RECEIVED
By Alameda County Environmental Health 7:28 am, Mar 16, 2016

PERJURY STATEMENT

Subject: Fuel Lake Case No. Ro0002981 and Geotracker Clobal ID T1000000416, Red Hanger Cleaners, 6335-6339 College Ave., Oakland, CA 94618

" I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge."

Ted Cleveland
Vice President – Eastern Region
EFI Global, Inc.

P&D ENVIRONMENTAL, INC.

55 Santa Clara Ave, Suite 240
Oakland, CA 94610
(510) 658-6916

March 15, 2016
Work Plan 0461.W3

Mr. Keith Nowell
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

SUBJECT: SITE INVESTIGATION AND SOIL VAPOR EXTRACTION FEASIBILITY TEST WORK PLAN
Spills Leaks, Investigation and Cleanup Leak Case No RO0002981
Geotracker Global ID T10000000416
Red Hanger Kleaners
6235-6239 College Avenue
Oakland, CA

Dear Mr. Nowell:

P&D Environmental, Inc. (P&D) has prepared this work plan for site investigation and a soil vapor extraction (SVE) feasibility test at the subject site on behalf of the property owner Ronald Elvidge and EFI Global, Inc. (EFI). This work plan is prepared following receipt of site access denial for additional soil gas investigation for the property located to the west of the subject site and conditions for access that we cannot satisfy for access to the property located to the northeast of the subject site, and to augment available information regarding the subsurface presence of tetrachloroethene (PCE) at the subject site.

The work scope includes the following activities:

- Drilling of six onsite boreholes designated as B9 through B14 to collect groundwater samples,
- Installation of two onsite soil gas wells designated as SG4-17 (17-foot depth) and SG11-17 (17-foot depth) for soil gas sample collection,
- Video camera visual evaluation of the site sanitary sewer pipe interior and exploratory excavation along the length of a portion of the onsite sanitary sewer to evaluate sanitary sewer trench construction materials and to evaluate the presence of PCE in the trench materials, with installation of horizontal SVE piping in the portion of the onsite sanitary sewer trench where exploratory excavation is performed,
- Installation of three SVE wells designated as SVE1, SVE2 and SVE3 for SVE feasibility testing,
- Perform a SVE feasibility test using existing soil gas wells and Vapor Pins at the site to monitor for vacuum in the vicinity of the locations where soil vapor is extracted.

All work will be performed under the direct supervision of a California professional geologist. A Site Location Map is attached as Figure 1, a Site Plan showing historical and proposed groundwater sample collection borehole locations is attached as Figure 2, and proposed soil gas wells and proposed SVE wells are shown on Figures 5 and 6.

BACKGROUND

A detailed discussion of the historical site use as a drycleaner from 1987 to 2015 (approximately 28 years) and of all known historical subsurface investigations is provided in P&D's Soil Gas Investigation Work Plan dated October 16, 2015 (document 0461.W1). The work plan includes all known available soil, groundwater, soil gas, and indoor air sample results (through October 13, 2015) for the subject site and also discusses the available known historical dry cleaner operations from 1953 to 1987 (approximately 34 years) at the nearby former Kay's Cleaners located at 6251-6255 College Avenue. Review of the available data shows that trichloroethene (TCE) has not been detected in any soil, groundwater, or soil gas samples. All known historical water quality results for the site are summarized in Table 1 and the groundwater sample collection locations are shown in Figure 2 attached with this Site Investigation and Soil Vapor Extraction Feasibility Test Work Plan.

Documentation of the evaluation and mitigation of indoor air quality at the subject site (including post-mitigation air sample results for samples collected on October 21, 2015) are provided in P&D's November 3, 2015 Indoor Air Investigation Report (document 0461.R2). The report concluded that indoor air mitigation measures had successfully mitigated indoor air PCE and TCE concentrations to below commercial trigger and Environmental Screening Level concentrations for common areas and tenant spaces.

Documentation of a sub-slab depressurization feasibility test that was performed on November 16, 2015 in the former Red Hanger Kleaners dry cleaner store at the subject site is provided in P&D's December 14, 2015 Sub-Slab Depressurization Feasibility Test Report (document 0461.R4). During the sub-slab depressurization feasibility test a vacuum of between 12 and 13 inches of water column was applied under the building slab and the highest recorded vacuum at soil gas well SG9-17 (located within the footprint of the subject site former dry cleaner store) was approximately 0.1 inches of water column, and the highest recorded vacuum at soil gas well SG10-7 (located within the footprint of the subject site former dry cleaner store) was approximately 0.09 inches of water column. The information obtained during the feasibility test demonstrated that although a sub-slab grade beam appeared to function as a barrier to the eastward migration of PCE vapors beneath the floor slab, vacuum was readily observed at all observation locations beneath the floor slab. The readily observed vacuum is attributed to the uniform presence of approximately 8 to 9.5 inches of coarse-grained material consisting primarily of gravel located beneath the floor slab.

Documentation of soil gas well installation during November 2015 and associated soil gas sample collection on December 2, 2015 at the subject site is provided in P&D's January 21, 2016 Soil Gas

Investigation Report (document 0461.R3). The sample results for shallow (approximately 7 foot depth) and deeper (approximately 17 foot depth) soil gas samples collected on December 2, 2015 are shown as Figures 3 and 4 attached with this Site Investigation and Soil Vapor Extraction Feasibility Test Work Plan. A detailed discussion of the site geology and hydrogeology based upon available historical boring logs, in addition to a summary of the depth to groundwater during historical site investigations is provided in the January 21, 2016 report.

SCOPE OF WORK

P&D will perform the following tasks for site investigation and SVE feasibility evaluation at the subject site.

- Permitting, mark drilling locations for Underground Service Alert notification and prepare a health and safety plan.
- Drilling six onsite boreholes designated as B9 through B14 to collect groundwater samples,
- Installation of two soil gas wells designated as SG4-17 (17-foot depth) and SG11-17 (17-foot depth) for soil gas sample collection,
- Video camera visual evaluation of the site sanitary sewer pipe interior and exploratory excavation along the length of a portion of the onsite sanitary sewer to evaluate sanitary sewer trench construction materials and to evaluate the presence of PCE in the trench materials, with installation of horizontal SVE piping in the portion of the onsite sanitary sewer trench where exploratory excavation is performed,
- Installation of three SVE wells designated as SVE1, SVE2 and SVE3 for SVE feasibility testing,
- Perform a SVE feasibility test using existing soil gas wells and Vapor Pins at the site to monitor for vacuum in the vicinity of the locations where soil vapor is extracted.
- Arrange for laboratory analysis of soil, water, soil gas, and air samples.
- Report preparation.

Each of these is discussed below in detail.

Permitting, Mark Drilling Locations, and Health and Safety Plan Preparation

Following oversight agency approval of this work plan, permits will be obtained for drilling and well installation from the Alameda County Public Works Agency (ACPWA), notification of the SVE feasibility test will be provided to the Bay Area Air Quality Management District, and site access will be scheduled with the property manager. The drilling locations will be marked with white paint and Underground Service Alert will be notified for underground utility location. A health and safety plan will be prepared for the scope of work identified in this work plan. Notification will be provided to the ACPWA inspector for the drilling dates, and notification will

be provided to the Alameda County Department of Environmental Health (ACDEH) of the scheduled dates of drilling, sampling, and SVE feasibility testing.

Borehole Drilling for Groundwater Grab Sample Collection

Groundwater grab samples will be collected from first-encountered groundwater in the boreholes to further evaluate the extent of PCE in first-encountered groundwater. Boreholes will be continuously cored to a depth of 25 feet below the ground surface (bgs) at locations designated as B9 through B14 (see Figure 2) using Geoprobe direct-push technology to drive a 2.5-inch outside diameter Geoprobe macrocore sampler lined with transparent PVC sleeves. The soil from the borings will be logged in the field in accordance with standard geologic field techniques and the Unified Soil Classification System. All soil from the boreholes will be evaluated with a Photoionization Detector (PID) equipped with a 10.6 eV bulb and calibrated using a 100 ppm isobutylene standard.

A soil sample will be collected from borehole B9 (located adjacent to the sanitary sewer trench) at a depth of approximately 3 feet bgs (the sanitary sewer pipe invert depth is approximately 2.5 feet bgs at the adjacent sanitary sewer cleanout). In addition, soil samples will be collected from all of the continuously cored boreholes at a depth immediately above the water table by selecting a 6-inch long portion of the transparent PVC sleeve corresponding to the desired depth, sequentially covering the ends of the selected portion of sleeve with aluminum foil and plastic endcaps, and then labeling and storing the sample in a cooler with ice pending delivery to the laboratory. Chain of custody procedures will be observed for all sample handling. With the exception of the soil sample collected from borehole B9 adjacent to the sanitary sewer cleanout at a depth of 3 feet bgs, all of the soil samples will be placed on hold pending receipt of the groundwater sample results.

Once groundwater is encountered during drilling, a 1-inch diameter temporary slotted PVC pipe will be placed in each borehole and a groundwater sample will be collected from each borehole by inserting a ¼-inch diameter polyethelene tube to the bottom of the borehole and using a peristaltic pump to retrieve the sample. The samples will be collected directly from the discharge tubing at each location into 40-milliliter Volatile Organic Analysis (VOA) vials that will be sealed with Teflon-lined screw caps. The VOA vials will be overturned and tapped to ensure that no air bubbles are present, and then will be labeled and transferred to a cooler with ice until they are transported to the laboratory. Chain of custody documentation procedures will be observed for all sample handling.

All drilling and sampling equipment will be cleaned by steam cleaning or with an Alconox solution followed by a clean water rinse prior to use in each borehole. Following completion of logging and sample collection activities, the boreholes will be filled with neat cement grout. All soil and water generated during subsurface investigation will be stored in 55-gallon labeled drums at the site pending characterization and proper disposal.

Soil Gas Well Construction and Sample Collection

Permanent soil gas wells will be constructed at proposed locations SG4-17 and SG11-17 (see Figures 5 and 6) to evaluate the extent and presence of HVOCs in soil gas. The soil gas wells will be constructed and the soil gas samples will be collected in accordance with procedures recommended in the February 2016 San Francisco Bay Regional Water Quality Control Board User's Guide: Derivation and Application of Environmental Screening Levels, and the following Department of Toxic Substances Control (DTSC) guidance documents:

- July 2015 Advisory - Active Soil Gas Investigations,
- March 2013 – FAQ for the 2012 Active Soil Gas Investigations Advisory,
- October 2011 – Vapor Intrusion Guidance,
- October 2011 – Vapor Intrusion Mitigation Advisory.

Based on low flow condition concerns associated with clay at the site, to remain consistent with construction methods for the soil gas wells previously constructed at the site, and based on access limitations, the permanent soil gas wells will be constructed in boreholes that will be drilled using a 6-inch outside diameter hand auger.

The soil from the borings will be logged in the field in accordance with standard geologic field techniques and the Unified Soil Classification System. All soil from the boreholes will be evaluated with a PID equipped with a 10.6 eV bulb and calibrated using a 100 ppm isobutylene standard. No soil samples will be retained for laboratory analysis.

The soil gas wells will be constructed by pouring #2/16 Lonestar sack sand into the borehole to fill the lowermost one foot of the borehole with sand. A ¾ inch diameter PVC pipe will then be used to place a 0.250-inch outside diameter (0.187-inch inside diameter) Teflon tube with a High Density Polyethylene (HDPE) filter at the bottom of the tube to the top of the one-foot thick sand layer (a depth of 1 foot above the bottom of the borehole), and additional #2/16 Lonestar sack sand will be poured into the borehole to two feet above the bottom of the borehole (the lowermost two feet of the borehole will be filled with sand with the filter at the end of the tube in the middle of the sand interval). The ¾-inch diameter PVC pipe will be withdrawn from the borehole as the sand is poured into the borehole while making sure that the HDPE filter stays in the center of the sand interval. Hydrated bentonite slurry will then be placed in the annular space above the sand to a depth of 1 foot bgs.

Each tubing length in the borehole will extend 2 feet above the ground surface, with total tubing lengths being 18 feet for each soil gas well. The top of each soil gas well will be enclosed in a well box with a lid that is secured with bolts. Following construction, the soil gas wells will not be sampled for a minimum of 2 weeks. Soil gas samples will not be collected if more than ½ inch of precipitation has occurred during the five days prior to the scheduled sampling date.

Soil gas samples will be collected from the two new soil gas wells in the following manner. A soil gas sampling manifold with a 1-liter Summa canister as the sampling canister for each location (see Figure 8) will be assembled in a shroud consisting of a 35-gallon Rubbermaid bin that has been modified by cutting viewing ports into the sides of the shroud and covering the viewing ports with transparent polycarbonate sheets. A hole measuring approximately two inches square in the bottom of the shroud allows the shroud to cover the soil gas well while still allowing access to the temporary well through the bottom of the bin. At the time that the sampling manifold is assembled, the vacuum for the sample canister will be verified with a vacuum gauge and recorded.

Prior to sampling the soil gas well, a 10 minute shut-in test of the sampling manifold will be performed by closing the valve located between the filter and the pressure gauge, opening the purge canister valve, and recording the manifold system vacuum (see Figure 8). No purge testing for purge volume determination will be performed in accordance with recommendations in the DTSC July 2015 Advisory for Active Soil Gas Investigations. Following successful verification of the manifold shut-in test, a total of 200 milliliters plus the tubing volume will be extracted prior to sample collection. The purge time will be calculated using a nominal flow rate provided by the flow controller of 150 cubic centimeters per minute.

Following completion of the purging, a lid will be placed onto the shroud and a tracer gas Difluoroethane (DFA) will be sprayed into the shroud interior for one second through a tube connected to a hole in the side of the shroud. Gloves in the lid of the shroud will be used to open the sample canister valve. After verifying that low flow conditions are not present associated with the soil gas sample, an air sample will be collected from the shroud atmosphere to quantify the shroud tracer gas concentration while the soil gas sample is being collected. The shroud atmosphere sample will be collected into a Tedlar bag that is placed into a vacuum chamber with the Tedlar bag inlet connected to a new piece of Teflon or polyethylene tubing that is inserted into the shroud atmosphere through a hole in the side of the shroud.

Once the vacuum for the sample canister valve has decreased to 5 inches of mercury, the gloves in the lid of the bin will be used to close the sample canister valve. The pressure gage on the inlet side of the flow controller (see Figure 8) will be monitored during sample collection to ensure that the vacuum applied to the soil gas well does not exceed 100 inches of water.

One duplicate soil gas sample will be collected into a Summa canister from one of the soil gas wells using a stainless steel sampling tee for the Summa canisters using methods described above. Following soil gas sample collection, a PID will be connected to the soil gas well Teflon tubing to obtain a preliminary field value for the sample collection location. The soil gas Summa canisters will be stored in a box and promptly shipped to the laboratory for extraction and analysis.

Chain of custody procedures will be observed for all sample handling. Measurements of vacuums, purging and equilibration time intervals, and PID readings will be recorded on Soil Gas Sampling Data Sheets.

All soil gas well construction equipment will be cleaned with an Alconox solution wash followed by a clean water rinse prior to use at each location. New Teflon tubing and filters and clean, unused vacuum gages and stainless steel sampling manifolds will be used at each sample collection location. All soil and water generated during soil gas well construction will be stored in 55-gallon labeled drums at the site pending characterization and proper disposal.

Sanitary Sewer Pipe and Trench Evaluation

A video camera will be used to visually evaluate the site sanitary sewer pipe interior between the bathroom located at the west end of the former Red Hanger Kleaner's store to 63rd Street for evidence of conditions that could result in releases from the sewer pipe (see Figure 5).

In addition, an exploratory trench measuring approximately 8 feet in length will be excavated along the length of a portion of the onsite sanitary sewer pipe at the location shown on Figure 5 to evaluate sanitary sewer trench construction materials and to evaluate the presence of PCE in the trench materials. The excavated trench materials will be evaluated using a PID as described above, and one soil sample will be collected from each end of the exploratory trench at a depth of approximately 6-inches below the sanitary sewer pipe if no trench bedding material is present, or at a depth of approximately 6-inches below any trench bedding material if trench bedding material is present. The soil samples will be collected at each location into a 2-inch diameter, 6-inch long stainless steel tube in a steel sampler that is driven into undisturbed soil by a slide hammer. Following sample collection each stainless steel tube will be removed from the sampler and the ends of the tube will be sequentially covered with aluminum foil and plastic endcaps. The tubes will be labeled and stored in a cooler with ice pending delivery to the laboratory. Chain of custody procedures will be observed for all sample handling.

Unused stainless steel tubes will be used at each sampling location for sample collection, and all sampling equipment will be cleaned with an Alconox solution followed by a clean water rinse prior to use at each location.

Prior to backfilling the trench a 5-foot long section of 4-inch diameter slotted PVC pipe will be placed horizontally in the bottom of the trench adjacent to the sanitary sewer pipe. The screened interval of the pipe will be constructed using 0.020-inch factory slot screen and the pipe will be surrounded with #2/12 Lonestar washed sack sand for a distance of approximately 3 inches from the pipe. An unslotted vertical section of 4-inch diameter schedule 40 PVC pipe will be connected to the south end of the horizontal pipe with a PVC elbow and the vertical section of pipe will extend upwards to approximately one foot bgs. The trench will then be backfilled and compacted using soil that had been excavated from the trench. Any excess soil will be stored in 55-gallon labeled drums at the site pending characterization and proper disposal. The top of the vertical pipe will be covered with a traffic-rated locking well vault, and the remaining portion of the trench will be resurfaced with concrete.

Soil Vapor Extraction Well Installation

A total of three soil vapor extraction wells designated as SVE1 through SVE3 will be installed at the subject site at locations shown on Figures 5 and 6. The boreholes for the wells will each be drilled to a total depth of 17 feet bgs using 12-inch outside diameter hollow stem augers and a truck-mounted drill rig. At locations SVE1 and SVE2 soil samples will be collected at five-foot intervals using a California-modified split spoon sampler lined with stainless steel or brass tubes driven by a 140 pound hammer falling 30 inches. Blow counts will be recorded every six inches. The soil from the boreholes will be logged in the field in accordance with standard geologic field techniques and the Unified Soil Classification System, and will also be evaluated with a PID using methods described above. Based on limited access at location SVE3, the borehole will be logged using visual observations of cuttings obtained by hand augering to a depth of 5 feet bgs and drilling to the total borehole depth with hollow stem augers, and driller's observations when coarse-grained materials are encountered.

No soil samples will be retained for laboratory analysis. The wells will be constructed using 4-inch diameter Schedule 40 PVC pipe to an approximate total depth of 17 feet bgs with a screen length of 10 feet between the depths of 7 and 17 feet bgs. The screened intervals of the wells will be constructed using 0.020-inch factory slot screen and the well screen will be surrounded with #2/12 Lonestar washed sack sand to a height of one foot above the top of the screen. Bentonite pellets will be placed in the borehole above the filter sand to a height of one foot above the sand. The remaining annular space will be filled with neat cement grout to approximately one foot bgs. The tops of the wells will be covered with traffic-rated locking well vaults.

All drilling and sampling equipment will be cleaned by steam cleaning or with an Alconox solution followed by a clean water rinse or prior to use in each borehole. Any soil or water generated during drilling will be stored in 55-gallon labeled drums at the site pending characterization and disposal.

Soil Vapor Extraction Feasibility Test

A trailer-mounted liquid ring blower capable of generating 12 inches of Mercury vacuum and a flow rate of 250 cubic feet per minute will be used to evaluate vapor extraction feasibility at the site at locations SVE1, SVE2, SVE3, and the riser to the slotted horizontal pipe located in the sanitary sewer trench. Carbon will be used as the air pollution control device.

Monitoring ports with valves will be installed at the top of each existing soil gas well, at each Vapor Pin that is located inside of the building (see Figure 7), at each SVE well where extraction is not performed, and in the top of the riser for the slotted horizontal pipe that is located in the sanitary sewer trench for evaluation of vacuum during SVE. Vacuum will be measured and recorded at vacuum monitoring locations surrounding each location where vacuum is applied to evaluate the radius of vacuum influence for the location where extraction is being performed.

Prior to the beginning of the application of vacuum at each SVE location for the SVE feasibility test, baseline vacuum conditions will be measured at the observation locations. A step test with two different vacuums will be performed at each extraction location, with the second vacuum applied being greater than the initial vacuum applied. Each SVE vacuum step will be performed for approximately 2 to 4 hours. During each SVE vacuum step, the following information and associated time of measurement will be periodically recorded for the blower.

- Air flow rate. Air flow rates will be measured using a hot wire anemometer.
- Air temperature. Ambient air temperature and air temperature at the blower inlet will be monitored at the beginning and end of each step.
- PID value. A field PID will be used to evaluate organic vapor concentrations at the beginning and end of each step at the blower inlet.
- Vacuum at the blower. The vacuum at the blower will be recorded at the beginning and end of each step using a vacuum gage.

During each SVE vacuum step, the following information and associated time of measurement will be periodically recorded at vacuum monitoring locations in the vicinity of the well or pipe riser where SVE is being performed.

- Vacuum will be measured using digital monometers or Magnehelic gages.

One air sample will be collected from a sampling port located at the inlet to the blower at the end of vapor extraction feasibility testing at each extraction location using a 1-liter Summa canister. The air flow rate during sample collection for each sample will be regulated using a new flow regulator that will result in a nominal air flow of 150 cubic centimeters per minute. Following air sample collection each Summa canister will be stored in a box pending delivery to the laboratory. Chain of custody procedures will be observed for all sample handling.

Once the two vacuum steps are completed at an extraction location, the application of vacuum will be removed from the extraction location and vacuum will be monitored at nearby vacuum monitoring locations in an effort to record the rate of vacuum decay.

Arrange for Sample Analysis

All of the soil and groundwater samples collected during site investigation will be analyzed at McCampbell Analytical, Inc. in Pittsburg, California for VOCs, including PCE and associated decomposition products, using EPA Method 8260B. All of the soil gas well samples, the soil gas well shroud air samples, and the SVE feasibility test air samples will be analyzed at Eurofins Air Toxics, Inc. for VOCs, including PCE and associated decomposition products, using EPA Method TO-15. The soil gas sample detection limits will be equal to or less than San Francisco Bay Regional Water Quality Control Board (SFRWQCB) February 2016 Table SG-1 Subslab/Soil Gas Vapor Intrusion Human Health Risk Screening Levels.

Report Preparation

Upon receipt of the laboratory analytical results, a report will be prepared. The report will document the soil gas well installation and sample collection procedures, the groundwater sample collection procedures, the sanitary sewer video observations and exploratory excavation observations, and the soil gas, groundwater and soil sample results. The report will include a map showing the sample collection locations, boring logs, well construction diagrams, copies of the laboratory analytical reports, and tables summarizing the sample results. The report will also include copies of field data sheets generated during the SVE feasibility test, (including air flow, vacuum, radius of influence, and extracted vapor concentrations) recommendations based on the sample results, and the stamp of a professional geologist.

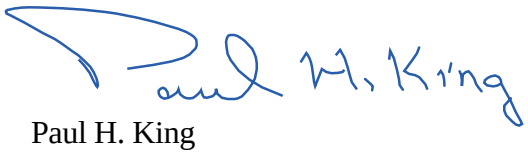
Upon receipt of an approved SVE permit from the BAAQMD, SVE remediation will be initiated at the subject site. Based on the SVE feasibility test results, additional extraction locations may be installed as part of the SVE remediation system.

March 15, 2016
Work Plan 0461.W3

Should you have any questions, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental, Inc.



Paul H. King
California Professional Geologist #5901
Expires: 12/31/17

Attachments:

Table 1 - Summary of Groundwater Sample Laboratory Analytical Results

Figure 1 - Site Location Map
Figure 2 - Site Plan Showing PCE Concentrations in Groundwater
Figure 3 - Site Plan Showing PCE Concentrations in Shallow Soil Gas
Figure 4 - Site Plan Showing PCE Concentrations in Deep Soil Gas
Figure 5 - Site Plan Showing PCE Concentrations in Shallow Soil Gas and Proposed Soil Gas and Soil Vapor Extraction Wells
Figure 6 - Site Plan Showing PCE Concentrations in Deep Soil Gas and Proposed Soil Gas and Soil Vapor Extraction Wells
Figure 7 - Site Plan Showing Sub-Slab Soil Gas Extraction Feasibility Test Monitoring Locations
Figure 8 - Typical Soil Gas Sampling Manifold

PHK/ sjc
0461.W3

TABLES

Table 1
Summary of Groundwater Sample Laboratory Analytical Results

Sample Location/ID	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Other VOCs by EPA 8260B
SB1-W	5/3/2005	48	ND<0.005	ND<0.005	ND<0.005	ND<0.005	0.83	All ND
SB-6	6/28/2005	15	ND<0.005	ND<0.005	ND<0.005	ND<0.005	0.83	All ND
B7-W	8/14/2008	12	ND<0.005	ND<0.005	ND<0.005	ND<0.005	1.6	All ND
B8-W	8/14/2008	7	ND<0.010	ND<0.010	ND<0.010	ND<0.010	0.98	All ND
A-1	10/11/2009	0.91	ND<0.005	ND<0.005	ND<0.005	ND<0.005	1.7	All ND
AD-1	10/11/2009	1.9	ND<0.005	ND<0.005	ND<0.005	ND<0.005	1.9	All ND
AUST-6	10/11/2009	NA	NA	NA	NA	NA	NA	All ND*
Tier 1 ESL		3.0	5.0	6.0	10	0.61	2.3	

NOTES:
PCE = Tetrachloroethene
TCE = Trichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
VOCs = Volatile Organic Compounds
ND = Not Detected.
NA = Not Analyzed.
* = Groundwater sample AUST-6 was only analyzed for petroleum related VOCs using EPA Method 8260B.
Tier 1 ESL = Tier 1 Environmental Screening Level, by San Francisco Bay-Regional Water Quality Control Board updated February 2016, from Groundwater Levels Summary Table.
Results and ESLs in micrograms per Liter (ug/L), unless otherwise noted.

FIGURES

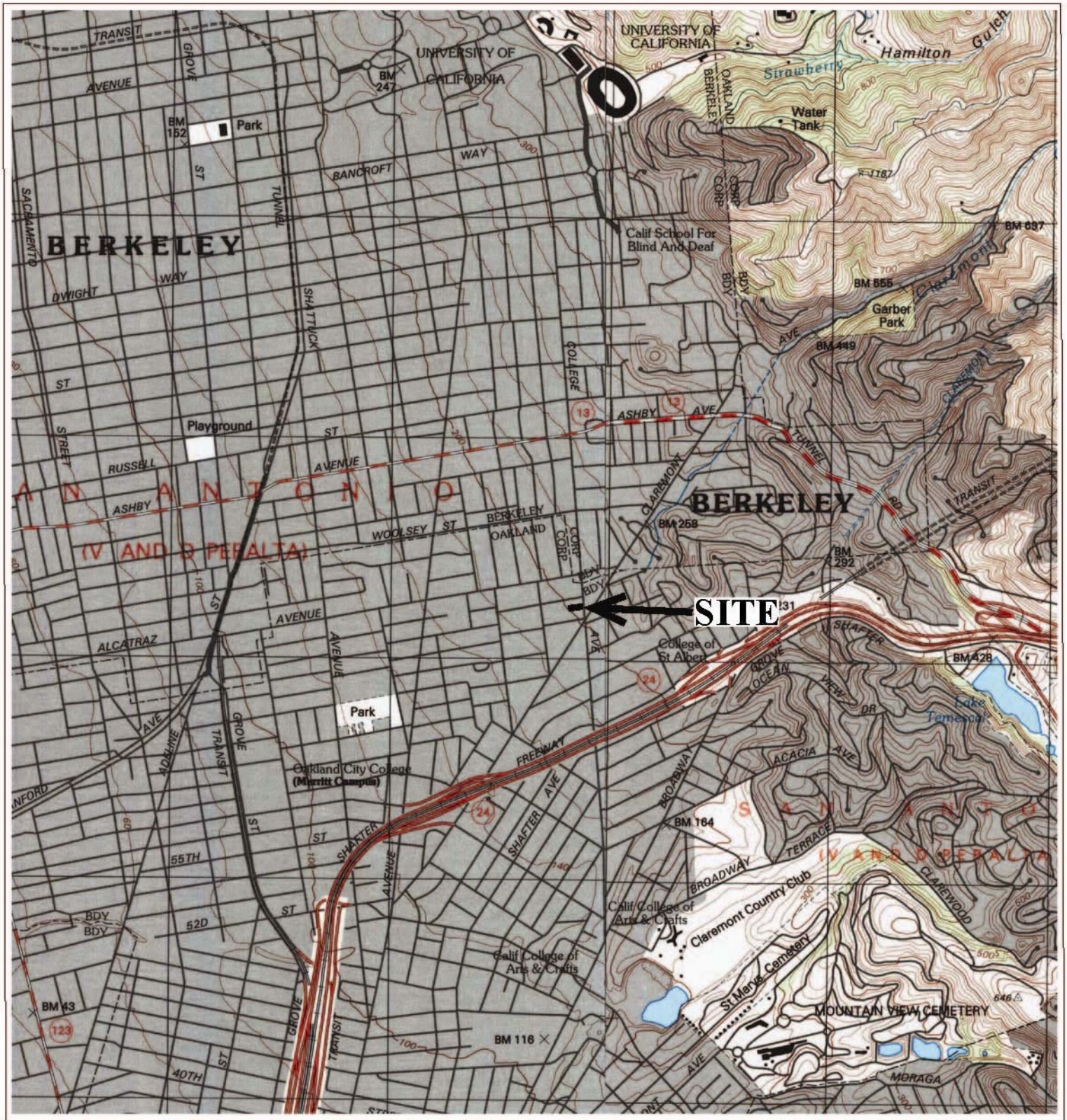


Figure 1
Site Location Map
Red Hanger Kleaners
6239 College Avenue
Oakland, California

Base Map From:
U.S. Geologic Survey 7.5 Minute Quadrangles Oakland East, and Oakland West, both maps edited 1996.

P&D Environmental, Inc.
55 Santa Clara Avenue, Suite 240
Oakland CA 94610

0 1,000 2,000
Approximate Scale in Feet

N

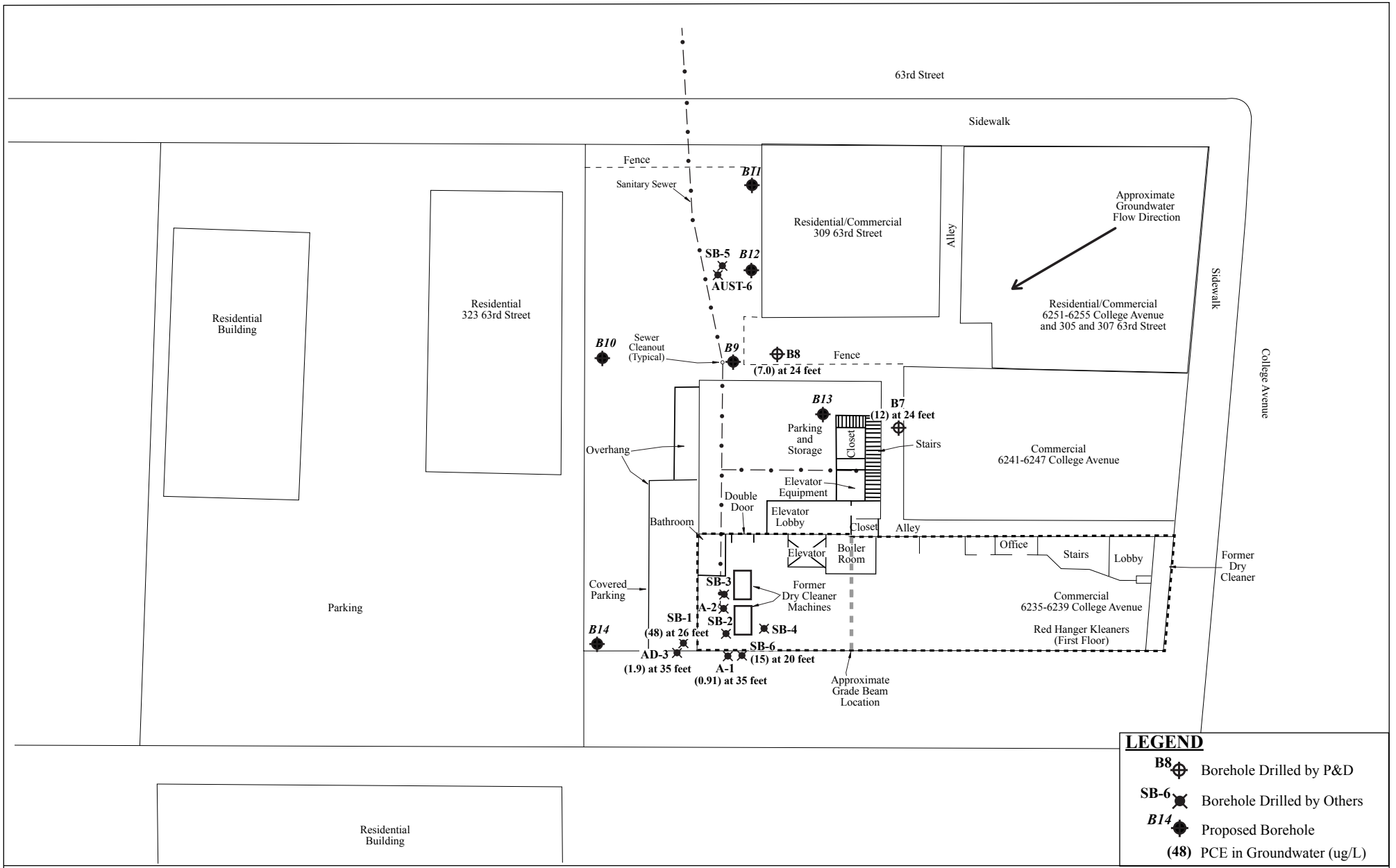


Figure 2
Site Plan Showing PCE Concentrations in Groundwater
Red Hanger Kleaners
6239 College Avenue
Oakland, California

Base Map from:
Gordon Building, July 30, 2007, Alameda County Assessor's Map, Revised June 15,1989, and Google Earth, 2015

P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610

0 15 30
Approximate Scale in Feet

N

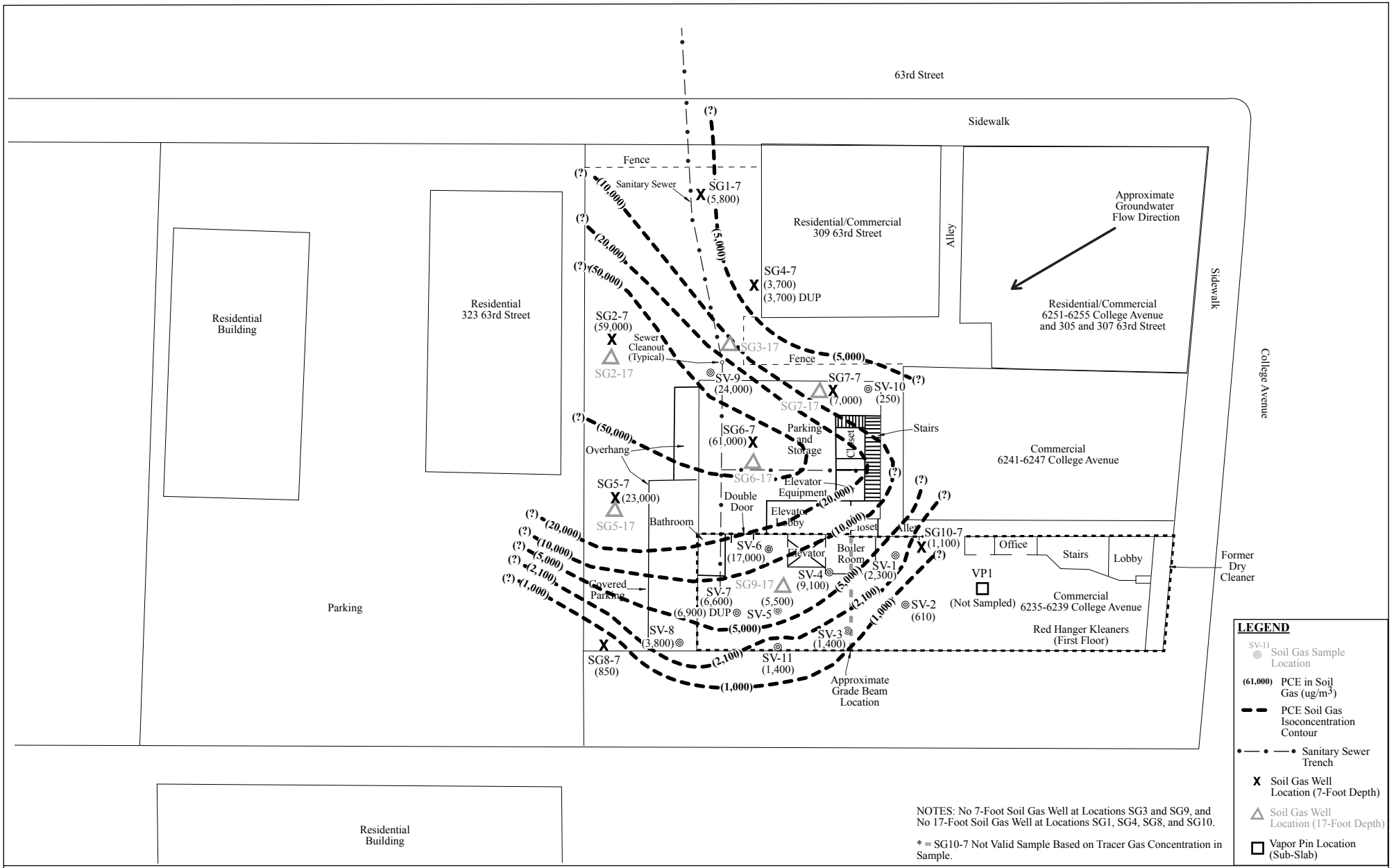


Figure 3
Site Plan Showing PCE Concentrations in Shallow Soil Gas
Red Hanger Kleaners
6239 College Avenue
Oakland, California

Base Map from:
Gordon Building, July 30, 2007, Alameda County Assessor's Map, Revised June 15,1989, and Google Earth, 2015

P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610

0 15 30
Approximate Scale in Feet

N

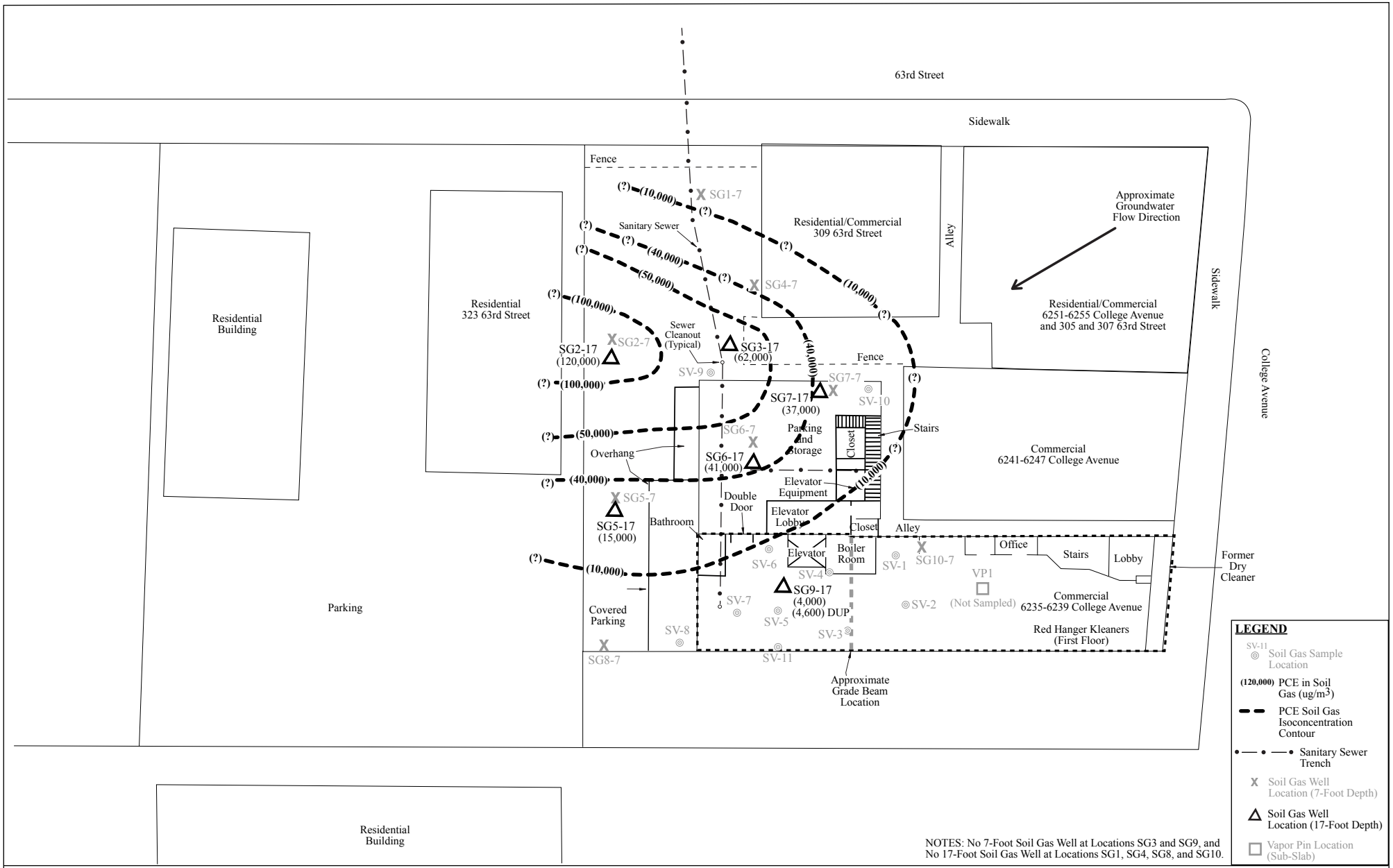


Figure 4
Site Plan Showing PCE Concentrations in Deep Soil Gas
Red Hanger Kleaners
6239 College Avenue
Oakland, California

Base Map from:
Gordon Building, July 30, 2007, Alameda County Assessor's Map, Revised June 15,1989, and Google Earth, 2015

P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610

0 15 30
Approximate Scale in Feet

N

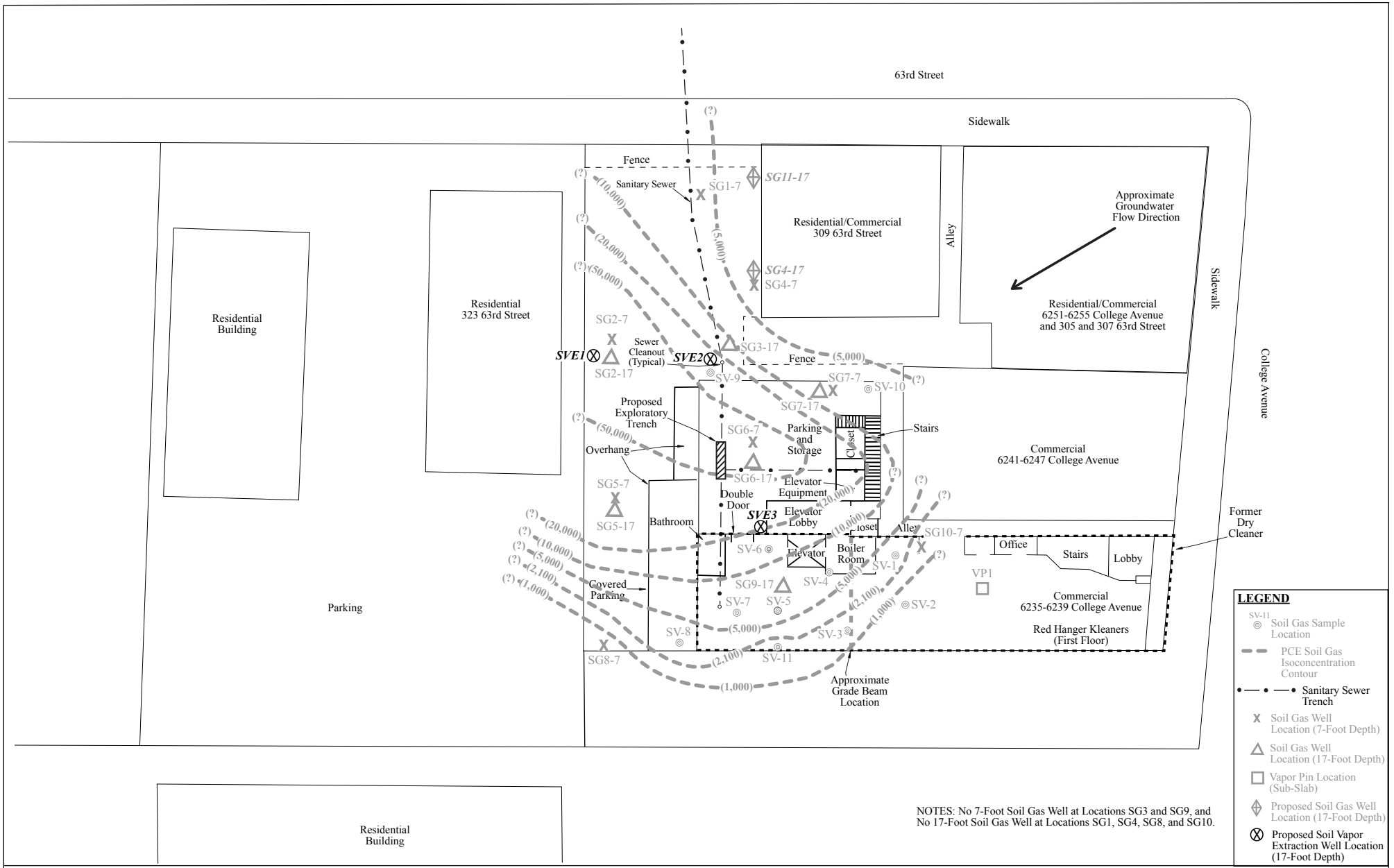


Figure 5
Site Plan Showing PCE Concentrations in Shallow Soil Gas and Proposed Soil Gas and Soil Vapor Extraction Wells
Red Hanger Kleaners
6239 College Avenue
Oakland, California

Base Map from:
Gordon Building, July 30, 2007, Alameda County Assessor's Map, Revised June 15,1989, and Google Earth, 2015

P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610

0 15 30
Approximate Scale in Feet

N

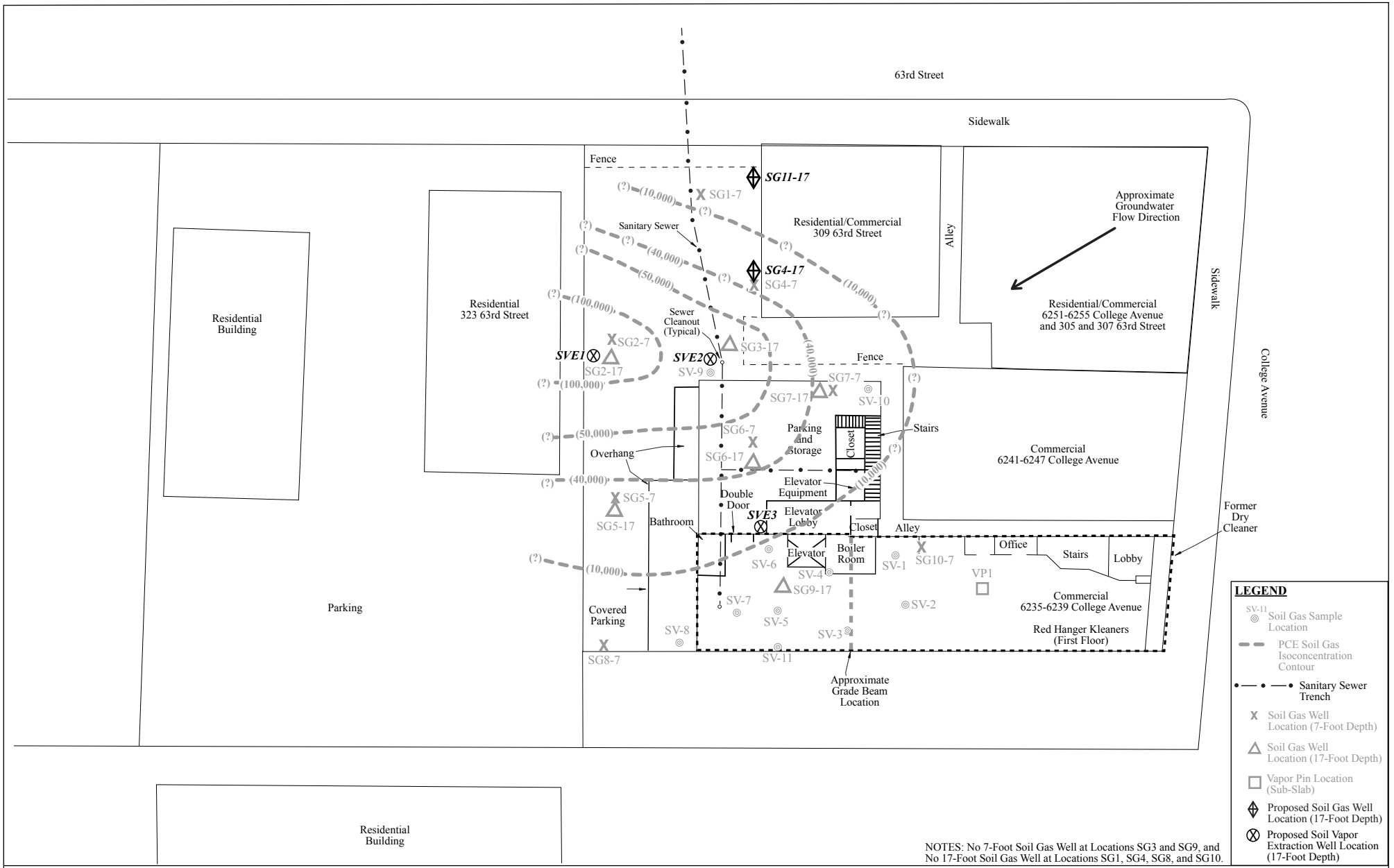


Figure 6
Site Plan Showing PCE Concentrations in Deep Soil Gas and Proposed Soil Gas and Soil Vapor Extraction Wells
Red Hanger Kleaners
6239 College Avenue
Oakland, California

Base Map from: Gordon Building, July 30, 2007, Alameda County Assessor's Map, Revised June 15,1989, and Google Earth, 2015	P&D Environmental, Inc. 55 Santa Clara Ave., Suite 240 Oakland, CA 94610	0 15 30 Approximate Scale in Feet N

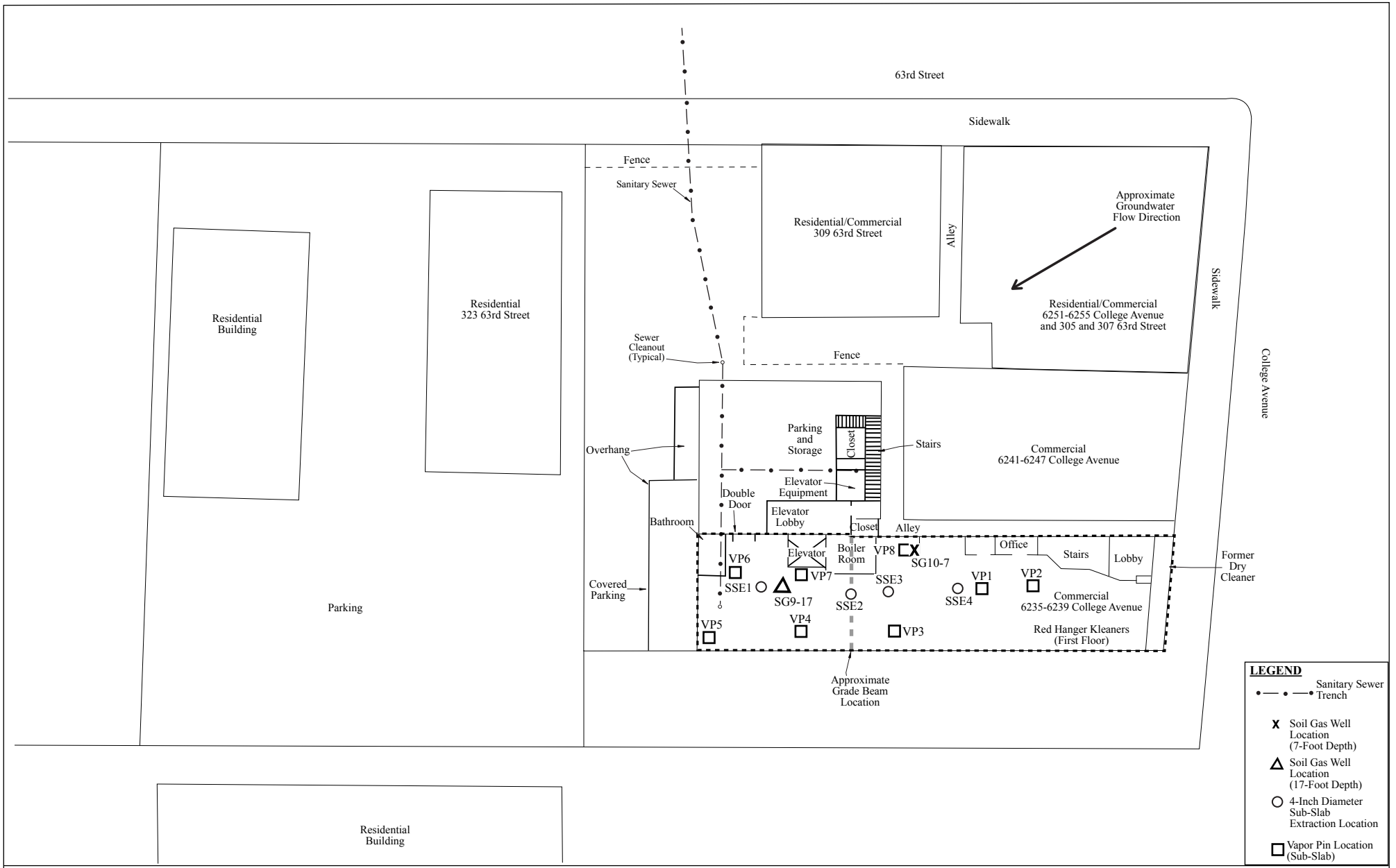


Figure 7
Site Plan Showing Sub-Slab Soil Gas Extraction Feasibility Test Monitoring Locations
Red Hanger Kleaners
6239 College Avenue
Oakland, California

Base Map from:
Gordon Building, July 30, 2007, Alameda County Assessor's Map, Revised June 15,1989, and Google Earth, 2015

P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610

0 15 30
Approximate Scale in Feet

N

Figure 8
Typical Soil Gas Sampling Manifold
Red Hanger Kleaners
6239 College Avenue
Oakland, California