31						- moist at 31 feet bgs						
32												
33												
34												
35												
36												
37												
38					▽							
39												
40					GW	Sandy Gravel (GW), Brown (7.5 YR 4/6), fine-grained to coarse-grained gravel, sub-angular to sub-rounded gravel, fine-grained to coarse-grained sand, saturated						
41												
42						Bottom of Boring = 42 feet						
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												

Boring terminated at a depth of 42 feet below ground surface.  
 Boring backfilled with cement grout.  
 Groundwater encountered at a depth of 38.5 feet during drilling.



Environmental Risk Assessors

Project No.: 01-2016-1300-001

Figure: E-3

PROJECT: 927 Main Street, Pleasanton, California

# Log of Boring

SB-9

PAGE 1 OF 2

Boring location: See Figure 3

Logged by:

Date started: 5/9/2017

Date finished: 5/9/2017

Lita Freeman

Drilling method: Direct Push 7720DT

Hammer weight/drop: NA

Hammer type: NA

## LABORATORY TEST DATA

Sampler: Arturo-Cascade/Lita Freeman-ERA

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	PID (ppmv)	Sample	Blows/ 6"	SPT N-Value <sup>1</sup>								
						Ground Surface Elevation: NM feet <sup>2</sup>						
1						Asphalt (6 inches) / Baserock (4 inches)						
2	0.0	☒			ML	Silt (ML), Brown (7.5 YR 4/6), low plasticity, stiff, dry						
3												
4												
5												
6												
7												
8	0.0	☒			CH	Silty Clay (CH), Brown (7.5 YR 4/6), high plasticity, stiff, dry						
9												
10												
11												
12												
13												
14	0.0	☒										
15												
16												
17												
18												
19	0.0	☒										
20												
21												
22												
23												
24												
25	0.0	☒										
26												
27												
28						- color change to Light Brown (7.5 YR 6/4) at 27.5 feet bgs						
29												
30												

Boring terminated at a depth of 40 feet below ground surface.  
 Boring backfilled with cement grout.  
 Groundwater encountered at a depth of 38 feet during drilling.



Environmental Risk Assessors

Project No.: 01-2016-1300-001

Figure: E-4



PROJECT: 927 Main Street, Pleasanton, California

# Log of Boring

SB-9

PAGE 2 OF 2

Boring location: See Figure 3

Logged by:

Date started: 5/9/2017

Date finished: 5/9/2017

Lita Freeman

Drilling method: Direct Push 7720DT

Hammer weight/drop: NA

Hammer type: NA

## LABORATORY TEST DATA

Sampler: Arturo-Cascade/Lita Freeman-ERA

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	PID (ppmv)	Sample	Blows/ 6"	SPT N-Value <sup>1</sup>								
31												
32						- moist at 31.5 feet bgs						
33												
34					SW	Gravelly Sand (SW), Brown (7.5 YR 4/6), fine-grained to coarse-grained sand, fine-grained to coarse-grained gravel, sub-angular to sub-rounded gravel						
35												
36												
37												
38						-saturated at 38 feet bgs						
39					GW	Sandy Gravelly (GW), Brown (7.5 YR 4/6), fine-grained to coarse-grained gravel, sub-angular to sub-rounded gravel, fine-grained to coarse-grained sand, saturated						
40						Bottom of Boring = 40 feet						
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												

Boring terminated at a depth of 40 feet below ground surface.  
 Boring backfilled with cement grout.  
 Groundwater encountered at a depth of 38 feet during drilling.



Environmental Risk Assessors

Project No.: 01-2016-1300-001

Figure: E-4

## **Appendix F**

Laboratory Analytical Report and  
Chain-of-Custody Documentation



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

21 June 2017

Lita Freeman  
Equity Enterprises  
4460 Black Ave. Stel  
Pleasanton, CA 94566  
RE: Main Street Property

Enclosed are the results of analyses for samples received by the laboratory on 05/12/17 10:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rose Fasheh  
Project Manager



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

Equity Enterprises  
 4460 Black Ave. Stel  
 Pleasanton CA, 94566

Project: Main Street Property  
 Project Number: [none]  
 Project Manager: Lita Freeman

**Reported:**  
 06/21/17 08:04

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-6-2.5	T171198-01	Soil	05/10/17 07:40	05/12/17 10:05
SB-6-7.5	T171198-02	Soil	05/10/17 07:50	05/12/17 10:05
SB-7-2.5	T171198-03	Soil	05/09/17 09:05	05/12/17 10:05
SB-7-7.5	T171198-04	Soil	05/09/17 09:10	05/12/17 10:05
SB-8-2.5	T171198-05	Soil	05/10/17 09:40	05/12/17 10:05
SB-8-7.5	T171198-06	Soil	05/10/17 09:45	05/12/17 10:05
SB-9-2.5	T171198-07	Soil	05/09/17 12:20	05/12/17 10:05
SB-9-8.5	T171198-08	Soil	05/09/17 12:30	05/12/17 10:05
SB-2A-GW	T171198-09	Water	05/10/17 13:15	05/12/17 10:05
SB-6-GW	T171198-10	Water	05/10/17 09:00	05/12/17 10:05
SB-7-GW	T171198-11	Water	05/10/17 11:00	05/12/17 10:05
SB-8-GW	T171198-12	Water	05/10/17 10:30	05/12/17 10:05
SB-9-GW	T171198-13	Water	05/10/17 12:30	05/12/17 10:05

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager

Equity Enterprises  
4460 Black Ave. Stel  
Pleasanton CA, 94566

Project: Main Street Property  
Project Number: [none]  
Project Manager: Lita Freeman

**Reported:**  
06/21/17 08:04

**DETECTIONS SUMMARY**

**Sample ID:** SB-6-2.5 **Laboratory ID:** T171198-01

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
C13-C28 (DRO)	37	10		mg/kg	EPA 8015B	
C29-C40 (MORO)	24	10		mg/kg	EPA 8015B	

**Sample ID:** SB-6-7.5 **Laboratory ID:** T171198-02

No Results Detected

**Sample ID:** SB-7-2.5 **Laboratory ID:** T171198-03

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
C29-C40 (MORO)	11	10		mg/kg	EPA 8015B	

**Sample ID:** SB-7-7.5 **Laboratory ID:** T171198-04

No Results Detected

**Sample ID:** SB-8-2.5 **Laboratory ID:** T171198-05

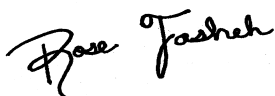
Analyte	Result	Reporting		Units	Method	Notes
		Limit				
C29-C40 (MORO)	14	10		mg/kg	EPA 8015B	

**Sample ID:** SB-8-7.5 **Laboratory ID:** T171198-06

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
C29-C40 (MORO)	12	10		mg/kg	EPA 8015B	

SunStar Laboratories, Inc.

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



Rose Fasheh, Project Manager

Equity Enterprises  
4460 Black Ave. Stel  
Pleasanton CA, 94566

Project: Main Street Property  
Project Number: [none]  
Project Manager: Lita Freeman

**Reported:**  
06/21/17 08:04

**Sample ID:** SB-9-2.5

**Laboratory ID:** T171198-07

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
C29-C40 (MORO)	22	10		mg/kg	EPA 8015B	

**Sample ID:** SB-9-8.5

**Laboratory ID:** T171198-08

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
C29-C40 (MORO)	75	10		mg/kg	EPA 8015B	

**Sample ID:** SB-2A-GW

**Laboratory ID:** T171198-09

No Results Detected

**Sample ID:** SB-6-GW

**Laboratory ID:** T171198-10

No Results Detected

**Sample ID:** SB-7-GW

**Laboratory ID:** T171198-11

No Results Detected

**Sample ID:** SB-8-GW

**Laboratory ID:** T171198-12

No Results Detected

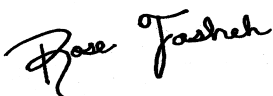
**Sample ID:** SB-9-GW

**Laboratory ID:** T171198-13

No Results Detected

SunStar Laboratories, Inc.

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



Rose Fasheh, Project Manager



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

Equity Enterprises  
4460 Black Ave. Stel  
Pleasanton CA, 94566

Project: Main Street Property  
Project Number: [none]  
Project Manager: Lita Freeman

**Reported:**  
06/21/17 08:04

---

SunStar Laboratories, Inc.

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

---

Rose Fasheh, Project Manager

Equity Enterprises  
4460 Black Ave. Stel  
Pleasanton CA, 94566

Project: Main Street Property  
Project Number: [none]  
Project Manager: Lita Freeman

Reported:  
06/21/17 08:04

**SB-6-2.5**  
**T171198-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	500	ug/kg	1	7051211	05/12/17	05/15/17	EPA 8015B	
Surrogate: 4-Bromofluorobenzene		112 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

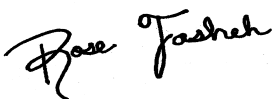
C13-C28 (DRO)	37	10	mg/kg	1	7051222	05/12/17	05/13/17	EPA 8015B	
C29-C40 (MORO)	24	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		95.2 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	1	7051219	05/12/17	05/12/17	EPA 8260B	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.6 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		130 %	95.7-135		"	"	"	"	
Surrogate: Toluene-d8		91.0 %	85.5-116		"	"	"	"	

SunStar Laboratories, Inc.

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



Rose Fasheh, Project Manager





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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-6-7.5**  
**T171198-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	500	ug/kg	1	7051211	05/12/17	05/15/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		127 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	10	mg/kg	1	7051222	05/12/17	05/13/17	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		103 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	1	7051219	05/12/17	05/12/17	EPA 8260B	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		85.0 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		129 %	95.7-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		92.5 %	85.5-116		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-7-2.5**  
**T171198-03 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	500	ug/kg	1	7051211	05/12/17	05/15/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		80.6 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	10	mg/kg	1	7051222	05/12/17	05/13/17	EPA 8015B	
<b>C29-C40 (MORO)</b>	<b>11</b>	10	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		100 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	1	7051219	05/12/17	05/12/17	EPA 8260B	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		88.3 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		121 %	95.7-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		95.5 %	85.5-116		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-7-7.5**  
**T171198-04 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	500	ug/kg	1	7051211	05/12/17	05/12/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		85.7 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	10	mg/kg	1	7051222	05/12/17	05/13/17	EPA 8015B	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		112 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	1	7051219	05/12/17	05/12/17	EPA 8260B	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		84.6 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		127 %	95.7-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		90.8 %	85.5-116		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-8-2.5**  
**T171198-05 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	500	ug/kg	1	7051211	05/12/17	05/12/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		80.8 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	10	mg/kg	1	7051222	05/12/17	05/13/17	EPA 8015B	
<b>C29-C40 (MORO)</b>	<b>14</b>	10	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		101 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	1	7051219	05/12/17	05/12/17	EPA 8260B	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		85.4 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		135 %	95.7-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		91.1 %	85.5-116		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-8-7.5**  
**T171198-06 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	500	ug/kg	1	7051211	05/12/17	05/12/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		96.7 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	10	mg/kg	1	7051222	05/12/17	05/13/17	EPA 8015B	
<b>C29-C40 (MORO)</b>	<b>12</b>	10	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		98.9 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	1	7051219	05/12/17	05/12/17	EPA 8260B	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		83.5 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		127 %	95.7-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		92.0 %	85.5-116		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-9-2.5**  
**T171198-07 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	500	ug/kg	1	7051211	05/12/17	05/15/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		84.1 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	10	mg/kg	1	7051222	05/12/17	05/13/17	EPA 8015B	
<b>C29-C40 (MORO)</b>	<b>22</b>	10	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		100 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	1	7051219	05/12/17	05/13/17	EPA 8260B	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		86.0 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		124 %	95.7-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		93.4 %	85.5-116		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-9-8.5**  
**T171198-08 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	500	ug/kg	1	7051211	05/12/17	05/12/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		82.3 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	10	mg/kg	1	7051222	05/12/17	05/13/17	EPA 8015B	
<b>C29-C40 (MORO)</b>	<b>75</b>	10	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		99.2 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	1	7051219	05/12/17	05/13/17	EPA 8260B	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		87.5 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		134 %	95.7-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		91.5 %	85.5-116		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-2A-GW  
T171198-09 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	50	ug/l	1	7051212	05/12/17	05/12/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		85.6 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	50	ug/l	1	7051224	05/12/17	05/15/17	EPA 8015B	
C29-C40 (MORO)	ND	100	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		85.1 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	1.2	ug/l	1	7051214	05/12/17	05/13/17	EPA 8260B	
1,2-Dichloroethane	ND	0.62	"	"	"	"	"	"	
Naphthalene	ND	1.2	"	"	"	"	"	"	
Benzene	ND	0.62	"	"	"	"	"	"	
Toluene	ND	0.62	"	"	"	"	"	"	
Ethylbenzene	ND	0.62	"	"	"	"	"	"	
m,p-Xylene	ND	1.2	"	"	"	"	"	"	
o-Xylene	ND	0.62	"	"	"	"	"	"	
Tert-butyl alcohol	ND	12	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.2	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.4 %	83.5-119		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		107 %	81-136		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		101 %	88.8-117		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager





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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-6-GW  
T171198-10 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	50	ug/l	1	7051212	05/12/17	05/12/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		88.0 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	50	ug/l	1	7051224	05/12/17	05/15/17	EPA 8015B	
C29-C40 (MORO)	ND	100	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		86.2 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	1.2	ug/l	1	7051214	05/12/17	05/13/17	EPA 8260B	
1,2-Dichloroethane	ND	0.62	"	"	"	"	"	"	
Naphthalene	ND	1.2	"	"	"	"	"	"	
Benzene	ND	0.62	"	"	"	"	"	"	
Toluene	ND	0.62	"	"	"	"	"	"	
Ethylbenzene	ND	0.62	"	"	"	"	"	"	
m,p-Xylene	ND	1.2	"	"	"	"	"	"	
o-Xylene	ND	0.62	"	"	"	"	"	"	
Tert-butyl alcohol	ND	12	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.2	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90.1 %	83.5-119		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		107 %	81-136		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		100 %	88.8-117		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-7-GW  
 T171198-11 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	50	ug/l	1	7051212	05/12/17	05/12/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		80.2 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	50	ug/l	1	7051224	05/12/17	05/15/17	EPA 8015B	
C29-C40 (MORO)	ND	100	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		85.6 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	1.2	ug/l	1	7051214	05/12/17	05/13/17	EPA 8260B	
1,2-Dichloroethane	ND	0.62	"	"	"	"	"	"	
Naphthalene	ND	1.2	"	"	"	"	"	"	
Benzene	ND	0.62	"	"	"	"	"	"	
Toluene	ND	0.62	"	"	"	"	"	"	
Ethylbenzene	ND	0.62	"	"	"	"	"	"	
m,p-Xylene	ND	1.2	"	"	"	"	"	"	
o-Xylene	ND	0.62	"	"	"	"	"	"	
Tert-butyl alcohol	ND	12	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.2	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		91.6 %	83.5-119		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		110 %	81-136		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		102 %	88.8-117		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-8-GW  
 T171198-12 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	50	ug/l	1	7051212	05/12/17	05/12/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.7 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	50	ug/l	1	7051224	05/12/17	05/15/17	EPA 8015B	
C29-C40 (MORO)	ND	100	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		86.2 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	1.2	ug/l	1	7051214	05/12/17	05/13/17	EPA 8260B	
1,2-Dichloroethane	ND	0.62	"	"	"	"	"	"	
Naphthalene	ND	1.2	"	"	"	"	"	"	
Benzene	ND	0.62	"	"	"	"	"	"	
Toluene	ND	0.62	"	"	"	"	"	"	
Ethylbenzene	ND	0.62	"	"	"	"	"	"	
m,p-Xylene	ND	1.2	"	"	"	"	"	"	
o-Xylene	ND	0.62	"	"	"	"	"	"	
Tert-butyl alcohol	ND	12	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.2	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		93.8 %	83.5-119		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		108 %	81-136		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		102 %	88.8-117		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**SB-9-GW  
 T171198-13 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

**SunStar Laboratories, Inc.**

**Purgeable Petroleum Hydrocarbons by EPA 8015B**

C6-C12 (GRO)	ND	50	ug/l	1	7051212	05/12/17	05/12/17	EPA 8015B	
<i>Surrogate: 4-Bromofluorobenzene</i>		87.7 %	65-135		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015B**

C13-C28 (DRO)	ND	50	ug/l	1	7051224	05/12/17	05/15/17	EPA 8015B	
C29-C40 (MORO)	ND	100	"	"	"	"	"	"	
<i>Surrogate: p-Terphenyl</i>		89.3 %	65-135		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

1,2-Dibromoethane (EDB)	ND	1.2	ug/l	1	7051214	05/12/17	05/13/17	EPA 8260B	
1,2-Dichloroethane	ND	0.62	"	"	"	"	"	"	
Naphthalene	ND	1.2	"	"	"	"	"	"	
Benzene	ND	0.62	"	"	"	"	"	"	
Toluene	ND	0.62	"	"	"	"	"	"	
Ethylbenzene	ND	0.62	"	"	"	"	"	"	
m,p-Xylene	ND	1.2	"	"	"	"	"	"	
o-Xylene	ND	0.62	"	"	"	"	"	"	
Tert-butyl alcohol	ND	12	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.2	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		88.9 %	83.5-119		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		110 %	81-136		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	88.8-117		"	"	"	"	

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**Purgeable Petroleum Hydrocarbons by EPA 8015B - Quality Control**  
**SunStar Laboratories, Inc.**

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

**Batch 7051211 - EPA 5030 GC**

<b>Blank (7051211-BLK1)</b>										
Prepared: 05/12/17 Analyzed: 05/16/17										
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	83.0		"	100		83.0	65-135			
<b>LCS (7051211-BS1)</b>										
Prepared & Analyzed: 05/12/17										
C6-C12 (GRO)	10700	500	ug/kg	11000		96.9	75-125			
Surrogate: 4-Bromofluorobenzene	96.6		"	100		96.6	65-135			
<b>LCS Dup (7051211-BSD1)</b>										
Prepared: 05/12/17 Analyzed: 05/15/17										
C6-C12 (GRO)	10800	500	ug/kg	11000		98.5	75-125	1.53	20	
Surrogate: 4-Bromofluorobenzene	86.8		"	100		86.8	65-135			

**Batch 7051212 - EPA 5030 GC**

<b>Blank (7051212-BLK1)</b>										
Prepared: 05/12/17 Analyzed: 05/15/17										
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	83.5		"	100		83.5	65-135			
<b>LCS (7051212-BS1)</b>										
Prepared & Analyzed: 05/12/17										
C6-C12 (GRO)	5460	50	ug/l	5500		99.3	75-125			
Surrogate: 4-Bromofluorobenzene	81.5		"	100		81.5	65-135			
<b>LCS Dup (7051212-BSD1)</b>										
Prepared & Analyzed: 05/12/17										
C6-C12 (GRO)	5380	50	ug/l	5500		97.8	75-125	1.42	20	
Surrogate: 4-Bromofluorobenzene	89.6		"	100		89.6	65-135			

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**Extractable Petroleum Hydrocarbons by 8015B - Quality Control**

**SunStar Laboratories, Inc.**

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

**Batch 7051222 - EPA 3550B GC**

<b>Blank (7051222-BLK1)</b>		Prepared: 05/12/17 Analyzed: 05/13/17								
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: <i>p</i> -Terphenyl	89.7		"	99.0		90.6	65-135			
<b>LCS (7051222-BS1)</b>		Prepared: 05/12/17 Analyzed: 05/13/17								
C13-C28 (DRO)	530	10	mg/kg	505		105	75-125			
Surrogate: <i>p</i> -Terphenyl	92.4		"	101		91.4	65-135			
<b>LCS Dup (7051222-BSD1)</b>		Prepared: 05/12/17 Analyzed: 05/13/17								
C13-C28 (DRO)	560	10	mg/kg	500		111	75-125	4.46	20	
Surrogate: <i>p</i> -Terphenyl	100		"	100		100	65-135			

**Batch 7051224 - EPA 3510C GC**

<b>Blank (7051224-BLK1)</b>		Prepared: 05/12/17 Analyzed: 05/15/17								
C13-C28 (DRO)	ND	50	ug/l							
C29-C40 (MORO)	ND	500	"							
Surrogate: <i>p</i> -Terphenyl	3390		"	4000		84.8	65-135			
<b>LCS (7051224-BS1)</b>		Prepared: 05/12/17 Analyzed: 05/15/17								
C13-C28 (DRO)	20800	50	ug/l	20000		104	75-125			
Surrogate: <i>p</i> -Terphenyl	3330		"	4000		83.2	65-135			
<b>LCS Dup (7051224-BSD1)</b>		Prepared: 05/12/17 Analyzed: 05/15/17								
C13-C28 (DRO)	19400	50	ug/l	20000		97.2	75-125	6.81	20	
Surrogate: <i>p</i> -Terphenyl	3420		"	4000		85.5	65-135			

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises  
 4460 Black Ave. Stel  
 Pleasanton CA, 94566

Project: Main Street Property  
 Project Number: [none]  
 Project Manager: Lita Freeman

Reported:  
 06/21/17 08:04

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**SunStar Laboratories, Inc.**

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

**Batch 7051214 - EPA 5030 GCMS**

**Blank (7051214-BLK1)**

Prepared: 05/12/17 Analyzed: 05/13/17

Bromobenzene	ND	1.2	ug/l							
Bromochloromethane	ND	1.2	"							
Bromodichloromethane	ND	1.2	"							
Bromoform	ND	1.2	"							
Bromomethane	ND	1.2	"							
n-Butylbenzene	ND	1.2	"							
sec-Butylbenzene	ND	1.2	"							
tert-Butylbenzene	ND	1.2	"							
Carbon tetrachloride	ND	0.62	"							
Chlorobenzene	ND	1.2	"							
Chloroethane	ND	1.2	"							
Chloroform	ND	1.2	"							
Chloromethane	ND	1.2	"							
2-Chlorotoluene	ND	1.2	"							
4-Chlorotoluene	ND	1.2	"							
Dibromochloromethane	ND	1.2	"							
1,2-Dibromo-3-chloropropane	ND	6.2	"							
1,2-Dibromoethane (EDB)	ND	1.2	"							
Dibromomethane	ND	1.2	"							
1,2-Dichlorobenzene	ND	1.2	"							
1,3-Dichlorobenzene	ND	1.2	"							
1,4-Dichlorobenzene	ND	1.2	"							
Dichlorodifluoromethane	ND	0.62	"							
1,1-Dichloroethane	ND	1.2	"							
1,2-Dichloroethane	ND	0.62	"							
1,1-Dichloroethene	ND	1.2	"							
cis-1,2-Dichloroethene	ND	1.2	"							
trans-1,2-Dichloroethene	ND	1.2	"							
1,2-Dichloropropane	ND	1.2	"							
1,3-Dichloropropane	ND	1.2	"							
2,2-Dichloropropane	ND	1.2	"							
1,1-Dichloropropene	ND	1.2	"							
cis-1,3-Dichloropropene	ND	0.62	"							
trans-1,3-Dichloropropene	ND	0.62	"							
Hexachlorobutadiene	ND	1.2	"							
Isopropylbenzene	ND	1.2	"							

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**SunStar Laboratories, Inc.**

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

**Batch 7051214 - EPA 5030 GCMS**

**Blank (7051214-BLK1)**

Prepared: 05/12/17 Analyzed: 05/13/17

p-Isopropyltoluene	ND	1.2	ug/l							
Methylene chloride	ND	1.2	"							
Naphthalene	ND	1.2	"							
n-Propylbenzene	ND	1.2	"							
Styrene	ND	1.2	"							
1,1,2,2-Tetrachloroethane	ND	1.2	"							
1,1,1,2-Tetrachloroethane	ND	1.2	"							
Tetrachloroethene	ND	1.2	"							
1,2,3-Trichlorobenzene	ND	1.2	"							
1,2,4-Trichlorobenzene	ND	1.2	"							
1,1,2-Trichloroethane	ND	1.2	"							
1,1,1-Trichloroethane	ND	1.2	"							
Trichloroethene	ND	1.2	"							
Trichlorofluoromethane	ND	1.2	"							
1,2,3-Trichloropropane	ND	1.2	"							
1,3,5-Trimethylbenzene	ND	1.2	"							
1,2,4-Trimethylbenzene	ND	1.2	"							
Vinyl chloride	ND	1.2	"							
Benzene	ND	0.62	"							
Toluene	ND	0.62	"							
Ethylbenzene	ND	0.62	"							
m,p-Xylene	ND	1.2	"							
o-Xylene	ND	0.62	"							
Tert-amyl methyl ether	ND	2.5	"							
Tert-butyl alcohol	ND	12	"							
Di-isopropyl ether	ND	2.5	"							
Ethyl tert-butyl ether	ND	2.5	"							
Methyl tert-butyl ether	ND	1.2	"							
Surrogate: 4-Bromofluorobenzene	9.01		"	10.0		90.1	83.5-119			
Surrogate: Dibromofluoromethane	11.0		"	10.0		110	81-136			
Surrogate: Toluene-d8	10.3		"	10.0		103	88.8-117			

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager





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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**SunStar Laboratories, Inc.**

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

**Batch 7051214 - EPA 5030 GCMS**

**LCS (7051214-BS1)**

Prepared: 05/12/17 Analyzed: 05/13/17

Benzene	27.3	0.62	ug/l	25.0		109	75-125			
Toluene	26.6	0.62	"	25.0		106	75-125			
Surrogate: 4-Bromofluorobenzene	10.1		"	10.0		101	83.5-119			
Surrogate: Dibromofluoromethane	9.54		"	10.0		95.4	81-136			
Surrogate: Toluene-d8	10.2		"	10.0		102	88.8-117			

**LCS Dup (7051214-BSD1)**

Prepared: 05/12/17 Analyzed: 05/13/17

Benzene	27.1	0.62	ug/l	25.0		108	75-125	0.736	20	
Toluene	24.2	0.62	"	25.0		96.7	75-125	9.46	20	
Surrogate: 4-Bromofluorobenzene	10.6		"	10.0		106	83.5-119			
Surrogate: Dibromofluoromethane	9.89		"	10.0		98.9	81-136			
Surrogate: Toluene-d8	9.89		"	10.0		98.9	88.8-117			

**Batch 7051219 - EPA 5030 GCMS**

**Blank (7051219-BLK1)**

Prepared & Analyzed: 05/12/17

Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	10	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**SunStar Laboratories, Inc.**

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

**Batch 7051219 - EPA 5030 GCMS**

**Blank (7051219-BLK1)**

Prepared & Analyzed: 05/12/17

1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,1-Dichloroethene	ND	5.0	"
cis-1,2-Dichloroethene	ND	5.0	"
trans-1,2-Dichloroethene	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
2,2-Dichloropropane	ND	5.0	"
1,1-Dichloropropene	ND	5.0	"
cis-1,3-Dichloropropene	ND	5.0	"
trans-1,3-Dichloropropene	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"
p-Isopropyltoluene	ND	5.0	"
Methylene chloride	ND	5.0	"
Naphthalene	ND	5.0	"
n-Propylbenzene	ND	5.0	"
Styrene	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,1,2-Tetrachloroethane	ND	5.0	"
Tetrachloroethene	ND	5.0	"
1,2,3-Trichlorobenzene	ND	5.0	"
1,2,4-Trichlorobenzene	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1,1-Trichloroethane	ND	5.0	"
Trichloroethene	ND	5.0	"
Trichlorofluoromethane	ND	5.0	"
1,2,3-Trichloropropane	ND	5.0	"
1,3,5-Trimethylbenzene	ND	5.0	"
1,2,4-Trimethylbenzene	ND	5.0	"
Vinyl chloride	ND	5.0	"
Benzene	ND	5.0	"
Toluene	ND	5.0	"

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises 4460 Black Ave. Stel Pleasanton CA, 94566	Project: Main Street Property Project Number: [none] Project Manager: Lita Freeman	Reported: 06/21/17 08:04
--	--	-----------------------------

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**SunStar Laboratories, Inc.**

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

**Batch 7051219 - EPA 5030 GCMS**

**Blank (7051219-BLK1)**

Prepared & Analyzed: 05/12/17

Ethylbenzene	ND	5.0	ug/kg							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							
Tert-amyl methyl ether	ND	20	"							
Tert-butyl alcohol	ND	50	"							
Di-isopropyl ether	ND	20	"							
Ethyl tert-butyl ether	ND	20	"							
Methyl tert-butyl ether	ND	20	"							
Surrogate: 4-Bromofluorobenzene	38.0		"	40.0		95.1	81.2-123			
Surrogate: Dibromofluoromethane	44.7		"	40.0		112	95.7-135			
Surrogate: Toluene-d8	37.0		"	40.0		92.5	85.5-116			

**LCS (7051219-BS1)**

Prepared: 05/12/17 Analyzed: 05/13/17

Chlorobenzene	124	5.0	ug/kg	99.4		125	75-125			
1,1-Dichloroethene	94.1	5.0	"	99.4		94.6	75-125			
Trichloroethene	86.5	5.0	"	99.4		87.0	75-125			
Benzene	82.1	5.0	"	99.4		82.6	75-125			
Toluene	84.8	5.0	"	99.4		85.4	75-125			
Surrogate: 4-Bromofluorobenzene	46.1		"	39.8		116	81.2-123			
Surrogate: Dibromofluoromethane	49.4		"	39.8		124	95.7-135			
Surrogate: Toluene-d8	33.7		"	39.8		84.9	85.5-116			S-GC

**LCS Dup (7051219-BSD1)**

Prepared: 05/12/17 Analyzed: 05/13/17

Chlorobenzene	122	5.0	ug/kg	98.8		123	75-125	1.84	20	
1,1-Dichloroethene	92.1	5.0	"	98.8		93.2	75-125	2.14	20	
Trichloroethene	83.6	5.0	"	98.8		84.6	75-125	3.45	20	
Benzene	78.9	5.0	"	98.8		79.8	75-125	3.92	20	
Toluene	79.7	5.0	"	98.8		80.6	75-125	6.26	20	
Surrogate: 4-Bromofluorobenzene	45.6		"	39.5		115	81.2-123			
Surrogate: Dibromofluoromethane	47.3		"	39.5		120	95.7-135			
Surrogate: Toluene-d8	32.7		"	39.5		82.8	85.5-116			S-GC

SunStar Laboratories, Inc.

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

Rose Fasheh, Project Manager



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

Equity Enterprises  
4460 Black Ave. Stel  
Pleasanton CA, 94566

Project: Main Street Property  
Project Number: [none]  
Project Manager: Lita Freeman

**Reported:**  
06/21/17 08:04

### Notes and Definitions

- S-GC Surrogate recovery outside of established control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

---

SunStar Laboratories, Inc.

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

---

Rose Fasheh, Project Manager

**Chain of Custody Record**

Client: Equity Enterprises  
 Address: 4460 Black Ave, STEL, Pleasanton, CA 94566  
 Phone: 925-484-3636 Fax: Lita 916-677-9897  
 Project Manager: Lita 916-677-9897

Date: 5/9/17 Page: 1 Of 1  
 Project Name: Main Street Property  
 Collector: Lita Freeman Client Project #: \_\_\_\_\_  
 Batch #: T171198 EDF #: \_\_\_\_\_

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260 - Seepage	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline) Purgeable	8015M (diesel) + Motoroil	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	Laboratory ID #	Comments/Preservative	Total # of containers
SB-6-2.5	5/10/17	0740	Soil	tube	X					X	X				01		1
SB-6-7.5	5/10/17	0750	Soil	tube	X					X	X				02		1
SB-7-2.5	5/9/17	0905	Soil	tube	X					X	X				03		1
SB-7-7.5	5/9/17	0910	Soil	tube	X					X	X				04		1
SB-8-2.5	5/10/17	0940	Soil	tube	X					X	X				05		1
SB-8-7.5	5/10/17	0945	Soil	tube	X					X	X				06		1
SB-9-2.5	5/9/17	1220	Soil	tube	X					X	X				07		1
SB-9-8.5	5/9/17	1230	Soil	tube	X					X	X				08		1
SB-2A-GW	5/10/17	1315	Groundwater	VOAS	X					X	X				09		6
SB-6-GW	5/10/17	0900	Groundwater	VOAS	X					X	X				10		13
SB-7-GW	5/10/17	1100	Groundwater	VOAS	X					X	X				11		6
SB-8-GW	5/10/17	1030	Groundwater	VOAS	X					X	X				12		6
SB-9-GW	5/10/17	1230	Groundwater	VOAS	X					X	X				13		11

12  
13  
6  
6

Relinquished by: (signature) <u>Lita Freeman</u>	Date / Time <u>5/11/17 1535</u>	Received by: (signature) <u>[Signature]</u>	Date / Time <u>5/11/17 1535</u>
Relinquished by: (signature) <u>GSO</u>	Date / Time <u>5/12/17 10:05</u>	Received by: (signature) <u>[Signature]</u>	Date / Time <u>5/12/17 10:05</u>
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers 50  
 Chain of Custody seals Y/N/NA  
 Seals intact? Y/N/NA  
 Received good condition/cold 3-4  
 Turn around time: 540

Notes  
 Report to  
lita.freeman@gmail.com  
 -VOCs report only BTEX, naph  
 M&BE, TBA, 1,2-DCA, EDB

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



## SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: 7171198

Client Name: EQUITY ENTERPRISES Project: MAIN STREET PROPERTY

Delivered by:  Client  SunStar Courier  GSO  FedEx  Other

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

Lab Received by: BRIAN Date/Time Lab Received: 5/12/17 10:05

Total number of coolers received: 1

Temperature:	Cooler #1	3.4 °C +/- the CF (- 0.2°C) = 3.4	°C corrected temperature
Temperature:	Cooler #2	°C +/- the CF (- 0.2°C) =	°C corrected temperature
Temperature:	Cooler #3	°C +/- the CF (- 0.2°C) =	°C corrected temperature
<b>Temperature criteria = ≤ 6°C (no frozen containers)</b>		Within criteria?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>If NO:</b>			
Samples received on ice?		<input type="checkbox"/> Yes	<input type="checkbox"/> No → <b>Complete Non-Conformance Sheet</b>
If on ice, samples received same day collected?		<input type="checkbox"/> Yes → Acceptable	<input type="checkbox"/> No → <b>Complete Non-Conformance Sheet</b>

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

\* Complete Non-Conformance Receiving Sheet if checked      Cooler/Sample Review - Initials and date: zc 5/12/17

**Comments:**  
 \_\_\_\_\_  
 \_\_\_\_\_

**WORK ORDER**

**T171198**

**Client: Equity Enterprises**  
**Project: Main Street Property**

**Project Manager: Rose Fasheh**  
**Project Number: [none]**

**Report To:**

Equity Enterprises  
 Lita Freeman  
 4460 Black Ave. Stel  
 Pleasanton, CA 94566

Date Due: 05/17/17 17:00 (3 day TAT)

Received By: Brian Charon

Date Received: 05/12/17 10:05

Logged In By: Brian Charon

Date Logged In: 05/12/17 10:35

Samples Received at: **3.4°C**

Custody Seals Yes Received On Ice Yes  
 Containers Intact Yes  
 COC/Labels Agree Yes  
 Preservation Confir Yes

Analysis	Due	TAT	Expires	Comments
<b>T171198-01 SB-6-2.5 [Soil] Sampled 05/10/17 07:40 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/24/17 07:40	
8015 m Gas Purge	05/17/17 15:00	3	05/24/17 07:40	
8260	05/17/17 15:00	3	05/24/17 07:40	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only
<b>T171198-02 SB-6-7.5 [Soil] Sampled 05/10/17 07:50 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/24/17 07:50	
8015 m Gas Purge	05/17/17 15:00	3	05/24/17 07:50	
8260	05/17/17 15:00	3	05/24/17 07:50	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only
<b>T171198-03 SB-7-2.5 [Soil] Sampled 05/09/17 09:05 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/23/17 09:05	
8015 m Gas Purge	05/17/17 15:00	3	05/23/17 09:05	
8260	05/17/17 15:00	3	05/23/17 09:05	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only
<b>T171198-04 SB-7-7.5 [Soil] Sampled 05/09/17 09:10 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/23/17 09:10	
8015 m Gas Purge	05/17/17 15:00	3	05/23/17 09:10	
8260	05/17/17 15:00	3	05/23/17 09:10	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only

**WORK ORDER**

**T171198**

**Client: Equity Enterprises**  
**Project: Main Street Property**

**Project Manager: Rose Fasheh**  
**Project Number: [none]**

Analysis	Due	TAT	Expires	Comments
<b>T171198-05 SB-8-2.5 [Soil] Sampled 05/10/17 09:40 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/24/17 09:40	
8015 m Gas Purge	05/17/17 15:00	3	05/24/17 09:40	
8260	05/17/17 15:00	3	05/24/17 09:40	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only
<b>T171198-06 SB-8-7.5 [Soil] Sampled 05/10/17 09:45 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/24/17 09:45	
8015 m Gas Purge	05/17/17 15:00	3	05/24/17 09:45	
8260	05/17/17 15:00	3	05/24/17 09:45	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only
<b>T171198-07 SB-9-2.5 [Soil] Sampled 05/09/17 12:20 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/23/17 12:20	
8015 m Gas Purge	05/17/17 15:00	3	05/23/17 12:20	
8260	05/17/17 15:00	3	05/23/17 12:20	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only
<b>T171198-08 SB-9-8.5 [Soil] Sampled 05/09/17 12:30 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/23/17 12:30	
8015 m Gas Purge	05/17/17 15:00	3	05/23/17 12:30	
8260	05/17/17 15:00	3	05/23/17 12:30	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only
<b>T171198-09 SB-2A-GW [Water] Sampled 05/10/17 13:15 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/17/17 13:15	
8015 m Gas Purge	05/17/17 15:00	3	05/24/17 13:15	
8260	05/17/17 15:00	3	05/24/17 13:15	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only
<b>T171198-10 SB-6-GW [Water] Sampled 05/10/17 09:00 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/17/17 09:00	
8015 m Gas Purge	05/17/17 15:00	3	05/24/17 09:00	
8260	05/17/17 15:00	3	05/24/17 09:00	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only
<b>T171198-11 SB-7-GW [Water] Sampled 05/10/17 11:00 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/17/17 11:00	
8015 m Gas Purge	05/17/17 15:00	3	05/24/17 11:00	
8260	05/17/17 15:00	3	05/24/17 11:00	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only



**WORK ORDER**

**T171198**

<b>Client:</b> Equity Enterprises	<b>Project Manager:</b> Rose Fasheh
<b>Project:</b> Main Street Property	<b>Project Number:</b> [none]

Analysis	Due	TAT	Expires	Comments
<b>T171198-12 SB-8-GW [Water] Sampled 05/10/17 10:30 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/17/17 10:30	
8015 m Gas Purge	05/17/17 15:00	3	05/24/17 10:30	
8260	05/17/17 15:00	3	05/24/17 10:30	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only
<b>T171198-13 SB-9-GW [Water] Sampled 05/10/17 12:30 (GMT-08:00) Pacific Time (US &amp;</b>				
8015 CC (D/MO)	05/17/17 15:00	3	05/17/17 12:30	
8015 m Gas Purge	05/17/17 15:00	3	05/24/17 12:30	
8260	05/17/17 15:00	3	05/24/17 12:30	BTEX,Naphthalene, MTBE,TBA, 1-2 DCA, EDB Only

5/31/2017

Ms. Jennifer Lagerbom  
McCampbell Analytical Inc.  
1534 Willow Pass Road

Pittsburg CA 94565

Project Name: Main Street

Project #:

Workorder #: 1705524R1

Dear Ms. Jennifer Lagerbom

The following report includes the data for the above referenced project for sample(s) received on 5/26/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Rachel Selenis at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Rachel Selenis  
Project Manager

**WORK ORDER #: 1705524R1**

Work Order Summary

<b>CLIENT:</b>	Ms. Jennifer Lagerbom McC Campbell Analytical Inc. 1534 Willow Pass Road Pittsburg, CA 94565	<b>BILL TO:</b>	Ms. Jennifer Lagerbom McC Campbell Analytical Inc. 1534 Willow Pass Road Pittsburg, CA 94565
<b>PHONE:</b>	925-252-9262	<b>P.O. #</b>	
<b>FAX:</b>	925-252-9269	<b>PROJECT #</b>	Main Street
<b>DATE RECEIVED:</b>	05/26/2017	<b>CONTACT:</b>	Rachel Selenis
<b>DATE COMPLETED:</b>	05/30/2017		
<b>DATE REISSUED:</b>	05/31/2017		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SB-5A-1L+1,000cc Tube	TO-15	4.8 psi	4.8 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY:   
 \_\_\_\_\_  
 Technical Director

DATE: 05/31/17

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,  
 TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935  
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)  
 Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

**LABORATORY NARRATIVE**  
**EPA Method TO-15**  
**McC Campbell Analytical Inc.**  
**Workorder# 1705524R1**

One Client Canister sample was received on May 26, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified (0.2 ppbv for compounds reported at 0.5 ppbv and 0.8 ppbv for compounds reported at 2.0 ppbv) may be false positives.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds. Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

The work order was reissued on 05/31/17 to quantify results using the pressurization factor provided by the client as the sample canister was pressurized prior to receipt at the laboratory.

Additionally, results were reported in a different format per client's request.

**Definition of Data Qualifying Flags**

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	SB-5A-1L+1,000cc Tube	<b>Date/Time Analyzed:</b>	5/27/17 03:00 PM
<b>Lab ID:</b>	1705524R1-01A	<b>Dilution Factor:</b>	1.99
<b>Date/Time Collecte</b>	5/17/17 12:51 PM	<b>Instrument/Filename:</b>	msdp.i / p052707r1
<b>Media:</b>	Client Canister		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	75-37-6	NA	D	11	Not Detected

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	SB-5A-1L+1,000cc Tube	<b>Date/Time Analyzed:</b>	5/27/17 03:00 PM
<b>Lab ID:</b>	1705524R1-01A	<b>Dilution Factor:</b>	1.99
<b>Date/Time Collecte</b>	5/17/17 12:51 PM	<b>Instrument/Filename:</b>	msdp.i / p052707r1
<b>Media:</b>	Client Canister		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	67-64-1	2.1	2.4	24	8.0 J
alpha-Chlorotoluene	100-44-7	1.0	2.1	5.2	Not Detected
Benzene	71-43-2	0.29	1.3	3.2	2.8 J
Bromodichloromethane	75-27-4	1.1	2.7	6.7	Not Detected
Bromoform	75-25-2	1.3	4.1	10	Not Detected
Bromomethane	74-83-9	3.2	3.9	39	Not Detected
Carbon Disulfide	75-15-0	0.73	3.1	12	3.3 J
Carbon Tetrachloride	56-23-5	3.7	3.7	6.3	Not Detected
Chlorobenzene	108-90-7	0.59	1.8	4.6	Not Detected
Chloroethane	75-00-3	1.5	2.6	10	Not Detected
Chloroform	67-66-3	0.84	1.9	4.8	Not Detected
Chloromethane	74-87-3	3.3	3.3	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.2	1.6	3.9	Not Detected
cis-1,3-Dichloropropene	10061-01-5	0.89	1.8	4.5	Not Detected
Cumene	98-82-8	0.57	2.0	4.9	Not Detected
Cyclohexane	110-82-7	0.60	1.4	3.4	Not Detected
Dibromochloromethane	124-48-1	1.1	3.4	8.5	Not Detected
Ethanol	64-17-5	1.0	1.9	7.5	3.3 J
Ethyl Benzene	100-41-4	0.52	1.7	4.3	0.92 J
Freon 11	75-69-4	1.0	2.2	5.6	1.3 J
Freon 113	76-13-1	1.6	3.0	7.6	Not Detected
Freon 114	76-14-2	0.96	2.8	7.0	Not Detected
Freon 12	75-71-8	1.0	2.0	4.9	17
Heptane	142-82-5	0.78	1.6	4.1	Not Detected

Naphthalene  
 91-20-3  
 0.20  
 0.52  
 10  
 0.61 J



EPA METHOD TO-15 GC/MS FULL SCAN  
 Main Street

**Client ID:** SB-5A-1L+1,000cc Tube  
**Lab ID:** 1705524R1-01A  
**Date/Time Collecte** 5/17/17 12:51 PM  
**Media:** Client Canister

**Date/Time Analyzed:** 5/27/17 03:00 PM  
**Dilution Factor:** 1.99  
**Instrument/Filename:** msdp.i / p052707r1

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexachlorobutadiene	87-68-3	3.6	11	42	Not Detected
Hexane	110-54-3	0.24	1.4	3.5	Not Detected
m,p-Xylene	108-38-3	0.65	1.7	4.3	3.3 J
Methyl tert-butyl ether	1634-04-4	0.94	1.4	14	Not Detected
Methylene Chloride	75-09-2	1.5	3.4	34	Not Detected
Naphthalene	91-20-3	0.20	0.52	10	0.61 J
o-Xylene	95-47-6	0.52	1.7	4.3	1.3 J
Propylbenzene	103-65-1	0.55	2.0	4.9	Not Detected
Styrene	100-42-5	0.95	1.7	4.2	Not Detected
Tetrachloroethene	127-18-4	0.93	2.7	6.7	Not Detected
Tetrahydrofuran	109-99-9	0.61	1.2	2.9	Not Detected
Toluene	108-88-3	0.46	1.5	3.7	4.4
trans-1,2-Dichloroethene	156-60-5	1.4	1.6	3.9	Not Detected
trans-1,3-Dichloropropene	10061-02-6	0.48	1.8	4.5	Not Detected
Trichloroethene	79-01-6	1.2	2.1	5.3	Not Detected
Vinyl Chloride	75-01-4	0.23	1.0	2.5	Not Detected

J = Estimated value.

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	90
4-Bromofluorobenzene	460-00-4	70-130	104
Toluene-d8	2037-26-5	70-130	100



EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	Lab Blank	<b>Date/Time Analyzed:</b>	5/27/17 12:04 PM
<b>Lab ID:</b>	1705524R1-02A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052706d
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	71-55-6	0.47	1.1	2.7	Not Detected
1,1,2,2-Tetrachloroethane	79-34-5	0.46	1.4	3.4	Not Detected
1,1,2-Trichloroethane	79-00-5	0.54	1.1	2.7	Not Detected
1,1-Dichloroethane	75-34-3	0.15	0.81	2.0	Not Detected
1,1-Dichloroethene	75-35-4	0.43	0.79	2.0	Not Detected
1,1-Difluoroethane	75-37-6	NA	D	5.4	Not Detected
1,2,4-Trichlorobenzene	120-82-1	1.4	3.7	15	Not Detected
1,2,4-Trimethylbenzene	95-63-6	0.75	0.98	2.4	Not Detected
1,2-Dibromoethane (EDB)	106-93-4	0.35	1.5	3.8	Not Detected
1,2-Dichlorobenzene	95-50-1	0.40	1.2	3.0	0.41 J
1,2-Dichloroethane	107-06-2	0.41	0.81	2.0	Not Detected
1,2-Dichloropropane	78-87-5	0.41	0.92	2.3	Not Detected
1,3,5-Trimethylbenzene	108-67-8	0.52	0.98	2.4	Not Detected
1,3-Butadiene	106-99-0	0.23	0.44	1.1	Not Detected
1,3-Dichlorobenzene	541-73-1	0.19	1.2	3.0	0.25 J
1,4-Dichlorobenzene	106-46-7	0.34	1.2	3.0	Not Detected
1,4-Dioxane	123-91-1	1.1	1.8	7.2	Not Detected
2,2,4-Trimethylpentane	540-84-1	0.21	0.93	2.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	78-93-3	0.83	1.5	5.9	Not Detected
2-Hexanone	591-78-6	0.36	2.0	8.2	Not Detected
2-Propanol	67-63-0	0.36	1.2	4.9	Not Detected
3-Chloropropene	107-05-1	1.0	1.6	6.3	Not Detected
4-Ethyltoluene	622-96-8	0.57	0.98	2.4	Not Detected
4-Methyl-2-pentanone	108-10-1	0.55	0.82	2.0	Not Detected

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	Lab Blank	<b>Date/Time Analyzed:</b>	5/27/17 12:04 PM
<b>Lab ID:</b>	1705524R1-02A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052706d
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	67-64-1	1.0	1.2	12	2.6 J
alpha-Chlorotoluene	100-44-7	0.53	1.0	2.6	Not Detected
Benzene	71-43-2	0.15	0.64	1.6	Not Detected
Bromodichloromethane	75-27-4	0.57	1.3	3.4	Not Detected
Bromoform	75-25-2	0.64	2.1	5.2	Not Detected
Bromomethane	74-83-9	1.6	1.9	19	Not Detected
Carbon Disulfide	75-15-0	0.36	1.6	6.2	0.46 J
Carbon Tetrachloride	56-23-5	1.8	1.8	3.1	Not Detected
Chlorobenzene	108-90-7	0.30	0.92	2.3	Not Detected
Chloroethane	75-00-3	0.75	1.3	5.3	Not Detected
Chloroform	67-66-3	0.42	0.98	2.4	Not Detected
Chloromethane	74-87-3	1.7	1.7	10	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.61	0.79	2.0	Not Detected
cis-1,3-Dichloropropene	10061-01-5	0.45	0.91	2.3	Not Detected
Cumene	98-82-8	0.28	0.98	2.4	Not Detected
Cyclohexane	110-82-7	0.30	0.69	1.7	Not Detected
Dibromochloromethane	124-48-1	0.54	1.7	4.2	Not Detected
Ethanol	64-17-5	0.52	0.94	3.8	Not Detected
Ethyl Benzene	100-41-4	0.26	0.87	2.2	Not Detected
Freon 11	75-69-4	0.52	1.1	2.8	Not Detected
Freon 113	76-13-1	0.82	1.5	3.8	Not Detected
Freon 114	76-14-2	0.48	1.4	3.5	Not Detected
Freon 12	75-71-8	0.50	0.99	2.5	Not Detected
Heptane	142-82-5	0.39	0.82	2.0	Not Detected

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	Lab Blank	<b>Date/Time Analyzed:</b>	5/27/17 12:04 PM
<b>Lab ID:</b>	1705524R1-02A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052706d
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexachlorobutadiene	87-68-3	1.8	5.3	21	Not Detected
Hexane	110-54-3	0.12	0.70	1.8	Not Detected
m,p-Xylene	108-38-3	0.33	0.87	2.2	Not Detected
Methyl tert-butyl ether	1634-04-4	0.47	0.72	7.2	Not Detected
Methylene Chloride	75-09-2	0.74	1.7	17	Not Detected
Naphthalene	91-20-3	0.10	0.26	5.2	Not Detected
o-Xylene	95-47-6	0.26	0.87	2.2	Not Detected
Propylbenzene	103-65-1	0.28	0.98	2.4	Not Detected
Styrene	100-42-5	0.48	0.85	2.1	Not Detected
Tetrachloroethene	127-18-4	0.47	1.4	3.4	Not Detected
Tetrahydrofuran	109-99-9	0.31	0.59	1.5	Not Detected
Toluene	108-88-3	0.23	0.75	1.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.73	0.79	2.0	Not Detected
trans-1,3-Dichloropropene	10061-02-6	0.24	0.91	2.3	Not Detected
Trichloroethene	79-01-6	0.61	1.1	2.7	Not Detected
Vinyl Chloride	75-01-4	0.11	0.51	1.3	Not Detected

J = Estimated value.

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	90
4-Bromofluorobenzene	460-00-4	70-130	106
Toluene-d8	2037-26-5	70-130	100

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	CCV	<b>Date/Time Analyzed:</b>	5/27/17 10:23 AM
<b>Lab ID:</b>	1705524R1-03A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052702
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
1,1,1-Trichloroethane	71-55-6	90
1,1,2,2-Tetrachloroethane	79-34-5	96
1,1,2-Trichloroethane	79-00-5	100
1,1-Dichloroethane	75-34-3	91
1,1-Dichloroethene	75-35-4	82
1,1-Difluoroethane	75-37-6	97
1,2,4-Trichlorobenzene	120-82-1	117
1,2,4-Trimethylbenzene	95-63-6	95
1,2-Dibromoethane (EDB)	106-93-4	104
1,2-Dichlorobenzene	95-50-1	106
1,2-Dichloroethane	107-06-2	106
1,2-Dichloropropane	78-87-5	99
1,3,5-Trimethylbenzene	108-67-8	98
1,3-Butadiene	106-99-0	92
1,3-Dichlorobenzene	541-73-1	106
1,4-Dichlorobenzene	106-46-7	106
1,4-Dioxane	123-91-1	97
2,2,4-Trimethylpentane	540-84-1	82
2-Butanone (Methyl Ethyl Ketone)	78-93-3	83
2-Hexanone	591-78-6	83
2-Propanol	67-63-0	80
3-Chloropropene	107-05-1	82
4-Ethyltoluene	622-96-8	99
4-Methyl-2-pentanone	108-10-1	89

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	CCV	<b>Date/Time Analyzed:</b>	5/27/17 10:23 AM
<b>Lab ID:</b>	1705524R1-03A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052702
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
Acetone	67-64-1	83
alpha-Chlorotoluene	100-44-7	90
Benzene	71-43-2	96
Bromodichloromethane	75-27-4	102
Bromoform	75-25-2	118
Bromomethane	74-83-9	81
Carbon Disulfide	75-15-0	84
Carbon Tetrachloride	56-23-5	98
Chlorobenzene	108-90-7	97
Chloroethane	75-00-3	86
Chloroform	67-66-3	94
Chloromethane	74-87-3	98
cis-1,2-Dichloroethene	156-59-2	93
cis-1,3-Dichloropropene	10061-01-5	95
Cumene	98-82-8	92
Cyclohexane	110-82-7	76
Dibromochloromethane	124-48-1	105
Ethanol	64-17-5	78
Ethyl Benzene	100-41-4	90
Freon 11	75-69-4	98
Freon 113	76-13-1	104
Freon 114	76-14-2	106
Freon 12	75-71-8	97
Heptane	142-82-5	89

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	CCV	<b>Date/Time Analyzed:</b>	5/27/17 10:23 AM
<b>Lab ID:</b>	1705524R1-03A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052702
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
Hexachlorobutadiene	87-68-3	126
Hexane	110-54-3	82
m,p-Xylene	108-38-3	89
Methyl tert-butyl ether	1634-04-4	75
Methylene Chloride	75-09-2	91
Naphthalene	91-20-3	77
o-Xylene	95-47-6	88
Propylbenzene	103-65-1	89
Styrene	100-42-5	89
Tetrachloroethene	127-18-4	113
Tetrahydrofuran	109-99-9	79
Toluene	108-88-3	95
trans-1,2-Dichloroethene	156-60-5	88
trans-1,3-Dichloropropene	10061-02-6	89
Trichloroethene	79-01-6	100
Vinyl Chloride	75-01-4	106

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	111
Toluene-d8	2037-26-5	70-130	102

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	LCS	<b>Date/Time Analyzed:</b>	5/27/17 10:48 AM
<b>Lab ID:</b>	1705524R1-04A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052703
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
1,1,1-Trichloroethane	71-55-6	95
1,1,2,2-Tetrachloroethane	79-34-5	101
1,1,2-Trichloroethane	79-00-5	102
1,1-Dichloroethane	75-34-3	87
1,1-Dichloroethene	75-35-4	82
1,1-Difluoroethane	75-37-6	Not Spiked
1,2,4-Trichlorobenzene	120-82-1	114
1,2,4-Trimethylbenzene	95-63-6	102
1,2-Dibromoethane (EDB)	106-93-4	104
1,2-Dichlorobenzene	95-50-1	111
1,2-Dichloroethane	107-06-2	100
1,2-Dichloropropane	78-87-5	99
1,3,5-Trimethylbenzene	108-67-8	104
1,3-Butadiene	106-99-0	90
1,3-Dichlorobenzene	541-73-1	112
1,4-Dichlorobenzene	106-46-7	114
1,4-Dioxane	123-91-1	99
2,2,4-Trimethylpentane	540-84-1	86
2-Butanone (Methyl Ethyl Ketone)	78-93-3	84
2-Hexanone	591-78-6	88
2-Propanol	67-63-0	79
3-Chloropropene	107-05-1	84
4-Ethyltoluene	622-96-8	108
4-Methyl-2-pentanone	108-10-1	94

\* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	LCS	<b>Date/Time Analyzed:</b>	5/27/17 10:48 AM
<b>Lab ID:</b>	1705524R1-04A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052703
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
Acetone	67-64-1	85
alpha-Chlorotoluene	100-44-7	98
Benzene	71-43-2	95
Bromodichloromethane	75-27-4	101
Bromoform	75-25-2	125
Bromomethane	74-83-9	85
Carbon Disulfide	75-15-0	84
Carbon Tetrachloride	56-23-5	102
Chlorobenzene	108-90-7	100
Chloroethane	75-00-3	87
Chloroform	67-66-3	92
Chloromethane	74-87-3	96
cis-1,2-Dichloroethene	156-59-2	85
cis-1,3-Dichloropropene	10061-01-5	100
Cumene	98-82-8	97
Cyclohexane	110-82-7	79
Dibromochloromethane	124-48-1	108
Ethanol	64-17-5	68 Q
Ethyl Benzene	100-41-4	96
Freon 11	75-69-4	96
Freon 113	76-13-1	105
Freon 114	76-14-2	104
Freon 12	75-71-8	96
Heptane	142-82-5	92

\* % Recovery is calculated using unrounded analytical results.



EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	LCS	<b>Date/Time Analyzed:</b>	5/27/17 10:48 AM
<b>Lab ID:</b>	1705524R1-04A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052703
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
Hexachlorobutadiene	87-68-3	122
Hexane	110-54-3	84
m,p-Xylene	108-38-3	94
Methyl tert-butyl ether	1634-04-4	76
Methylene Chloride	75-09-2	87
Naphthalene	91-20-3	74
o-Xylene	95-47-6	94
Propylbenzene	103-65-1	96
Styrene	100-42-5	95
Tetrachloroethene	127-18-4	114
Tetrahydrofuran	109-99-9	80
Toluene	108-88-3	94
trans-1,2-Dichloroethene	156-60-5	97
trans-1,3-Dichloropropene	10061-02-6	91
Trichloroethene	79-01-6	99
Vinyl Chloride	75-01-4	96

Q = Exceeds Quality Control limits.

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	92
4-Bromofluorobenzene	460-00-4	70-130	110
Toluene-d8	2037-26-5	70-130	99

\* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	LCSD	<b>Date/Time Analyzed:</b>	5/27/17 11:13 AM
<b>Lab ID:</b>	1705524R1-04AA	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052704
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
1,1,1-Trichloroethane	71-55-6	94
1,1,2,2-Tetrachloroethane	79-34-5	99
1,1,2-Trichloroethane	79-00-5	101
1,1-Dichloroethane	75-34-3	89
1,1-Dichloroethene	75-35-4	81
1,1-Difluoroethane	75-37-6	Not Spiked
1,2,4-Trichlorobenzene	120-82-1	126
1,2,4-Trimethylbenzene	95-63-6	100
1,2-Dibromoethane (EDB)	106-93-4	103
1,2-Dichlorobenzene	95-50-1	110
1,2-Dichloroethane	107-06-2	100
1,2-Dichloropropane	78-87-5	98
1,3,5-Trimethylbenzene	108-67-8	102
1,3-Butadiene	106-99-0	90
1,3-Dichlorobenzene	541-73-1	110
1,4-Dichlorobenzene	106-46-7	111
1,4-Dioxane	123-91-1	98
2,2,4-Trimethylpentane	540-84-1	87
2-Butanone (Methyl Ethyl Ketone)	78-93-3	84
2-Hexanone	591-78-6	86
2-Propanol	67-63-0	79
3-Chloropropene	107-05-1	86
4-Ethyltoluene	622-96-8	106
4-Methyl-2-pentanone	108-10-1	94

\* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	LCSD	<b>Date/Time Analyzed:</b>	5/27/17 11:13 AM
<b>Lab ID:</b>	1705524R1-04AA	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052704
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
Acetone	67-64-1	84
alpha-Chlorotoluene	100-44-7	96
Benzene	71-43-2	94
Bromodichloromethane	75-27-4	100
Bromoform	75-25-2	124
Bromomethane	74-83-9	89
Carbon Disulfide	75-15-0	85
Carbon Tetrachloride	56-23-5	103
Chlorobenzene	108-90-7	98
Chloroethane	75-00-3	88
Chloroform	67-66-3	93
Chloromethane	74-87-3	97
cis-1,2-Dichloroethene	156-59-2	86
cis-1,3-Dichloropropene	10061-01-5	99
Cumene	98-82-8	95
Cyclohexane	110-82-7	79
Dibromochloromethane	124-48-1	107
Ethanol	64-17-5	68 Q
Ethyl Benzene	100-41-4	95
Freon 11	75-69-4	97
Freon 113	76-13-1	104
Freon 114	76-14-2	104
Freon 12	75-71-8	96
Heptane	142-82-5	92

\* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN  
Main Street

<b>Client ID:</b>	LCSD	<b>Date/Time Analyzed:</b>	5/27/17 11:13 AM
<b>Lab ID:</b>	1705524R1-04AA	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collecte</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p052704
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
Hexachlorobutadiene	87-68-3	133 Q
Hexane	110-54-3	84
m,p-Xylene	108-38-3	93
Methyl tert-butyl ether	1634-04-4	77
Methylene Chloride	75-09-2	87
Naphthalene	91-20-3	83
o-Xylene	95-47-6	92
Propylbenzene	103-65-1	93
Styrene	100-42-5	93
Tetrachloroethene	127-18-4	110
Tetrahydrofuran	109-99-9	81
Toluene	108-88-3	93
trans-1,2-Dichloroethene	156-60-5	99
trans-1,3-Dichloropropene	10061-02-6	90
Trichloroethene	79-01-6	99
Vinyl Chloride	75-01-4	104

Q = Exceeds Quality Control limits.

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	93
4-Bromofluorobenzene	460-00-4	70-130	109
Toluene-d8	2037-26-5	70-130	98

\* % Recovery is calculated using unrounded analytical results.



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1705812 **Amended:** 06/02/2017

**Report Created for:** Environmental Risk Assessors

1420 East Roseville Parkway, Suite 140-262  
Roseville, CA 95661

**Project Contact:** Lita Freeman

**Project P.O.:**

**Project Name:** Main Street

**Project Received:** 05/17/2017

Analytical Report reviewed & approved for release on 05/31/2017 by:

Angela Rydelius,  
Laboratory Manager

*The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.*





## Glossary of Terms & Qualifier Definitions

**Client:** Environmental Risk Assessors  
**Project:** Main Street  
**WorkOrder:** 1705812

### Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



# Analytical Report

**Client:** Environmental Risk Assessors  
**Date Received:** 5/17/17 17:05  
**Date Prepared:** 5/22/17  
**Project:** Main Street

**WorkOrder:** 1705812  
**Extraction Method:** TO17  
**Analytical Method:** TO17  
**Unit:** µg/m<sup>3</sup>

## Volatile Organic Compounds in µg/m<sup>3</sup>

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5A	1705812-001B	SoilGas	05/17/2017 12:51	GC37	139300

Analytes	Result	RL	DF	Date Analyzed
1,1,1-Trichloroethane	ND	2.0	1	05/22/2017 12:42
1,1-Dichloroethane	ND	2.0	1	05/22/2017 12:42
1,1-Dichloroethene	ND	2.0	1	05/22/2017 12:42
1,1-Dichloropropene	ND	2.0	1	05/22/2017 12:42
2,2-Dichloropropane	ND	2.0	1	05/22/2017 12:42
2-Butanone (MEK)	ND	8.0	1	05/22/2017 12:42
2-Hexanone	ND	2.0	1	05/22/2017 12:42
4-Methyl-2-pentanone (MIBK)	ND	10	1	05/22/2017 12:42
Acetone	ND	1000	1	05/22/2017 12:42
Bromochloromethane	ND	2.0	1	05/22/2017 12:42
Carbon Disulfide	ND	10	1	05/22/2017 12:42
Carbon Tetrachloride	ND	2.0	1	05/22/2017 12:42
Chloroform	ND	2.0	1	05/22/2017 12:42
cis-1,2-Dichloroethene	ND	2.0	1	05/22/2017 12:42
Dibromomethane	ND	2.0	1	05/22/2017 12:42
Dichlorodifluoromethane	29	2.0	1	05/22/2017 12:42
Diisopropyl ether (DIPE)	ND	2.0	1	05/22/2017 12:42
Ethyl tert-butyl ether (ETBE)	ND	2.0	1	05/22/2017 12:42
Methylene chloride	ND	10	1	05/22/2017 12:42
n-Butyl benzene	ND	2.0	1	05/22/2017 12:42
t-Butyl alcohol (TBA)	ND	8.0	1	05/22/2017 12:42
tert-Amyl methyl ether (TAME)	ND	2.0	1	05/22/2017 12:42
Tetrahydrofuran	ND	2.0	1	05/22/2017 12:42
trans-1,2-Dichloroethene	ND	2.0	1	05/22/2017 12:42
Trichlorofluoromethane	ND	10	1	05/22/2017 12:42
Benzene	3.3	2.0	1	05/22/2017 12:42
Bromobenzene	ND	2.0	1	05/22/2017 12:42
Bromodichloromethane	ND	2.0	1	05/22/2017 12:42
Bromoform	ND	2.0	1	05/22/2017 12:42
sec-Butyl benzene	ND	2.0	1	05/22/2017 12:42
tert-Butyl benzene	ND	2.0	1	05/22/2017 12:42
Chlorobenzene	ND	2.0	1	05/22/2017 12:42
2-Chlorotoluene	ND	2.0	1	05/22/2017 12:42
4-Chlorotoluene	ND	2.0	1	05/22/2017 12:42
Dibromochloromethane	ND	2.0	1	05/22/2017 12:42
1,2-Dibromo-3-chloropropane	ND	2.0	1	05/22/2017 12:42
1,2-Dibromoethane (EDB)	ND	2.0	1	05/22/2017 12:42

(Cont.)

 Angela Rydelius, Lab Manager



# Analytical Report

**Client:** Environmental Risk Assessors  
**Date Received:** 5/17/17 17:05  
**Date Prepared:** 5/22/17  
**Project:** Main Street

**WorkOrder:** 1705812  
**Extraction Method:** TO17  
**Analytical Method:** TO17  
**Unit:** µg/m<sup>3</sup>

## Volatile Organic Compounds in µg/m<sup>3</sup>

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-5A	1705812-001B	SoilGas	05/17/2017 12:51	GC37	139300

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichlorobenzene	ND	2.0	1	05/22/2017 12:42
1,3-Dichlorobenzene	ND	2.0	1	05/22/2017 12:42
1,4-Dichlorobenzene	ND	2.0	1	05/22/2017 12:42
1,2-Dichloroethane (1,2-DCA)	ND	2.0	1	05/22/2017 12:42
1,2-Dichloropropane	ND	2.0	1	05/22/2017 12:42
1,3-Dichloropropane	ND	2.0	1	05/22/2017 12:42
cis-1,3-Dichloropropene	ND	2.0	1	05/22/2017 12:42
trans-1,3-Dichloropropene	ND	2.0	1	05/22/2017 12:42
Ethylbenzene	ND	2.0	1	05/22/2017 12:42
Hexachlorobutadiene	ND	2.0	1	05/22/2017 12:42
Isopropylbenzene	ND	2.0	1	05/22/2017 12:42
4-Isopropyl toluene	ND	2.0	1	05/22/2017 12:42
Methyl-t-butyl ether (MTBE)	ND	2.0	1	05/22/2017 12:42
Naphthalene	ND	2.0	1	05/22/2017 12:42
n-Propyl benzene	ND	2.0	1	05/22/2017 12:42
Styrene	ND	2.0	1	05/22/2017 12:42
1,1,1,2-Tetrachloroethane	ND	2.0	1	05/22/2017 12:42
1,1,2,2-Tetrachloroethane	ND	2.0	1	05/22/2017 12:42
Tetrachloroethene	ND	2.0	1	05/22/2017 12:42
Toluene	6.0	2.0	1	05/22/2017 12:42
1,2,3-Trichlorobenzene	ND	2.0	1	05/22/2017 12:42
1,2,4-Trichlorobenzene	ND	2.0	1	05/22/2017 12:42
1,1,2-Trichloroethane	ND	2.0	1	05/22/2017 12:42
Trichloroethene	ND	2.0	1	05/22/2017 12:42
1,2,3-Trichloropropane	ND	2.0	1	05/22/2017 12:42
1,2,4-Trimethylbenzene	2.8	2.0	1	05/22/2017 12:42
1,3,5-Trimethylbenzene	ND	2.0	1	05/22/2017 12:42
Xylenes, Total	6.1	6.0	1	05/22/2017 12:42
Surrogates	REC (%)	Limits		
1,2-DCA-d4	96	70-130		05/22/2017 12:42
toluene-d8	95	70-130		05/22/2017 12:42
4-BFB	94	70-130		05/22/2017 12:42

Analyst(s): KBO

 Angela Rydelius, Lab Manager





## Quality Control Report

**Client:** Environmental Risk Assessors  
**Date Prepared:** 5/22/17  
**Date Analyzed:** 5/22/17  
**Instrument:** GC37  
**Matrix:** Sorbent Tube  
**Project:** Main Street

**WorkOrder:** 1705812  
**BatchID:** 139300  
**Extraction Method:** TO17  
**Analytical Method:** TO17  
**Unit:** µg/m<sup>3</sup>  
**Sample ID:** MB/LCS-139300

### QC Summary Report for TO17

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1,1-Trichloroethane	ND	49.8	2.0	50	-	100	60-140
1,1-Dichloroethane	ND	55.6	2.0	50	-	111	60-140
1,1-Dichloroethene	ND	55.3	2.0	50	-	111	60-140
1,1-Dichloropropene	ND	51.2	2.0	50	-	102	60-140
2,2-Dichloropropane	ND	50.0	2.0	50	-	100	60-140
2-Butanone (MEK)	ND	227	8.0	200	-	114	60-140
2-Hexanone	ND	63.5	2.0	50	-	127	60-140
4-Methyl-2-pentanone (MIBK)	ND	62.2	10	50	-	124	60-140
Acetone	ND	1240	100	1000	-	124	60-140
Bromochloromethane	ND	49.7	2.0	50	-	99	60-140
Carbon Disulfide	ND	59.1	10	50	-	118	60-140
Carbon Tetrachloride	ND	51.0	2.0	50	-	102	60-140
Chloroform	ND	53.6	2.0	50	-	107	60-140
cis-1,2-Dichloroethene	ND	58.3	2.0	50	-	117	60-140
Dibromomethane	ND	52.1	2.0	50	-	104	60-140
Dichlorodifluoromethane	ND	43.2	2.0	50	-	86	60-140
Diisopropyl ether (DIPE)	ND	52.7	2.0	50	-	105	60-140
Ethyl tert-butyl ether (ETBE)	ND	57.7	2.0	50	-	115	60-140
Methylene chloride	ND	62.4	10	50	-	125	60-140
n-Butyl benzene	ND	50.5	2.0	50	-	101	60-140
t-Butyl alcohol (TBA)	ND	241	8.0	200	-	120	60-140
tert-Amyl methyl ether (TAME)	ND	57.2	2.0	50	-	114	60-140
Tetrahydrofuran	ND	546	2.0	500	-	109	60-140
trans-1,2-Dichloroethene	ND	46.6	2.0	50	-	93	60-140
Trichlorofluoromethane	ND	45.7	10	50	-	91	60-140
Benzene	ND	50.8	2.0	50	-	102	60-140
Bromobenzene	ND	50.5	2.0	50	-	101	60-140
Bromodichloromethane	ND	51.4	2.0	50	-	103	60-140
Bromoform	ND	49.6	2.0	50	-	99	60-140
sec-Butyl benzene	ND	50.8	2.0	50	-	102	60-140
tert-Butyl benzene	ND	52.0	2.0	50	-	104	60-140
Chlorobenzene	ND	49.7	2.0	50	-	99	60-140
2-Chlorotoluene	ND	49.3	2.0	50	-	99	60-140
4-Chlorotoluene	ND	51.8	2.0	50	-	104	60-140
Dibromochloromethane	ND	49.1	2.0	50	-	98	60-140
1,2-Dibromo-3-chloropropane	ND	19.1	2.0	20	-	96	60-140
1,2-Dibromoethane (EDB)	ND	51.1	2.0	50	-	102	60-140

(Cont.)

 QA/QC Officer



## Quality Control Report

**Client:** Environmental Risk Assessors  
**Date Prepared:** 5/22/17  
**Date Analyzed:** 5/22/17  
**Instrument:** GC37  
**Matrix:** Sorbent Tube  
**Project:** Main Street

**WorkOrder:** 1705812  
**BatchID:** 139300  
**Extraction Method:** TO17  
**Analytical Method:** TO17  
**Unit:** µg/m<sup>3</sup>  
**Sample ID:** MB/LCS-139300

### QC Summary Report for TO17

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,2-Dichlorobenzene	ND	49.3	2.0	50	-	99	60-140
1,3-Dichlorobenzene	ND	48.8	2.0	50	-	98	60-140
1,4-Dichlorobenzene	ND	48.5	2.0	50	-	97	60-140
1,2-Dichloroethane (1,2-DCA)	ND	53.4	2.0	50	-	107	60-140
1,2-Dichloropropane	ND	56.0	2.0	50	-	112	60-140
1,3-Dichloropropane	ND	52.5	2.0	50	-	105	60-140
cis-1,3-Dichloropropene	ND	55.4	2.0	50	-	111	60-140
trans-1,3-Dichloropropene	ND	59.5	2.0	50	-	119	60-140
Ethylbenzene	ND	51.7	2.0	50	-	103	60-140
Hexachlorobutadiene	ND	44.2	2.0	50	-	88	60-140
Isopropylbenzene	ND	49.5	2.0	50	-	99	60-140
4-Isopropyl toluene	ND	50.4	2.0	50	-	101	60-140
Methyl-t-butyl ether (MTBE)	ND	55.1	2.0	50	-	110	60-140
Naphthalene	ND	49.7	2.0	50	-	99	60-140
n-Propyl benzene	ND	52.7	2.0	50	-	105	60-140
Styrene	ND	52.2	2.0	50	-	104	60-140
1,1,1,2-Tetrachloroethane	ND	50.5	2.0	50	-	101	60-140
1,1,2,2-Tetrachloroethane	ND	52.8	2.0	50	-	106	60-140
Tetrachloroethene	ND	48.1	2.0	50	-	96	60-140
Toluene	ND	48.2	2.0	50	-	96	60-140
1,2,3-Trichlorobenzene	ND	45.5	2.0	50	-	91	60-140
1,2,4-Trichlorobenzene	ND	46.3	2.0	50	-	93	60-140
1,1,2-Trichloroethane	ND	49.8	2.0	50	-	100	60-140
Trichloroethene	ND	47.9	2.0	50	-	96	60-140
1,2,3-Trichloropropane	ND	51.6	2.0	50	-	103	60-140
1,2,4-Trimethylbenzene	ND	51.3	2.0	50	-	103	60-140
1,3,5-Trimethylbenzene	ND	52.1	2.0	50	-	104	60-140
Xylenes, Total	ND	155	6.0	150	-	103	60-140
<b>Surrogate Recovery</b>							
1,2-DCA-d4	98.44	105		100	98	105	70-130
toluene-d8	98.42	102		100	98	102	70-130
4-BFB	94.29	99.6		100	94	100	70-130

 QA/QC Officer



1534 Willow Pass Rd  
 Pittsburg, CA 94565-1701  
 (925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1705812

ClientCode: ERAR

- WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQulS   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

Report to:  
 Lita Freeman  
 Environmental Risk Assessors  
 1420 East Roseville Parkway, Suite  
 140-262  
 Roseville, CA 95661  
 (916) 677-9897    FAX:

Email: litafreeman@gmail.com  
 cc/3rd Party:  
 PO:  
 ProjectNo: Main Street

Bill to:  
 Accounts Payable  
 Environmental Risk Assessors  
 1420 East Roseville Parkway, Suite 140  
 Roseville, CA 95661

Requested TAT: 5 days;  
 Date Received: 05/17/2017  
 Date Logged: 05/18/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1705812-001	SB-5A	SoilGas	5/17/2017 12:51	<input type="checkbox"/>		A	A	A	A	A	A	B					
1705812-002	SB-5A DUPE	SoilGas	5/17/2017 00:00	<input type="checkbox"/>	A												

**Test Legend:**

1	PRSUMAHOLD	2	TO15_HIGHLEVEL_SOIL(UG/M3)	3	TO15_HIGHLEVEL-LC_SOIL(UG/M3)	4	TO15_Scan-SIM_SOIL(UG/M3) [N]
5	TO15-8260_SOIL(UG/M3) [N]	6	TO15-LC_SOIL(UG/M3) [N]	7	TO17VOC_ST(UGM3)	8	
9		10		11		12	

Prepared by: Jena Alfaro

The following SampID: 001A contains testgroup TO15\_SG(UG/M3).

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
 Hazardous samples will be returned to client or disposed of at client expense.



### WORK ORDER SUMMARY

**Client Name:** ENVIRONMENTAL RISK ASSESSORS

**Project:** Main Street

**Work Order:** 1705812

**Client Contact:** Lita Freeman

**QC Level:** LEVEL 2

**Contact's Email:** litafreeman@gmail.com

**Comments:**

**Date Logged:** 5/18/2017

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1705812-001A	SB-5A	SoilGas	TO15 for Soil Vapor (Scan-SIM)	1	1L Summa	<input type="checkbox"/>	5/17/2017 12:51	5 days		<input type="checkbox"/>	
1705812-001B	SB-5A	SoilGas	TO17 (VOCs) (µg/m³) <Naphthalene, Xylenes, Total>	1	Sorbent Tube	<input type="checkbox"/>	5/17/2017 12:51	5 days		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

<div style="display: flex; align-items: center;"> <div> <p><b>McCAMPBELL ANALYTICAL, INC.</b></p> <p>1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701</p> <p>Telephone: (877) 252-9262 / Fax: (925) 252-9269</p> <p>www.mccampbell.com      main@mccampbell.com</p> </div> </div>	<b>CHAIN OF CUSTODY RECORD</b>																																				
	Turn Around Time: 1 Day Rush		2 Day Rush		3 Day Rush		STD <input checked="" type="checkbox"/>		Quote #																												
	J-Flag / MDL		ESL		Cleanup Approved		Bottle Order #																														
	Delivery Format: PDF		GeoTracker EDF <input checked="" type="checkbox"/>		EDD		Write On (DW)		EQuIS																												
Report To: <u>Lita Freeman</u> Bill To: <u>Lita Freeman</u>					<b>Analysis Requested</b>					Helium Shroud SN#																											
Company: <u>ERA</u>					<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>VOCs TO-15 (µg/m<sup>3</sup>) - See Notes</td> <td>8010 by TO-15 (µg/m<sup>3</sup>)</td> <td>TPH(g) (µg/m<sup>3</sup>)</td> <td>LEED: (inc. 4PCH, Formaldehyde, CO, Total VOCs)</td> <td>Fixed Gas (CO<sub>2</sub>, Methane, Ethane, Ethylene, Acetylene, Propane, CO) %</td> <td>Fixed Gas: (O<sub>2</sub>, N<sub>2</sub>) %</td> <td>APH: Aliphatic and/or Aromatic (circle one) µg/m<sup>3</sup></td> <td>Helium Leak Check %</td> <td>Leak Check (IPA, Norflorane, 1,1-difluoroethane) µg/m<sup>3</sup></td> </tr> <tr> <td colspan="9" style="text-align: center;"> <u>TO-17, n-dodecaphthalene</u>  <u>held</u> </td> </tr> </table>					VOCs TO-15 (µg/m <sup>3</sup> ) - See Notes	8010 by TO-15 (µg/m <sup>3</sup> )	TPH(g) (µg/m <sup>3</sup> )	LEED: (inc. 4PCH, Formaldehyde, CO, Total VOCs)	Fixed Gas (CO <sub>2</sub> , Methane, Ethane, Ethylene, Acetylene, Propane, CO) %	Fixed Gas: (O <sub>2</sub> , N <sub>2</sub> ) %	APH: Aliphatic and/or Aromatic (circle one) µg/m <sup>3</sup>	Helium Leak Check %	Leak Check (IPA, Norflorane, 1,1-difluoroethane) µg/m <sup>3</sup>	<u>TO-17, n-dodecaphthalene</u> <u>held</u>									<b>Leak Check Default is IPA</b>									
VOCs TO-15 (µg/m <sup>3</sup> ) - See Notes	8010 by TO-15 (µg/m <sup>3</sup> )	TPH(g) (µg/m <sup>3</sup> )	LEED: (inc. 4PCH, Formaldehyde, CO, Total VOCs)	Fixed Gas (CO <sub>2</sub> , Methane, Ethane, Ethylene, Acetylene, Propane, CO) %						Fixed Gas: (O <sub>2</sub> , N <sub>2</sub> ) %	APH: Aliphatic and/or Aromatic (circle one) µg/m <sup>3</sup>	Helium Leak Check %	Leak Check (IPA, Norflorane, 1,1-difluoroethane) µg/m <sup>3</sup>																								
<u>TO-17, n-dodecaphthalene</u> <u>held</u>																																					
Email: <u>Lita.freeman@gmail.com</u>										Notes: Please specify units if different than default: VOCs is reported in µg/m <sup>3</sup> , fixed is reported in %.		<u>Leak check 11DFN</u>																									
Alt Email:      Tele:					Matrix		Canister Pressure / Vacuum																														
Project Name: <u>Main Street</u> Project#:					Soilgas		Indoor Air		Initial      Final																												
Project Location: <u>927 Main St Pleasanton</u> PO #					<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">SAMPLE ID</td> <td colspan="2">Sampling Start</td> <td>End</td> <td rowspan="2">Canister SN#</td> <td rowspan="2">Sample Kit / Manifold #</td> <td rowspan="2">VOCs TO-15 (µg/m<sup>3</sup>)</td> <td rowspan="2">8010 by TO-15 (µg/m<sup>3</sup>)</td> <td rowspan="2">TPH(g) (µg/m<sup>3</sup>)</td> <td rowspan="2">LEED: (inc. 4PCH, Formaldehyde, CO, Total VOCs)</td> <td rowspan="2">Fixed Gas (CO<sub>2</sub>, Methane, Ethane, Ethylene, Acetylene, Propane, CO) %</td> <td rowspan="2">Fixed Gas: (O<sub>2</sub>, N<sub>2</sub>) %</td> <td rowspan="2">APH: Aliphatic and/or Aromatic (circle one) µg/m<sup>3</sup></td> <td rowspan="2">Helium Leak Check %</td> <td rowspan="2">Leak Check (IPA, Norflorane, 1,1-difluoroethane) µg/m<sup>3</sup></td> <td rowspan="2">TO-17, n-dodecaphthalene</td> <td rowspan="2">held</td> <td colspan="2">Initial</td> <td colspan="2">Final</td> </tr> <tr> <td>Location / Field Point</td> <td>Date</td> <td>Time</td> <td>Time</td> <td>Soilgas</td> <td>Indoor Air</td> <td></td> <td></td> </tr> </table>		SAMPLE ID	Sampling Start		End	Canister SN#	Sample Kit / Manifold #	VOCs TO-15 (µg/m <sup>3</sup> )	8010 by TO-15 (µg/m <sup>3</sup> )	TPH(g) (µg/m <sup>3</sup> )	LEED: (inc. 4PCH, Formaldehyde, CO, Total VOCs)	Fixed Gas (CO <sub>2</sub> , Methane, Ethane, Ethylene, Acetylene, Propane, CO) %	Fixed Gas: (O <sub>2</sub> , N <sub>2</sub> ) %	APH: Aliphatic and/or Aromatic (circle one) µg/m <sup>3</sup>	Helium Leak Check %	Leak Check (IPA, Norflorane, 1,1-difluoroethane) µg/m <sup>3</sup>	TO-17, n-dodecaphthalene	held	Initial		Final		Location / Field Point	Date	Time	Time	Soilgas	Indoor Air			-29      -5	
SAMPLE ID	Sampling Start		End	Canister SN#			Sample Kit / Manifold #	VOCs TO-15 (µg/m <sup>3</sup> )	8010 by TO-15 (µg/m <sup>3</sup> )	TPH(g) (µg/m <sup>3</sup> )														LEED: (inc. 4PCH, Formaldehyde, CO, Total VOCs)	Fixed Gas (CO <sub>2</sub> , Methane, Ethane, Ethylene, Acetylene, Propane, CO) %	Fixed Gas: (O <sub>2</sub> , N <sub>2</sub> ) %	APH: Aliphatic and/or Aromatic (circle one) µg/m <sup>3</sup>	Helium Leak Check %	Leak Check (IPA, Norflorane, 1,1-difluoroethane) µg/m <sup>3</sup>	TO-17, n-dodecaphthalene	held	Initial		Final			
Location / Field Point	Date	Time	Time		Soilgas	Indoor Air																															
Sampler Signature: <u>Lita D Freeman</u>																																					

**\*\*MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.**

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time	Comments / Instructions
<u>Lita D Freeman ERA</u>	<u>5/17/17</u>	<u>1622</u>	<u>[Signature]</u>	<u>5/17/17</u>	<u>1622</u>	
<u>[Signature]</u>	<u>5/17</u>	<u>1705</u>	<u>[Signature]</u>	<u>5/17/17</u>	<u>1705</u>	



### Sample Receipt Checklist

Client Name: **Environmental Risk Assessors**  
 Project Name: **Main Street**

Date and Time Received: **5/17/2017 17:05**  
 Date Logged: **5/18/2017**  
 Received by: **Jena Alfaro**  
 Logged by: **Jena Alfaro**

WorkOrder No: **1705812** Matrix: SoilGas  
 Carrier: Benjamin Yslas (MAI Courier)

**Chain of Custody (COC) Information**

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

**Sample Receipt Information**

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

**Sample Preservation and Hold Time (HT) Information**

All samples received within holding time? Yes  No  NA   
 Sample/Temp Blank temperature Temp: NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

**UCMR3 Samples:**

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes  No  NA   
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes  No  NA

Comments: