Voluntary remedial efforts were undertaken to remove source area soils within the primary area where chemical mixing operations had been located at the Site; an unpaved area within the former building. About 80 cubic yards of soil were excavated and removed from the Site in 1984 and the area was backfilled with imported soils. Following the soil removal action the Site was redeveloped with the existing building and a new concrete slab-on-grade floor was constructed which fully covered the formerly unpaved area.

At the request of the DTSC, several phases of soil and groundwater investigation were voluntarily conducted both onsite and in the immediately adjacent railroad right-of-way. A change in grade of about 4 to 6 feet exists between the location of the main rail lines and the existing floor slab; the floor slab is elevated above the rail lines. The change in grade is accommodated by a narrow slope or embankment which extends from the west side of the building down to the location of a utility raceway located at the same grade as the main rail lines. The embankment is covered with vegetation. As summarized in a presentation on June 23, 2005 at the DTSC offices in Berkeley, analytical data from studies conducted through March 1995, show that levels of PCP and chlordane in soil at concentrations exceeding California Human Health Screening Levels (CHHSL) existed beneath the concrete floor slab on the west side of the Site, and were present within the embankment area immediately adjacent to the west side of the existing building. Similarly, levels of PCP and chlordane at concentrations in excess of Maximum Contaminant levels (MCL) were located below the west side of the existing structure.

Levels of various solvents including 111 TCA, 11DCA, and other cleaning, cutting and painting solvents have been shown to exist throughout this commercial and industrial area. These solvents have not been detected in Site soils at concentrations that would suggest the presence of a source area at the Site.

SCOPE OF WORK

Based on discussions with DTSC on September 1, 2005, Fugro understands that the DTSC would like to bring up-to-date the data regarding PCP and chlordane concentrations in soil and groundwater in the railroad right-of-way immediately adjacent to the west side of the Site. Specifically, the DTSC has requested that both soil and groundwater samples be collected from borings located adjacent to the existing structure, from borings located between the building and the main rail line, and from borings located on the west side of the railroad right-of-way. In addition to permitting the work through the City of Berkeley, all of the work will require a right-of-entry agreement with the railroad, Union Pacific, and precautionary safety measures (integrating flagman and/or escort vehicles into the project logistics) may change the manner in which the work is conducted. Discussions with Union Pacific regarding access are underway, and require an extensive application review process. Herst Ventures would like to obtain DTSC's feedback on this proposed scope of work prior to submitting our application for the right-of-entry, so that our application will accurately reflect the final scope.

Upon finalization of an access agreement between Herst Ventures and Union Pacific, a boring permit will be obtained through the City of Berkeley. Underground Service Alert will be notified and a private utility locator will be retained to mark known, active lines in the area. It is currently known that telecommunication and high-pressure petroleum fuel lines are buried

within the railroad right-of-way, and any new sampling points will need to be located several feet away from these active lines.

Selected soil and grab groundwater samples will be collected from within 8 borings. The borings will be advanced using a geoprobe sampling rig operated under standard industry practices regarding worker safety, equipment decontamination, and sample handling. The borings will be extended to groundwater, which is believed to exist at 8 to 12 feet below the existing floor slab, and 3 to 5 feet below the adjacent railroad right-of-way. Soil samples will be collected from vadose zone soils situated above the groundwater surface. Lithology will be graphically logged and soils will be classified in accordance with the Unified Soil Classification System (USCS).

Soil samples will be retained in clean, stainless steel tubes or acetate liners; liners will be capped with Teflon sheeting and plastic end caps, and placed into ice-cooled chests. We propose to submit up to 4 selected soil samples from each boring for analytical testing. Proposed depths for samples that will be submitted for analytical testing are presented in the table below.

Boring Areas	Number of Soil Samples to be Submitted for Analytical Testing and Approximate Sample Depths
Borings immediately west of the existing building, on the transition slope	2 borings, 4 samples; at 0.50ft, 2ft, 5ft and 7 ft bgs.
Borings between base of slope and east side of the main rail lines	3 borings, 3 samples each, at 0.50ft, 2ft, and 5ft bgs.
Borings between west side of main rail lines and west limit of railroad right-of-way	3 borings, 3 samples each, at 0.50ft, 2ft, and 5ft bgs.

Following collection of the soil samples, 6 of the probes (2 from each of the three boring areas shown above) will be extended 1 to 2 feet below the groundwater surface to facilitate the collection of grab groundwater samples. Groundwater samples from the geoprobe holes will be obtained from pre-cleaned 1-inch diameter machine slotted well screens placed into the holes. Depending on field conditions, Fugro will attempt to remove one casing volume of water prior to sample collection. Water samples will be obtained using new disposable bailers. Following sample collection, the casings will be removed and the probe holes will be backfilled with cement grout and patched to match existing conditions.

In addition to the collection of soil and grab groundwater samples from the new borings, groundwater samples will be obtained from an existing monitoring well and 4 piezometers located within the west side of the existing Site building. The well and piezometers will be re-developed and sampled in accordance with standard industry practices. The depth to water will

be measured, and at least three casing volumes of water will be removed while monitoring pH, temperature, and conductivity parameters. The well and piezometers will be sampled with clean disposable bailers. Groundwater samples will be placed in the laboratory-prepared containers, stored in ice-cooled chests.

Soil and groundwater samples will be delivered to a state-certified chemical testing laboratory under chain-of-custody documentation. The testing program will include the following:

- Total Petroleum Hydrocarbons within the diesel range (TPHd) using EPA Method 8015m with silica gel cleanup;
- Pentachlorophenol using EPA Test Method 8270; and
- Chlordane using EPA Test Method 8080.

Fugro will prepare a letter report that describes the scope of services conducted and our findings. The report will summarize the results of the chemical testing, and will present our conclusions and recommendations regarding site conditions, and potential risks to human health and the environment due to any detected presence of chlordane and PCP in soil and groundwater. The report will include a vicinity map showing the site, a series of site plans showing the location of sampling points and concentration values for PCP and chlordane, tabulated analytical data from all known studies conducted to date, and the laboratory reports.

CLOSING

If you should have any questions regarding the information in this letter, please contact the undersigned at (510) 268-0461.

Sincerely,
FUGRO WEST, INC.

Jeriann Alexander
Civil Engineer 40469 (exp. 3/31/07)
Registered Environmental Assessor 03130
(exp. 07/06)

jna/JNA

3357135_v2

Department of Toxic Substances Control

Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA

700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Arnold Schwarzenegger
Governor

November 15, 2005

Ms. Jeriann Alexander
Fugro West, Inc
1000 Broadway, Suite 200
Oakland, California 94607

Dear Ms. Alexander:

The Department of Toxic Substances Control (DTSC) has completed its review of the Scope of Work for 2220 Fourth Street property in Berkeley, California received on November 4, 2005. DTSC hereby approves the scope of work.

Please notify Claude Jemison of my staff seven days prior to conducting the sampling. If you have any further questions, please contact Claude Jemison at (510) 540-3803.

Sincerely,

Barbara J. Cook, P.E., Chief
Northern California
Coastal Cleanup Operations Branch

cc: Andrea Sumits, Senior Counsel
Holland & Knight LLP
50 California Street, Suite2800
San Francisco, California 94111

Mr. Geoff Fiedler
City of Berkeley
Planning Department, Toxics Management Division (TMD)
2118 Milvia Street, Suite 200
Berkeley, California 94704

FUGRO WEST, INC.

1000 Broadway, Suite 200
Oakland, California 94607
Tel: (510) 268-0461
Fax: (510) 268-0137

March 8, 2006
Project No. 698.004

Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710

Attention: Mr. Claude Jemison

Subject: Project Progress Update
Scope of Work to Determine Current Pentachlorophenol and Chlordane Impacts to Soil and Groundwater
2220 Fourth Street
Berkeley, California

Dear Mr. Jemison:

In response to our phone conversation of March 1, 2006, Fugro West, Inc., (Fugro) is presenting this letter updating the status of the DTSC approved Scope of Work for 2220 Fourth Street in Berkeley. Since receiving the DTSC approval letter dated November 15, 2005, Herst Ventures, the 2220 Fourth Street property owner, has diligently pursued obtaining a right-of-entry agreement to enter onto the Union Pacific Railroad Company (UP) right-of-way to conduct the field activities outlined in the Scope of Work dated November 4, 2005. As shown on the Proposed Sampling Plan attached to Scope of Work, the UP right-of-way spans the entire distance between the west or rear wall of the 2220 Fourth Street building and a concrete retaining wall extending along the west side of the right-of-way. In addition to the main rail lines, there are known active fiber optic cables and pressurized petroleum product pipelines on both sides of the active main rail lines in the area of abandoned rail lines.

On December 5, 2005 Fugro submitted a completed UP Application for Environmental Right of Entry, as the initial phase of obtaining the clearance to enter onto the UP property. In February 2006, Herst Ventures received notification from UP that the application had been accepted, and the second phase of clearance began. As part of this phase, Herst Ventures, Fugro, and all contractors are in the process of reviewing various UP insurance requirements and obtaining the endorsements and certificates required by UP. Once the UP process is complete and fees are paid to UP, Fugro will initiate the process of securing City of Berkeley permits.

As discussed with you, it is our understanding that any work conducted by entities other than UP within the UP right-of-way needs to comply with the requirements outlined by UP. The time-consuming right of entry agreement process is well underway to complete the DTSC approved scope of work including all soil and groundwater sampling locations shown on the Proposed Sampling Plan. At this point, if any changes were requested to the scope

and/or manner in which the scope of work is implemented, a petition would need to be made to UP would likely result in further delay of the process.

We will update you as to the date that the City of Berkeley permit phase begins. If you should have any questions regarding the information in this letter, please contact the undersigned at (510) 268-0461.

Sincerely,
FUGRO WEST, INC.

Jeriann Alexander
Civil Engineer 40469 (exp. 3/31/07)
Registered Environmental Assessor 03130
(exp. 07/06)

jna/JNA

cc: Derek van Hoorn, DTSC Senior Staff Counsel
Karen Toth, DTSC Supervising Hazardous Substances Engineer I
Doug Herst, Herst Ventures, Inc.
Andrea Sumits, Senior Counsel, Holland & Knight, LLP
Geoff Fiedler, City of Berkeley TMD

FUGRO WEST, INC.

1000 Broadway, Suite 200
Oakland, California 94607
Tel: (510) 268-0461
Fax: (510) 268-0137

July 28, 2006
Project No. 698.004

Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710

Attention: Mr. Claude Jemison

Subject: Project Progress Update
Scope of Work to Determine Current
Pentachlorophenol and Chlordane Impacts to Soil and Groundwater
2220 Fourth Street Property
Berkeley, California

Dear Mr. Jemison:

In response to your recent inquiry Fugro West, Inc., (Fugro) is presenting this letter updating the status of the DTSC approved Scope of Work for the 2220 Fourth Street property in Berkeley. On July 10, 2006, Herst Ventures, the 2220 Fourth Street property owner, finally received a signed and approved right-of-entry agreement to enter onto the Union Pacific Railroad Company (UP) right-of-way to conduct the field activities outlined in the approved Scope of Work dated November 4, 2005. One minor deviation from the approved scope of work comprises the need to obtain all soil and grab groundwater samples from within hand-augered borings extended through the UP right-of-way property. This deviation was necessitated as none of the three drilling subcontractors considered for use for this project (Vironex, Gregg, and Clearheart) would comply with all required terms and conditions required by UP. Thus, Fugro staff will conduct all field efforts.

Fugro will now initiate the process of securing City of Berkeley permits for the work, and will coordinate initial site reconnaissance meeting(s). Fugro will contact the UP area field supervisor to determine the need for railroad flag men and/or other safety precautions which may be required by UP to conduct the work. Fugro will also schedule a field meeting through Underground Service Alert to identify the location of the active fiber optic cables and active petroleum pipelines as well as to determine whether other buried utilities extend within the project area.

We anticipate that field-work will be completed during the month of September. We will update you as to the exact field dates once the site meetings are completed. In the event that you would like to participate in the field meetings, and/or observe field activities please call Melissa Pleva (267-4459) of our office to make appropriate arrangements.

Sincerely,
FUGRO WEST, INC.

Jeriann Alexander
Civil Engineer 40469 (exp. 3/31/07)
Registered Environmental Assessor 03130
(exp. 07/07)

jna/JNA:mp

Copies Submitted :
(1) Derek van Hoorn, DTSC Senior Staff Counsel
(1) Karen Toth, DTSC Supervising Hazardous Substances Engineer
(1) Doug Herst, Herst Ventures, Inc.
(1) Andrea Sumits, Of Counsel, Holland & Knight, LLP
(1) Geoff Fiedler, City of Berkeley TMD

APPENDIX B
UNION PACIFIC RIGHT OF ENTRY AGREEMENT
CITY OF BERKELEY WORK NOTIFICATION

ROE 880702
Form Approved, AVP-Law

AUDIT 240880

Folder No. 2366-34

RIGHT OF ENTRY AGREEMENT

THIS AGREEMENT is made and entered into as of January 20, 2006, by and between **UNION PACIFIC RAILROAD COMPANY**, a Delaware corporation (hereinafter the "Railroad"), and **HERST VENTURES**, a California corporation, to be addressed at 2246 5th Street, Berkeley, CA 94702-0556 (hereinafter the "Licensee").

IT IS MUTUALLY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

Article I. DEFINITION OF LICENSEE.

For purposes of this Agreement, all references in this Agreement to the Licensee shall include the Licensee's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority.

Article II. RIGHT GRANTED; PURPOSE.

The Railroad hereby grants to the Licensee the right, during the term hereinafter stated and upon and subject to each and all of the terms, provisions and conditions herein contained, to enter upon and have ingress to and egress from the portion of Railroad's property in the vicinity of Mile Post 5.9, Martinez Subdivision, at or near Berkeley, California, for the purpose of Phase II site investigation - eight soil borings. The right herein granted to Licensee is limited to those portions of the Railroad's property specifically described herein in the location shown on the print marked Exhibit A, attached hereto and hereby made a part hereof, or designated by the Railroad Representative named in Article IV.

Article III. TERMS AND CONDITIONS CONTAINED IN EXHIBITS B AND B-1.

The terms and conditions contained in Exhibits B and B-1, hereto attached, are hereby made a part of this Agreement.

Article IV. ALL EXPENSES TO BE BORNE BY LICENSEE; RAILROAD REPRESENTATIVE.

The Licensee shall bear any and all costs and expenses associated with any work performed by the Licensee, or any costs or expenses incurred by the Railroad relating to this Agreement. All work performed by Licensee on Railroad's property shall be performed in a manner satisfactory to the representative local Manager of Track Maintenance of the Railroad or his authorized representative (hereinafter the Railroad Representative):

MICHEL KERWOOD, MTM
UNION PACIFIC RAILROAD
33 BRIDGEHEAD ROAD
MARTINEZ CA 94553
(510) 891-7862
(510) 891-7486 Fax

Article IX. LICENSE FEE.

Licensee shall pay, and Railroad shall accept, upon the execution and return of this instrument, the nonrefundable sum of **Three Thousand Five Hundred Dollars ($3,500.00)** to cover Railroad's cost to prepare and administer this Agreement.

Flagging charges are not included in the sum recited in the preceding paragraph, and will be billed separately, if incurred.

Article X. SPECIAL PROVISION – RAILROAD FLAGMAN; WHEN REQUIRED; FLAGGING CHARGES.

A. No work of any kind shall be performed, and no person, equipment, machinery, tool(s), material(s), vehicle(s), or thing(s) shall be located, operated, placed, or stored within 25 feet of any of Railroad's track(s) at any time, for any reason, unless and until a Railroad flagman is provided to watch for trains, pursuant to the terms of the attached Exhibit 'B'. All expenses connected with the furnishing of said flagman shall be at the sole cost and expense of the Licensee, who shall promptly pay to Railroad all charges connected therewith, within 30 days after presentation of a bill therefore.

B. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays; two and one-half times current hourly rate for holidays.

C. Wage rates are subject to change, at any time, by law or by agreement between the Railroad and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized Governmental Agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, the Licensee shall pay on the basis of the new rates and charges.

D. Reimbursement to the Railroad will be required covering the full eight hour day during which any flagman is furnished, unless he can be assigned to other Railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other work. Reimbursement will also be required for any day not actually worked by said flagman following his assignment to work on the project for which the Railroad is required to pay the flagman and which could not reasonably be avoided by the Railroad Company by assignment of such flagman to other work, even though the Licensee may not be working during such time.

E. Arrangements for flagging are to be made at least Ten (10) days in advance of commencing work, with the Railroad Manager of Track Maintenance.

December 2005
Project Number 698.004

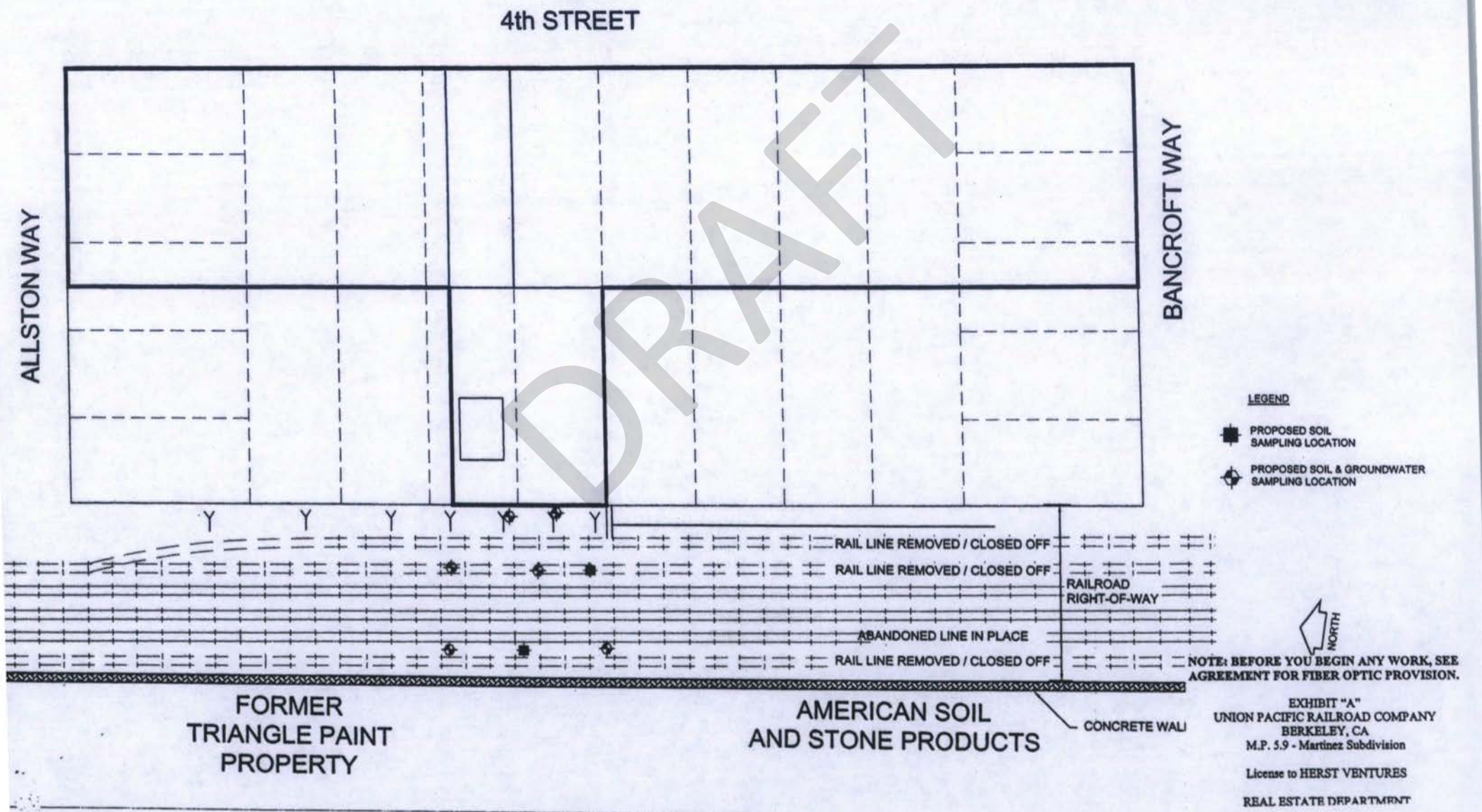


EXHIBIT B

Section 1 - NOTICE OF COMMENCEMENT OF WORK – FLAGGING.

The Licensee agrees to notify the Railroad Representative at least Ten (10) days in advance of Licensee commencing its work and at least 24 hours in advance of proposed performance of any work by the Licensee in which any person or equipment will be within 25 feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within 25 feet of any track. Upon receipt of such notice, the Railroad Representative will determine and inform the Licensee whether a flagman need be present and whether the Licensee need implement any special protective or safety measures. If any flagmen or other special protective or safety measures are performed by the Railroad, such services will be provided at Licensee's expense with the understanding that if the Railroad provides any flagging or other services, the Licensee shall not be relieved of any of its responsibilities or liabilities set forth herein.

Section 2 - LIMITATION AND SUBORDINATION OF RIGHTS GRANTED.

a. The foregoing grant of right is subject and subordinate to the prior and continuing right and obligation of the Railroad to use and maintain its entire property including the right and power of the Railroad to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, roadways, signal, communication, fiber optics, or other wirelines, pipelines and other facilities upon, along or across any or all parts of its property, all or any of which may be freely done at any time or times by the Railroad without liability to the Licensee or to any other party for compensation or damages.

b. The foregoing grant is also subject to all outstanding superior rights (including those in favor of licensees and lessees of the Railroad's property, and others) and the right of the Railroad to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

Section 3 - NO INTERFERENCE WITH RAILROAD'S OPERATION.

No work performed by Licensee shall cause any interference with the constant, continuous and uninterrupted use of the tracks, property and facilities of the Railroad, its lessees, licensees or others, unless specifically permitted under this Agreement, or specifically authorized in advance by the Railroad Representative. Nothing shall be done or suffered to be done by the Licensee at any time that would in any manner impair the safety thereof. When not in use, Licensee's machinery and materials shall be kept at least 50 feet from the centerline of Railroad's nearest track, and there shall be no crossings of Railroad's tracks except at existing open public crossings.

Section 4 - PERMITS.

Prior to beginning any work, the Licensee, at its sole expense, shall obtain all necessary permits to perform any work contemplated by this Agreement.

Section 5 - MECHANIC'S LIENS.

The Licensee shall pay in full all persons who perform labor or provide materials for the work to be performed by Licensee. The Licensee shall not create, permit or suffer any mechanic's or materialmen's liens of any kind or nature to be enforced against any property of the Railroad for any such work performed. The Licensee shall indemnify and hold harmless the Railroad from and against any and all liens, claims, demands, costs or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished.

Section 6 - FIBER OPTIC CABLE SYSTEMS.

In addition to other indemnity provisions in this Agreement, the Licensee shall indemnify and hold the Railroad harmless from and against all costs, liability and expense whatsoever (including, without limitation, attorneys' fees, court costs and expenses) arising out of any act or omission of the Licensee, its contractor, agents and/or employees, that causes or contributes to (1) any damage to or destruction of any telecommunications system on Railroad's property, and (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractor, agents and/or employees, on Railroad's property. Licensee shall not have or seek recourse against Railroad for any claim or cause of action for alleged loss of profits or revenue or loss of service or other consequential damage to a telecommunication company using Railroad's property or a customer or user of services of the fiber optic cable on Railroad's property.

Section 7 - COMPLIANCE WITH LAWS.

In the prosecution of the work covered by this Agreement, the Licensee shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work. The Licensee shall use only such methods as are consistent with safety, both as concerns the Licensee, the Licensee's agents and employees, the officers, agents, employees and property of the Railroad and the public in general. The Licensee (without limiting the generality of the foregoing) shall comply with all applicable state and federal occupational safety and health acts and regulations. All Federal Railroad Administration regulations shall be followed when work is performed on the Railroad's property. If any failure by the Licensee to comply with any such laws, regulations, and enactments, shall result in any fine, penalty, cost or charge being assessed, imposed or charged against the Railroad, the Licensee shall reimburse and indemnify the Railroad for any such fine, penalty, cost or charge, including without limitation attorneys' fees, court costs and expenses. The Licensee further agrees in the event of any such action, upon notice thereof being provided by the Railroad, to defend such action free of cost, charge, or expense to the Railroad.

Section 8 - SAFETY INSTRUCTIONS.

Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of the work pursuant to this Agreement. As reinforcement and in furtherance of overall safety measures to be observed by the Licensee (and not by way of limitation), the following special safety rules shall be followed:

a. The Licensee shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job. The Licensee shall have proper first aid supplies available on the job site so that prompt first aid services can be provided to any person that may be injured on the job site. The Licensee shall promptly notify the Railroad of any U.S. Occupational Safety and Health Administration reportable injuries occurring to any

person that may arise during the work performed on the job site. The Licensee shall have a non-delegable duty to control its employees, while they are on the job site or any other property of the Railroad to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage or illegally obtained drug, narcotic or other substance that may inhibit the safe performance of work by an employee.

b. The employees of the Licensee shall be suitably dressed to perform their duties safely and in a manner that will not interfere with their vision, hearing or free use of their hands or feet. Only waist length shirts with sleeves and trousers that cover the entire leg are to be worn. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching. The employees should wear sturdy and protective footwear. Employees shall not wear boots (other than work boots), sandals, canvas-type shoes or other shoes that have thin soles or heels that are higher than normal. In addition, the Licensee shall require its employees to wear personal protective equipment as specified by Railroad rules, regulations or Railroad officials overlooking the work at the job site. In particular, the protective equipment to be warn shall be:

(1) Protective head gear that meets American National Standard-Z89.1-latest revision. It is suggested that all hardhats be affixed with Licensee's or subcontractor's company logo or name.

(2) Eye protection that meets American National Standard for occupational and educational eye and face protection, Z87.1-latest revision. Additional eye protection must be provided to meet specific job situations such as welding, grinding, burning, etc.; and

(3) Hearing protection which affords enough attenuation to give protection from noise levels that will be occurring on the job site.

c. All heavy equipment provided or leased by the Licensee shall be equipped with audible back-up warning devices. If in the opinion of the Railroad Representative any of Licensee's or any of its subcontractors' equipment is unsafe for use on the Railroad's right-of-way, the Licensee, at the request of the Railroad Representative, shall remove such equipment from the Railroad's right-of-way.

Section 9 - INDEMNITY.

a. As used in this Section, "Railroad" includes other railroad companies using the Railroad's property at or near the location of the Licensee's installation and their officers, agents, and employees; "Loss" includes loss, damage, claims, demands, actions, causes of action, penalties, costs, and expenses of whatsoever nature, including court costs and attorneys' fees, which may result from: (i) injury to or death of persons whomsoever (including the Railroad's officers, agents, and employees, the Licensee's officers, agents, and employees, as well as any other person); and (ii) damage to or loss or destruction of property whatsoever (including Licensee's property, damage to the roadbed, tracks, equipment, or other property of the Railroad, or property in its care or custody).

b. As a major inducement and in consideration of the license and permission herein granted, the Licensee agrees to indemnify and hold harmless the Railroad from any Loss which is due to or arises from any cause and is associated in whole or in part with the work performed under this Agreement, a breach of the Agreement or the failure to observe the health and safety provisions herein, 1 or any activity or omission arising out of performance or nonperformance of this Agreement; regardless of whether caused solely or contributed to in part by the negligence or fault of the Railroad.

c. Any liability of either party hereunder to one of its employees under any Workers' Compensation Act or the Federal Employers' Liability Act shall not be questioned or in any way challenged by the other party, nor shall any jury or court findings, resulting from any employee's suit against either party pursuant to any such Act(s), be relied upon or used by either party in any attempt to assert common law liability against the other.

Section 10 - RESTORATION OF PROPERTY.

In the event the Railroad authorizes the Licensee to take down any fence of the Railroad or in any manner move or disturb any of the other property of the Railroad in connection with the work to be performed by Licensee, then in that event the Licensee shall, as soon as possible and at Licensee's sole expense, restore such fence and other property to the same condition as the same were in before such fence was taken down or such other property was moved or disturbed, and the Licensee shall indemnify and hold harmless the Railroad, its officers, agents and employees, against and from any and all liability, loss, damages, claims, demands, costs and expenses of whatsoever nature, arising from the taking down of any fence or the moving or disturbance of any other property of the Railroad.

Section 11 - WAIVER OF BREACH.

The waiver by the Railroad of the breach of any condition, covenant or agreement herein contained to be kept, observed and performed by the Licensee shall in no way impair the right of the Railroad to avail itself of any remedy for any subsequent breach thereof.

Section 12 - ASSIGNMENT – SUBCONTRACTING.

The Licensee shall not assign, sublet or subcontract this Agreement, or any interest therein, without the written consent of the Railroad and any attempt to so assign, sublet or subcontract without the written consent of the Railroad shall be void. If the Railroad gives the Licensee permission to subcontract all or any portion of the work herein described, the Licensee is and shall remain responsible for all work of subcontractors and all work of subcontractors shall be governed by the terms of this Agreement.

Exhibit B-1
Union Pacific Railroad
Right of Entry

Licensee shall, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

A. **Commercial General Liability** insurance. This insurance shall contain broad form contractual liability with a single limit of at least $5,000,000 each occurrence or claim and an aggregate limit of at least $10,000,000. Coverage must be purchased on a post 1998 ISO or equivalent form, including but not limited to coverage for the following:

- Bodily injury including death and personal injury
- Property damage
- Fire legal liability (Not less than the replacement value of the portion of the premises occupied)
- Products and completed operations

The policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- The employee and worker's compensation related exclusions in the above policy apply only to Licensee's employees
- The exclusions for railroads (except where the Job Site is more than fifty feet (50') from any railroad including but not limited to tracks, bridges, trestles, roadbeds, terminals, underpasses or crossings), and explosion, collapse and underground hazard shall be removed.
- Waiver of subrogation

B. **Business Automobile Coverage** insurance. This insurance shall contain a combined single limit of at least $5,000,000 per occurrence or claim, including but not limited to coverage for the following:

- Bodily injury and property damage
- Any and all motor vehicles including owned, hired and non-owned

The policy shall also contain the following endorsements, **which shall be indicated on the certificate of insurance:**

- The employee and worker's compensation related exclusions in the above policy apply only to Licensee's employees
- The exclusions for railroads (except where the Job Site is more than fifty feet (50') from any railroad including but not limited to tracks, bridges, trestles, roadbeds, terminals, underpasses or crossings), and explosion, collapse and underground hazard shall be removed.
- Motor Carrier Act Endorsement- Hazardous materials clean up (MCS-90) if required by law

C. **Workers Compensation and Employers Liability** insurance including but not limited to:

- Licensee's statutory liability under the workers' compensation laws of the state(s) affected by this Agreement.
- Employers' Liability (Part B) with limits of at least $500,000 each accident, $500,000 disease policy limit $500,000 each employee

If Workers Compensation insurance will not cover the liability of Licensee in states that require participation in state workers' compensation fund, Licensee shall comply with the laws of such states. If Licensee is self-insured, evidence of state approval must be provided along with evidence of excess workers compensation coverage. Coverage shall include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.
The policy shall also contain the following endorsement which shall be indicated on the certificate of insurance:

- Alternate Employer Endorsement

D **Umbrella or Excess Policies** In the event Licensee utilizes Umbrella or excess policies, these policies shall "follow form" and afford no less coverage than the primary policy.

E **Railroad Protective Liability** insurance naming only the Railroad as the insured with a combined single limit of $2,000,000 per occurrence with a $6,000,000 aggregate. The policy shall be broad form coverage for "Physical Damage to Property" (ISO Form CG 00 35 07 98 or equivalent). A binder stating the policy is in place must be submitted to the Railroad until the original policy is forwarded to the Railroad.

Other Requirements

F. Punitive damage exclusion must be deleted, **which deletion shall be indicated on the certificate of insurance.**

G. Licensee agrees to waive its right of recovery, and its insurers, through policy endorsement, agree to waive their right of subrogation against Railroad. Licensee further waives its right of recovery, and its insurers also waive their right of subrogation against Railroad for loss of its owned or leased property or property under its care, custody and control. Licensee's insurance shall be primary with respect to any insurance carried by Railroad. All waivers of subrogation **shall be indicated on the certificate of insurance.**

H. All policy(ies) required above (excluding Workers Compensation) shall provide severability of interests and shall name Railroad as an additional insured. **Severability of interest and naming Railroad as additional insured shall be indicated on the certificate of insurance.**

I. Prior to commencing the Work, Licensee shall furnish to Railroad original certificate(s) of insurance evidencing the required coverage, endorsements, and amendments. The certificate(s) shall contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify Railroad in writing of any cancellation or material alteration. **Upon request from Railroad, a certified duplicate original of any required policy shall be furnished.**

J. Any insurance policy shall be written by a reputable insurance company acceptable to Railroad or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provided.

K. Licensee **WARRANTS** that this Agreement has been thoroughly reviewed by Licensee's insurance agent(s)/broker(s), who have been instructed by Licensee to procure the insurance coverage required by this Agreement and acknowledges that Licensees insurance coverage will be primary.

L. If Licensee fails to procure and maintain insurance as required, Railroad may elect to do so at the cost of Licensee plus a 25% administration fee.

M. The fact that insurance is obtained by Licensee or Railroad on behalf of Licensee shall not be deemed to release or diminish the liability of Licensee, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad shall not be limited by the amount of the required insurance coverage.

Alexander, Jeriann

From: Fiedler, Geoff [GFiedler@ci.berkeley.ca.us]
Sent: Tuesday, August 01, 2006 8:54 AM
To: Alexander, Jeriann; Al-Hadithy, Nabil; Claude Jemison
Cc: Pleva, Melissa
Subject: RE: Peerless Electric

Thank You -

Fugro left a message yesterday evening suggesting that all of their work would be shallow, hand auger borings, along the SPCC right-of-way. I will contact them today to confirm. We generally don't permit hand auger borings shallower than 5 feet, but we would like to have an application and site plan, with boring locations indicated.

If possible, can we please arrange to be copied with the reports and work plans on Berkeley projects? We have a library available to the public and we also interact with the planning department on CEQA and EIR studies. It would be helpful to have current information on DTSC projects in Berkeley. The City may also have relevant institutional knowledge that could be helpful for these projects.

Thank you for the note.

Geoff

-----Original Message-----
From: Alexander, Jeriann [mailto:JAlexander@Fugro.com]
Sent: Monday, July 31, 2006 12:52 PM
To: Fiedler, Geoff; Al-Hadithy, Nabil; Claude Jemison
Cc: Pleva, Melissa
Subject: RE: Peerless Electric

Fugro just sent a confirming letter out to the DTSC regarding the schedule. The need to obtain the city permit is noted in the approved Work Plan and the confirming letter.

Jeriann

-----Original Message-----
From: Fiedler, Geoff [mailto:GFiedler@ci.berkeley.ca.us]
Sent: Friday, July 28, 2006 12:07 PM
To: Al-Hadithy, Nabil; Claude Jemison
Subject: RE: Peerless Electric

Please remind the RP or consultant of the requirement to obtain permits from the City of Berkeley. I don't believe we would bill or inspect for borings in the RR ROW, since this is not city-owned, but we would like a permit under any circumstances.

-----Original Message-----
From: Al-Hadithy, Nabil
Sent: Friday, July 28, 2006 11:23 AM
To: 'Claude Jemison'
Cc: Fiedler, Geoff
Subject: RE: Peerless Electric

Please keep us in the loop. We need to update our landuse as you progress.

We got an offer from the RR to test soils only on their ROW. They refused to

allow gw to be tested. Not sure it was very meaningful.

-----Original Message-----
From: Claude Jemison [mailto:CJemison@dtsc.ca.gov]
Sent: Thursday, July 27, 2006 5:47 PM
To: Al-Hadithy, Nabil
Subject: Re: Peerless Electric

Peerless Electric will be conducting soil and groundwater investigation along the right of way as soon as consultant gain Union Pacific consent. The fieldwork will probably start sometime in September.

>>> "Al-Hadithy, Nabil" <NAl-Hadithy@ci.berkeley.ca.us> 7/27/2006 9:35 AM >>>
Hi Claude

You seem busy with Berkeley sites.

Another site is Peerless Lighting. 2220 4th St.

The status says Active. Can you please tell me what has happened since 2004? Thanks.

> -----Original Message-----
> From: Al-Hadithy, Nabil
> Sent: Thursday, July 27, 2006 9:33 AM
> To: 'cjemison@dtsc.ca.gov'
> Cc: Fiedler, Geoff
> Subject: Dover Sales - 707 Park Way
>
> Hi Claude
>
> Toxics Management is the Certified Unified Program Agency (Ch 6.11 Div 20, Cal HSC)
>
> We have been reviewing and moving to closure on this site for past dozen years.
>
> On your web site, it says CERTIFIED AS OF 1/1/1984 . What does this mean? Are you also actively involved on this case?
>
> Thanks
>
>
> Nabil Al-Hadithy, PhD
> Toxics Management Division
> City of Berkeley
> 2118 Milvia Street
> Berkeley CA 94704
> Tel: 510 981 7460
> Fax: 510 981 7470
>
>

FUGRO

FACSIMILE TRANSMITTAL SHEET **August 8, 2006**

TO/COMPANY:	FACSIMILE NO.:	CITY/STATE/COUNTRY:
Geoff Fieldler City of Berkeley Toxics Management	**510-981-7470**	
FROM: Melissa L. Pleva	**PHONE:** 510-267-4459	**E-MAIL:** MPLEVA@FUGRO.COM
SUBJECT: Permit application & Field Meeting 2220 Fourth Street Berkeley, Califonria		**PROJECT NO.:** **698.004**
TRANSMITTED BY: MLP	**TRANSMITTAL FAX:** 510-268-0137	**TOTAL PAGES, INCLUDING COVER:** 3

Geoff,

Attached is the application for soil borings you requested. We will hand auger 8 borings to <5 feet within the UP right-of-way. We have a site meeting scheduled with a UP representative and the utility companies on Tuesday August 15th at 9:00. We will meet where Bancroft Way intersects the railroad tracks.

If you have any questions or need any additional information please call me at 510-267-4459.

Thanks.
Fugro West

Melissa L. Pleva
Project Engineer & Geologist

1000 Broadway, Suite 200 Oakland, California 94607 Tel: 510.268.0461 Fax: 510.268.0137 Web: www.fugro.com

Department of Planning and Development
TOXICS MANAGEMENT DIVISION
A Certified Unified Program Agency

For TMD Use Only
Permit No.: _____
Total Permit Fee: _____

Approved by: _____
Date Approved: _____
(Permit expires 90 days from approval date)

APPLICATION FOR

Well Construction, Installation, Destruction Or Modification
Soil Boring /Probe/Grab and Ground Water Sampling

Name of Facility:	former Peerless Lighting facility (currently vacant)
Address:	2220 Fourth Street Berkeley, California
Telephone *(Business):*	*(Emergency:)* (805) 652-2602

Property Owner:	Herst Ventures
Owner Address:	P.O. Box 2556 Berkeley, California 94720

Supervising Geological/Engineering Co.:	Fugro West, Inc. (Fugro)				
Address:	P.O. Box 2556 Berkeley, California 94720				
Contractor Lic. No.:	N/A	Type:		Expires:	
Local Contact Person:	Melissa L. Pleva	Tel.:	(510) 267-4459	Fax:	(510) 268-0137

Drilling Co.:	N/A - hand auger only	Fugro West, Inc			
Address:	1000 Broadway, Suite 200	Oakland, CA 94501			
Local Contact Person:	Melissa Pleva	Tel.:	510-267-4459	Fax:	510-268-0137
License No.:	N/A	Type:		Expiration Date:	

Type of Work	Well Specifications
☐ Install _____ Monitor Wells	Well Excavation Diameter _____
☐ Destroy _____ Monitor Wells	Well Casing Diameter _____
☒ Drill X Temporary Soil Borings (<5ft)	Gauge of Casing _____
☐ Drill _____ Temporary GW Sampling Points	Well Depth _____
☐ Modify _____ Wells by installing pumps/vacuums in wells for remediation systems	Type of Grout _____
	Other _____

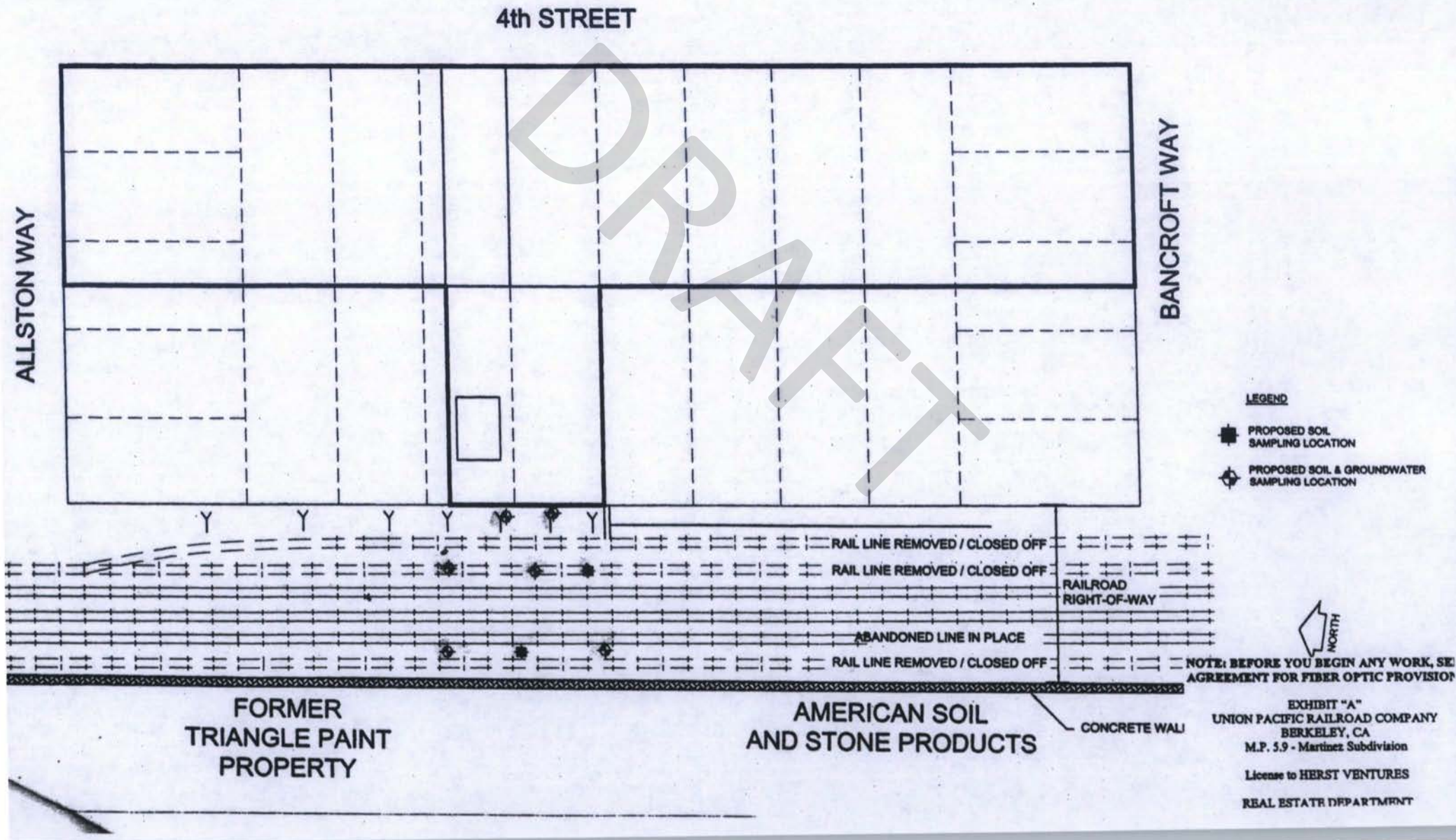
- Provide a scaled plan identifying the proposed drilling locations, property boundaries, streets, structures, pollution source areas, buried and overhead utility lines.
- Call the Toxics Management Division (TMD) and schedule an inspection of the grout sealing of boreholes or wells. Notification should be provided a minimum of two (2) working days in advance of first scheduled day of drilling.
- Inform TMD of any contamination found. Please forward report to TMD within 60 days of completion.

I certify that I have prepared this application and that the work will be done in accordance with the provisions of the laws of the State of California, the ordinances and the rules and regulations of the City of Berkeley.

Signed Melissa L Pleva Date 8/8/06

FEES: First Well/Each add'l. - $376/$112 First Soil Boring/Each add'l. - $188/$112

December 2006
Project Number 698.004



Alexander, Jeriann

From: Fiedler, Geoff [GFiedler@ci.berkeley.ca.us]
Sent: Thursday, August 24, 2006 8:35 AM
To: Pleva, Melissa; Claude Jemison (E-mail); doug@herstventures.com; andrea.sumits@hklaw.com
Cc: Alexander, Jeriann; Al-Hadithy, Nabil
Subject: RE: UP field sampling Berkeley

Thank you for this notification.

I don't plan on being there but can be available if there is a need.

Geoff

-----Original Message-----
From: Pleva, Melissa [mailto:MPleva@Fugro.com]
Sent: Wednesday, August 23, 2006 5:51 PM
To: Claude Jemison (E-mail); Fiedler, Geoff; doug@herstventures.com; andrea.sumits@hklaw.com
Cc: Alexander, Jeriann
Subject: UP field sampling Berkeley

We have scheduled the soil and groundwater sampling to be conducted within the UP right-of-way adjacent to the former Peerless Lighting facility for Tuesday August 29th through Thursday August 31st. We will begin working at 9:00 am and finish each day at 3:00. 1 hour is needed at the start (8:00 to 9:00) and end (3:00 to 4:00) of each day for the UP flagman set up and take down activities. I will locate and measure the water levels in the site wells on Monday August 28th. If you have any questions or require any additional information please contact me.

Melissa L. Pleva
Project Engineer & Geologist
Fugro West, Inc.
1000 Broadway, Suite 200
Oakland, CA 94607
www.fugrowest.com
phone: (510)268-0461
direct line : (510) 267-4459
fax: (510) 268-0137
cell: (510) 610-5416

APPENDIX C
LOGS OF BORINGS
WELL SAMPLING FORMS

MAJOR DIVISIONS			GROUP NAMES	
COARSE-GRAINED SOILS (More than 50% retained on the No. 200 sieve)	GRAVELS (MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE)	Clean gravels less than 5% fines	GW	Well-Graded Gravel
			GP	Poorly Graded Gravel
		Gravels with more than 12% fines	GM	Silty Gravel
			GC	Clayey Gravel
	SANDS (MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE)	Clean sand less than 5% fines	SW	Well-Graded Sand
			SP	Poorly Graded Sand
		Sands with more than 12% fines	SM	Silty Sand
			SC	Clayey Sand
FINE-GRAINED SOILS (50% or more passes the No. 200 sieve)	SILTS AND CLAYS (Liquid Limit Less than 50%)		ML	Silt
			CL	Lean Clay
			OL	Organic Silt
	SILTS AND CLAYS (Liquid Limit Greater than 50%)		MH	Elastic Silt
			CH	Fat Clay
			OH	Organic Clay
HIGHLY ORGANIC SOILS			PT	Peat or Highly Organic Soils
			FILL	Debris or Mixed Fill
			AC	Asphalt Concrete Pavement with Aggregate Base

GENERAL NOTES

Classification of Soils in general accordance with ASTM D2487 or D2488 (based on the Unified Soil Classification System)

Geologic Formation noted in bold font at the top of interpreted interval
Sloped line in break column indicates transitional boundary

Blow counts for modified California Liner Sampler shown in ( )

Length of sample symbol approximates recovery length

SAMPLER DRIVING RESISTANCE

Number of blows with * hammer, falling * to drive sampler * after seating sampler *, for example,

Blows/ft	Description
25	25 blows drove sampler 12" after initial 6" of seating
50/7"	50 blows drove sampler 7" after initial 6" of seating
Ref/3"	50 blows drove sampler 3" during initial 6" seating interval (Ref=Refusal)

STRENGTH TEST METHOD

U = Unconfined Compression
Q = Unconsolidated Undrained Triaxial
T = Torvane
P = Pocket Penetrometer
M = Miniature Vane
F = Field Vane

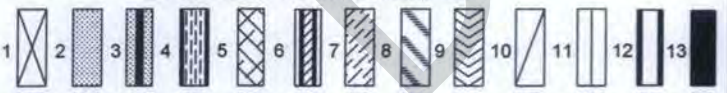
OTHER TESTS

k = Permeability
Consol = Consolidation
Gs = Specific Gravity
MA = Particle Size Analysis
EI = Expansion Index
OVM = Organic Vapor Meter

WATER LEVEL SYMBOLS

- Initial or perched water level
- Final ground water level
- Seepages encountered

SAMPLER TYPE AND RECOVERY



Samplers and sampler dimensions (unless otherwise noted in report text) are as follows:

1 SPT Sampler, driven 1 3/8" ID, 2" OD
2 MOD CA Liner Sampler 2 3/8" ID, 3" OD
3 CA Liner Sampler 1 7/8" ID, 2.5" OD
4 Thin-walled Tube, pushed 2 7/8" ID, 3" OD
5 Bulk Bag Sample (from cuttings)
6 Hand Auger Sample
7 Lexan Sample
8 Pitcher Sample
9 Vibracore Sample
10 No Sample Recovered
11 Rock Core
12 Direct Push
13 Enviromental Sample

Retained samples listed in sample No. column

SOIL STRUCTURE

Fissured: Containing shrinkage or relief cracks, often filled with fine sand or silt, usually more or less vertical.

Pocket: Inclusion of material of different texture that is smaller than the diameter of the sample.

Parting: Inclusion less than 1/8 inch thick extending through the sample.

Seam: Inclusion 1/8 inch to 3 inches thick extending through the sample.

Layer: Inclusion greater than 3 inches thick extending through the sample.

Laminated: Soil sample composed of alternating partings or seams of different soil types.

Interlayered: Soil sample composed of alternating layers of different soil type.

Intermixed: Soil sample composed of pockets of different soil type, and layered or laminated structure is not evident.

CONSISTENCY (1)

Clays	Blows/Foot SPT	Undrained Shear Strength (ksf)
Very Soft	0 - 2	0 - 0.25
Soft	2 - 4	0.25 - 0.5
Firm	4 - 8	0.5 - 1
Stiff	8 - 15	1 - 2
Very Stiff	15 - 30	2 - 4
Hard	Over 30	Over 4

RELATIVE DENSITY (1)

Sands and Gravels	Blows/Foot SPT
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	Over 50

INCREASING VISUAL MOISTURE CONTENT

Dry
Moist
Wet

Information on each boring log is a compilation of subsurface conditions and soil or rock classifications obtained from the field as well as from laboratory testing of samples. Strata have been interpreted by commonly accepted procedures. The stratum lines on the logs may be transitional and approximate in nature. Water level measurements refer only to those observed at the time and places indicated, and can vary with time, geologic condition, or construction activity.
(1) Terzaghi and Peck 1967

TERMS AND SYMBOLS USED ON BORING LOGS

DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLER TYPE	SAMPLER BLOW COUNT/ PRESSURE	OVM/PID (ppm)	LOCATION: SURFACE EL: ft +/- (rel. datum) MATERIAL DESCRIPTION	OTHER TESTS
		1			0	Silty GRAVEL (GM): very dense, brown, moist, fine and coarse, sub-rounded to sub-angular, some sand (fine- to coarse-grained)	
		2			0	Sandy CLAY (CL): stiff, medium brown, moist, fine- to medium-grained	
5		3			0		
					0	CLAY (CL): stiff to very stiff, light brown, moist, some sand (fine- to coarse-grained)	
10		4					

BORING DEPTH: 15.0 ft
DEPTH TO WATER: 13.9 ft

DRILLING METHOD: 3-in. dia. Hand Auger

COMPLETION DATE:
NOTES: 1. Terms and symbols defined on Plate A-1.

DRILLED BY: CES
LOGGED BY: M Pleva

LOG OF HA-1
2220 Fourth Street
Berkeley, California

DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLER TYPE	SAMPLER BLOW COUNT/ PRESSURE	OVM/PID (ppm)	LOCATION: SURFACE EL: ft +/- (rel. datum) MATERIAL DESCRIPTION	OTHER TESTS
		1			0.3	Silty GRAVEL (GM): very dense, brown, moist, fine and coarse, sub-rounded to sub-angular, some sand (fine- to coarse-grained)	
		2			0		
						Sandy CLAY (CL): stiff, brown, moist, fine- to coarse-grained, trace gravel (fine, sub-angular to sub-rounded)	
					0		
5		3				refusal at 5.5 feet	
10							

BORING DEPTH: 5.5 ft
DEPTH TO WATER: Not Encountered

DRILLING METHOD: 3-in. dia. Hand Auger

COMPLETION DATE:
NOTES: 1. Terms and symbols defined on Plate A-1.

DRILLED BY: CES
LOGGED BY: M Pleva

LOG OF HA-2
2220 Fourth Street
Berkeley, California

Project No. 698.004

DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLER TYPE	SAMPLER BLOW COUNT/ PRESSURE	OVM/PID (ppm)	LOCATION: SURFACE EL: ft +/- (rel. datum) MATERIAL DESCRIPTION	OTHER TESTS
		1			1	Silty GRAVEL (GM): very dense, brown, dry to moist, fine and coarse, sub-rounded to sub-angular, some sand (fine- to coarse-grained)	
					0		
		2			0	Sandy CLAY (CL): stiff to very stiff, medium brown, moist, fine- to medium-grained	
5		3				refusal at 5.5 feet	
10							

BORING DEPTH: 5.0 ft
DEPTH TO WATER: Not Encountered

DRILLING METHOD: 3-in. dia. Hand Auger

COMPLETION DATE:
NOTES: 1. Terms and symbols defined on Plate A-1.

DRILLED BY: CES
LOGGED BY: M Pleva

LOG OF HA-3
2220 Fourth Street
Berkeley, California

DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLER TYPE	SAMPLER BLOW COUNT/ PRESSURE	OVM/PID (ppm)	LOCATION: SURFACE EL: ft +/- (rel. datum) MATERIAL DESCRIPTION	OTHER TESTS
		1			0.6	Silty GRAVEL (GM): very dense, brown, dry to moist, fine and coarse, sub-rounded to sub-angular, some sand (fine- to coarse-grained)	
		2			0.8		
						Sandy CLAY (CL): stiff, brown, moist, fine- to medium-grained	
					0		
5		3				refusal at 5.5 feet	
10							

BORING DEPTH: 5.5 ft
DEPTH TO WATER: Not Encountered

DRILLING METHOD: 3-in. dia. Hand Auger

COMPLETION DATE:
NOTES: 1. Terms and symbols defined on Plate A-1.

DRILLED BY: CES
LOGGED BY: M Pleva

LOG OF HA-4
2220 Fourth Street
Berkeley, California

Project No. 698.004

DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLER TYPE	SAMPLER BLOW COUNT/ PRESSURE	OVM/PID (ppm)	LOCATION: SURFACE EL: ft +/- (rel. datum) MATERIAL DESCRIPTION	OTHER TESTS
		1			0	Gravel (GP): very dense, brown, dry to moist, fine and coarse, sub-rounded to sub-angular, some sand (fine- to coarse-grained)	
					0		
		2				Silty CLAY (ML): very stiff, medium brown, moist, trace sand (fine- to medium-grained), trace gravel (fine, sub-rounded to sub-angular)	
					0	refusal at 3.8 feet	
5							
10							

BORING DEPTH: 3.8 ft
DEPTH TO WATER: Not Encountered

DRILLING METHOD: 3-in. dia. Hand Auger

COMPLETION DATE:
NOTES: 1. Terms and symbols defined on Plate A-1.

DRILLED BY: CES
LOGGED BY: M Pleva

LOG OF HA-6
2220 Fourth Street
Berkeley, California

DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLER TYPE	SAMPLER BLOW COUNT/ PRESSURE	OVM/PID (ppm)	LOCATION: SURFACE EL: ft +/- (rel. datum) MATERIAL DESCRIPTION	OTHER TESTS
		1			0	Silty CLAY (CL): very stiff, dark brown, dry to moist, some sand (fine- to medium-grained), trace gravel (fine, sub-angular to sub-rounded), large concrete (up to 6-inches)	
		2			1.8	refusal at 2.5 feet	
5							
10							

BORING DEPTH: 2.5 ft
DEPTH TO WATER: Not Encountered

DRILLING METHOD: 3-in. dia. Hand Auger

COMPLETION DATE:
NOTES: 1. Terms and symbols defined on Plate A-1.

DRILLED BY: CES
LOGGED BY: M Pleva

LOG OF HA-7
2220 Fourth Street
Berkeley, California

Project No. 698.004

DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLER TYPE	SAMPLER BLOW COUNT/ PRESSURE	OVM/PID (ppm)	LOCATION: SURFACE EL: ft +/- (rel. datum) MATERIAL DESCRIPTION	OTHER TESTS
		1			0	Clayey SILT with Gravel (ML): very dense, brown, dry to moist, fine and coarse, sub-angular to sub-rounded, concrete, glass	
		2			0.5	refusal at 2 feet	
5							
10							

BORING DEPTH: 2.0 ft
DEPTH TO WATER: Not Encountered

DRILLING METHOD: 3-in. dia. Hand Auger

COMPLETION DATE:
NOTES: 1. Terms and symbols defined on Plate A-1.

DRILLED BY: CES
LOGGED BY: M Pleva

LOG OF HA-8
2220 Fourth Street
Berkeley, California

FUGRO

WELL SAMPLING FORM

PROJECT NAME: Former Peerless Lighting Facility 2220 Fourth Street
PROJECT NO.: 698.004
SAMPLED BY: Melissa L. Pleva
DATE: 8/29/06
WEATHER: Overcast, 65°

WELL NO.: M-1
WELL CASING DIAMETER: 2
TOC ELEVATION: _____

TOTAL DEPTH OF CASING (BTOC): 20 ~~17.9~~ FEET

DEPTH TO GROUNDWATER (BTOC): 12.15 FEET

FEET OF WATER IN WELL: 7.85 FEET

CALCULATED PURGE VOLUME: 3.8 gallons
(feet of water * casing dia^2 * .0408 * # of Volumes)

FREE PRODUCT: _____

PURGE METHOD: bailer

MEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER _____

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	Temp	pH	CONDUCTIVITY (µS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
~~Downhole~~ (Pre-Purge)	1615	17.2	8.90	957				watt Sudsy
1.5	1625	17.3	8.90	988				"
3.0	1630	17.3	8.88	972				"
4.0	1635	17.4	8.86	940				"

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 12.2' TIME SAMPLED: 1205

SAMPLING METHOD Bailer

CONTAINERS / PRESERVATIVE:

___/none 40 ML	___/none LITER
___/ Poly	___/ OTHER

ANALYSES: (Note if any samples are field filtered)

- ____ TEHd, TEHmo (8015 w/ Silica gel)
- ____ TVHg, BTEX, MTBE (8015/8020)
- ____ VOCs (8260)
- ____ HVOCs (8260)
- ____ Title 22 Metals (6010/9000)
- ____ Pesticides (8080)
- ____ PCBs (8080)
- ____ Sulfate (300.0)
- ____ Nitrate (300.0)
- ____ Fe^{2+} - Field Filtered

MISC FIELD OBSERVATION: _____

FUGRO

WELL SAMPLING FORM

PROJECT NAME: Former Peerless Lighting Facility 2220 Fourth Street
PROJECT NO.: 698.004
SAMPLED BY: Melissa L. Pleva
DATE: 8/29/06
WEATHER: Overcast, 60°

WELL NO.: MW-2
WELL CASING DIAMETER: 2"
TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC): ~30 ~~77.9~~ FEET

DEPTH TO GROUNDWATER (BTOC): 11.91 FEET

FEET OF WATER IN WELL: 18.09 FEET

CALCULATED PURGE VOLUME: 8.95 gallons
(feet of water * casing dia^2 * .0408 * # of Volumes)

FREE PRODUCT: none

PURGE METHOD: bailer

MEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	Temp	pH	CONDUCTIVITY (µS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
~~Downhole~~ (Pre-Purge)	1448	17.1	9.36	941				
2.5	1452	17.2	8.22	867				water sudsy
6.0	1512	17.1	8.57	864				"
9.0	1525	17.0	8.70	843				"

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 11.85 TIME SAMPLED: 1206

SAMPLING METHOD: Bailer

CONTAINERS / PRESERVATIVE:

none / 40 ML	3 / none LITER
/ Poly	/ OTHER

ANALYSES: (Note if any samples are field filtered)

- X TEHd, ~~TEHmo~~ (8015 w/ Silica gel)
- ____ TVHg, BTEX, MTBE (8015/8020)
- ____ VOCs (8260)
- ____ HVOCs (8260)
- ____ Title 22 Metals (6010/9000)
- ____ Pesticides (8080)
- ____ PCBs (8080)
- ____ Sulfate (300.0)
- ____ Nitrate (300.0)
- ____ Fe $^{2+}$ - Field Filtered
- ~~X~~ pentachlorophenol
- X chlordane

MISC FIELD OBSERVATION:

FUGRO

WELL SAMPLING FORM

PROJECT NAME: Former Peerless Lighting Facility 2220 Fourth Street
PROJECT NO.: 698.004
SAMPLED BY: Melissa L. Pleva
DATE: 8/31/06
WEATHER: Sunny, breezy, 70s

WELL NO.: ~~MW~~ 2 S-7
WELL CASING DIAMETER: 2 1
TOC ELEVATION: _____

TOTAL DEPTH OF CASING (BTOC): 16.1 ~~14.9~~ FEET
DEPTH TO GROUNDWATER (BTOC): 11.0 FEET
FEET OF WATER IN WELL: 6.1 FEET

CALCULATED PURGE VOLUME: 0.74 gallons
(feet of water * casing dia^2 * .0408 * # of Volumes)
FREE PRODUCT: Sheen
PURGE METHOD: bailer

MEASUREMENT METHOD: (ELECTRONIC SOUNDER) or OTHER _____

FIELD MEASUREMENTS

Liters ~~GALLONS~~ REMOVED	TIME	Temp	pH	CONDUCTIVITY (µS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
~~Downhole (Pre-Purge)~~								
0.25 l	1608	18.2	8.74	1323				turbid, gray, hydrocarbon odor
0.50 l	1613	18.3	8.75	1332				slight sheen

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): _____ TIME SAMPLED: _____

SAMPLING METHOD: Bailer

CONTAINERS / PRESERVATIVE:

___ / none 40 ML	___ / none LITER
___ / Poly	___ / OTHER

ANALYSES: (Note if any samples are field filtered)

- ___ TEHd, TEHmo (8015 w/ Silica gel)
- ___ TVHg, BTEX, MTBE (8015/8020)
- ___ VOCs (8260)
- ___ HVOCs (8260)
- ___ Title 22 Metals (6010/9000)
- ___ Pesticides (8080)
- ___ PCBs (8080)
- ___ Sulfate (300.0)
- ___ Nitrate (300.0)
- ___ Fe^{2+} - Field Filtered

MISC FIELD OBSERVATION: Purged dry @ 0.6 liters

Note: this well was initially found unprotected. no metal plate & no well cap on Monday Aug 27, 2006

GRO

WELL SAMPLING FORM

PROJECT NAME: Former Peerless Lighting Facility 2220 Fourth Street
PROJECT NO.: 698.004
SAMPLED BY: Melissa L. Pleva
DATE: 8/29/06
WEATHER: Overcast, 65°

WELL NO.: S-8
WELL CASING DIAMETER: 1"
TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC): ~~14.9~~ 16.5 FEET
DEPTH TO GROUNDWATER (BTOC): 11.95 FEET
FEET OF WATER IN WELL: 4.55 FEET

CALCULATED PURGE VOLUME: 0.5 gallons
(feet of water * casing dia^2 * .0408 * # of Volumes)
FREE PRODUCT: none
PURGE METHOD: bailer

MEASUREMENT METHOD: (ELECTRONIC SOUNDER) or OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	Temp	pH	CONDUCTIVITY (µS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
Downhole (Pre-Purge)								
0.1 ~~1558~~	1558	8.73	17.9	1014				
0.2gal	1608	18.0	8.8	1004				

able to sample 0.5 liters before going dry 9/30

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): 12.28 TIME SAMPLED:

SAMPLING METHOD Bailer

CONTAINERS / PRESERVATIVE:
/ none 40 ML
/ none LITER
/ Poly
/ OTHER

ANALYSES: (Note if any samples are field filtered)

- ____ TEHd, TEHmo (8015 w/ Silica gel)
- ____ TVHg, BTEX, MTBE (8015/8020)
- ____ VOCs (8260)
- ____ HVOCs (8260)
- ____ Title 22 Metals (6010/9000)
- ____ Pesticides (8080)
- ____ PCBs (8080)
- ____ Sulfate (300.0)
- ____ Nitrate (300.0)
- ____ Fe^{2+} - Field Filtered

MISC FIELD OBSERVATION: purged dry @ 0.2 gallons

DRAFT

A member of the Fugro group of companies with offices throughout the world.

FUGRO

WELL SAMPLING FORM

PROJECT NAME: Former Peerless Lighting Facility 2220 Fourth Street
PROJECT NO.: 698.004
SAMPLED BY: Melissa L. Pleva
DATE: 8/31/06
WEATHER: Sunny, Drizzy 700

WELL NO.: S-10
WELL CASING DIAMETER: 11
TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC): ~~[illegible]~~ 14.25 FEET

CALCULATED PURGE VOLUME: 0.33 gallons
(feet of water * casing dia^2 * .0408 * # of Volumes)

DEPTH TO GROUNDWATER (BTOC): 11.5 FEET

FEET OF WATER IN WELL: 2.75 FEET

FREE PRODUCT:

PURGE METHOD: bailer

MEASUREMENT METHOD: (ELECTRONIC SOUNDER) or OTHER

FIELD MEASUREMENTS

Liters GALLONS REMOVED	TIME	Temp	pH	CONDUCTIVITY (µS/CM)	TDS (g/L)	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
~~Duplicate (Pre-Purge)~~								
0.25 liters ✓	1556	18.0	8.88	1001				

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC): TIME SAMPLED:

SAMPLING METHOD Bailer

CONTAINERS / PRESERVATIVE:

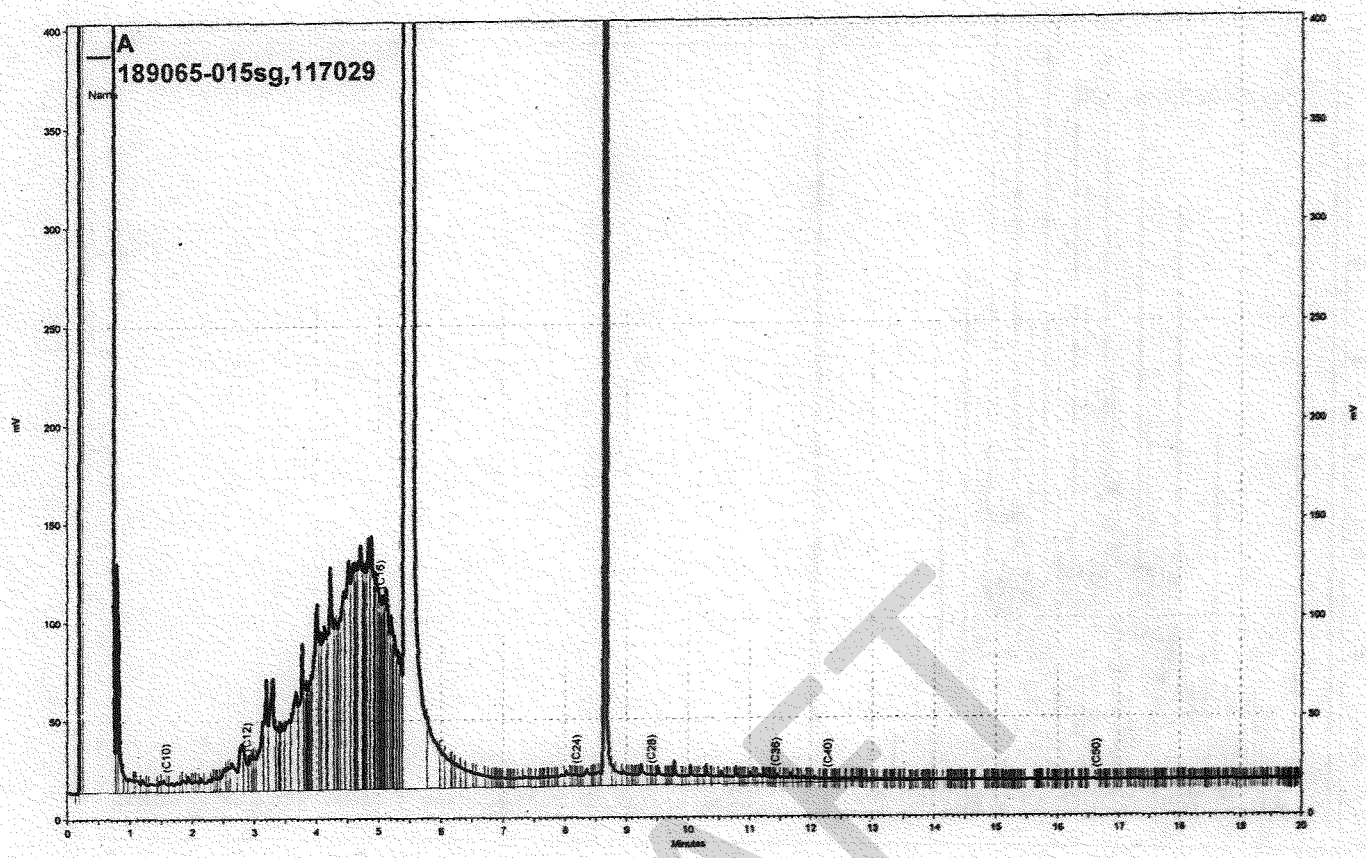
2 / none — 40 ML	2 / none — LITER
/ — Poly	/ — OTHER

ANALYSES: (Note if any samples are field filtered)

- ____ TEHd, TEHmo (8015 w/ Silica gel)
- ____ TVHg, BTEX, MTBE (8015/8020)
- ____ VOCs (8260)
- ____ HVOCs (8260)
- ____ Title 22 Metals (6010/9000)
- ____ Pesticides (8080)
- ____ PCBs (8080)
- ____ Sulfate (300.0)
- ____ Nitrate (300.0)
- ____ Fe^{2+} - Field Filtered

MISC FIELD OBSERVATION: Purged dry @ 0.25 liters

APPENDIX D
CHEMICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION



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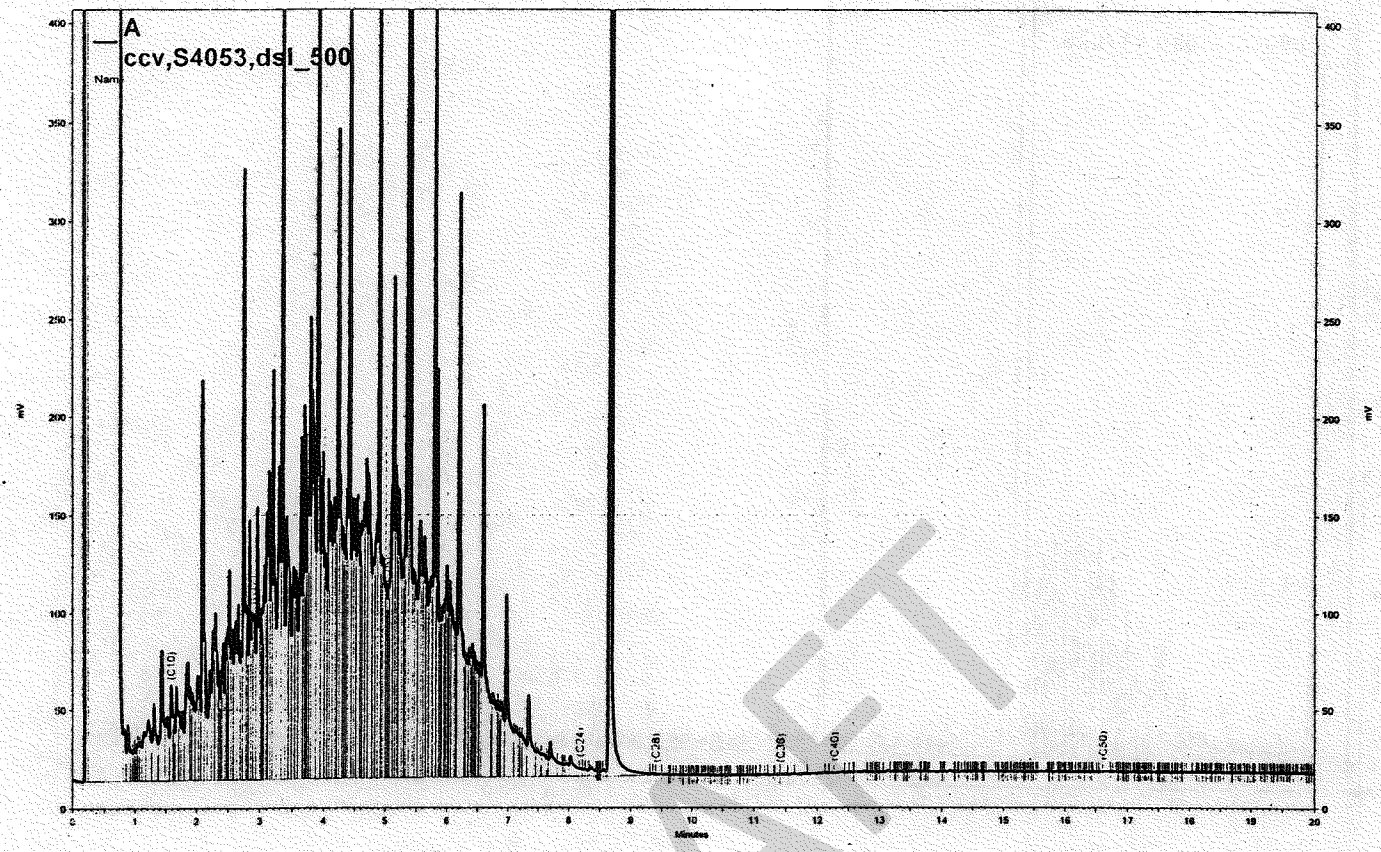
M-2



\\Lims\gdrive\ezchrom\Projects\GC11A\Data\248a003, A

Dusel

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	189065	Location:	Frmr. Peerless Lighting 2220 4th St.
Client:	Fugro West Inc.	Prep:	EPA 3520C
Project#:	698.004	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	117029
Units:	ug/L	Prepared:	09/01/06
Diln Fac:	1.000	Analyzed:	09/05/06

Type: BS
Lab ID: QC354464

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,912	76	61-133

Surrogate	%REC	Limits
Hexacosane	89	65-130

Type: BSD
Lab ID: QC354465

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,736	69	61-133	10	31

Surrogate	%REC	Limits
Hexacosane	82	65-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	189065	Location:	Frmr. Peerless Lighting 2220 4th St.
Client:	Fugro West Inc.	Prep:	SHAKER TABLE
Project#:	698.004	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	08/30/06

Field ID:	HA-1-1	Sampled:	08/29/06
Type:	SAMPLE	Prepared:	09/02/06
Lab ID:	189065-001	Analyzed:	09/05/06
Diln Fac:	1.000	Cleanup Method:	EPA 3630C
Batch#:	117050		

Analyte	Result	RL
Diesel C10-C24	98 H Y	0.99

Surrogate	%REC	Limits
Hexacosane	85	48-130

Field ID:	HA-1-2	Sampled:	08/29/06
Type:	SAMPLE	Prepared:	09/02/06
Lab ID:	189065-002	Analyzed:	09/05/06
Diln Fac:	1.000	Cleanup Method:	EPA 3630C
Batch#:	117050		

Analyte	Result	RL
Diesel C10-C24	6.3 H Y	1.0

Surrogate	%REC	Limits
Hexacosane	92	48-130

Field ID:	HA-1-3	Sampled:	08/29/06
Type:	SAMPLE	Prepared:	09/02/06
Lab ID:	189065-003	Analyzed:	09/05/06
Diln Fac:	1.000	Cleanup Method:	EPA 3630C
Batch#:	117050		

Analyte	Result	RL
Diesel C10-C24	ND	0.99

Surrogate	%REC	Limits
Hexacosane	85	48-130

Field ID:	HA-2-1	Sampled:	08/29/06
Type:	SAMPLE	Prepared:	09/01/06
Lab ID:	189065-004	Analyzed:	09/06/06
Diln Fac:	10.00	Cleanup Method:	EPA 3630C
Batch#:	117017		

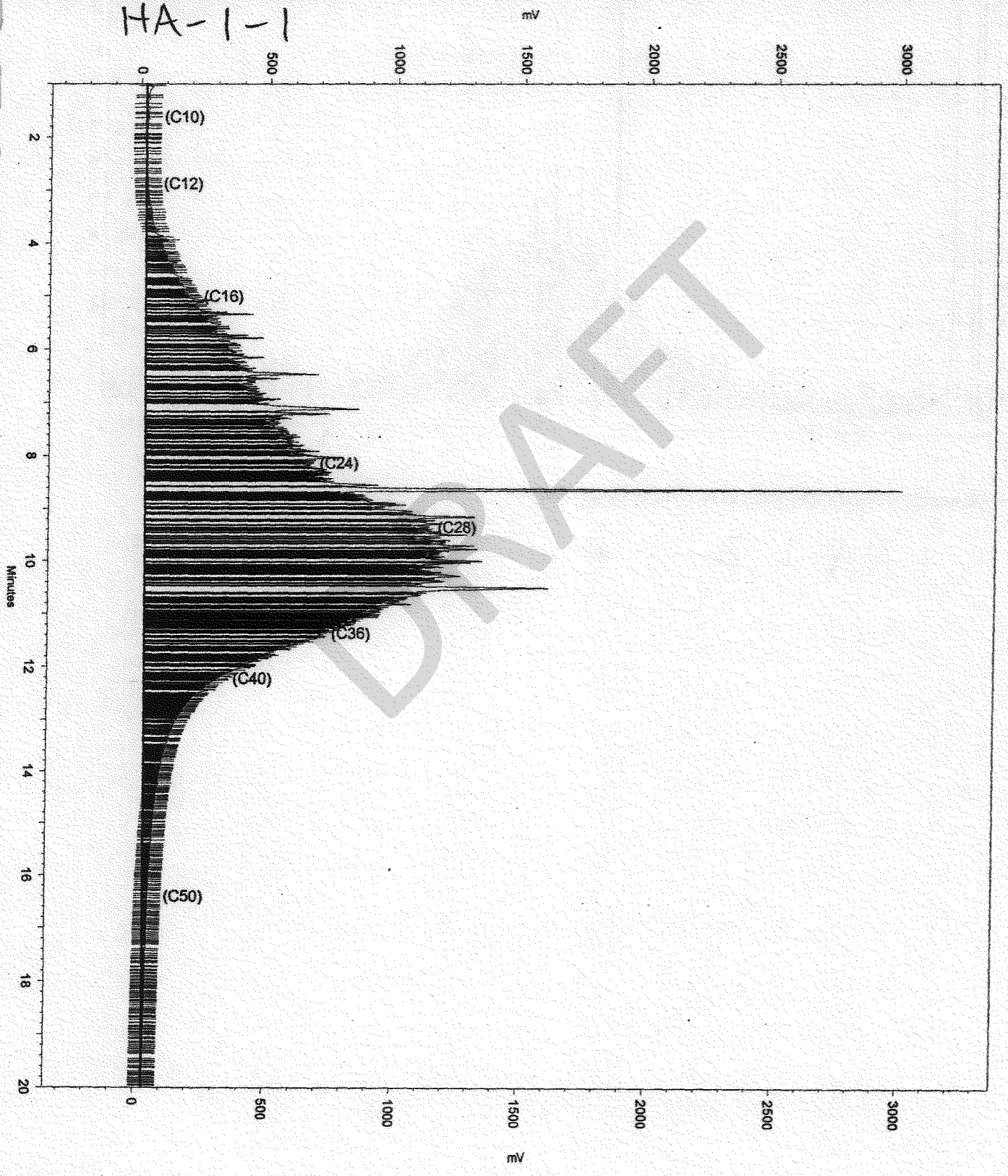
Analyte	Result	RL
Diesel C10-C24	61 H Y	10

Surrogate	%REC	Limits
Hexacosane	DO	48-130

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

Sample Name: **189065-001sg,117050**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC17A\Data\248a022**
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC17A\Sequence\248.seq**
Software Version 3.1.7
Method Name: \\Lims\gdrive\ezchrom\Projects\GC17A\Method\ateh244.met
Run Date: 9/5/2006 6:55:48 PM
Analysis Date: 9/6/2006 6:30:10 AM
Instrument: GC17A Vial: 22 Operator: Teh 3. Analyst (lims2k3\teh3)
Sample Amount: 1 Dilution Factor: 1 PDF: 1

HA-1-1



705 BANCROFT WAY

(SUBSURFACE CONSULTANTS, INC, 1992)

PRELIMINARY ENVIRONMENTAL ASSESSMENT
705 BANCROFT WAY
BERKELEY, CALIFORNIA
SCI 698.001

Prepared for:

Mr. Richard Kraber
Chief Operating Officer
Peerless Lighting Corporation
2246 Fifth Street
Berkeley, California 94702-0556

by:

Jeriann N. Alexander
Environmental Assessor REA-03130 (expires 6/30/92)

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Geotechnical Engineer 741 (expires 12/31/92)
Environmental Assessor REA-03291 (expires 06/30/92)

Subsurface Consultants, Inc.
171 - 12th Street, Suite 201
Oakland, California 94607
(415) 268-0461

January 6, 1992

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EXECUTIVE SUMMARY

The property at 705 Bancroft Way in Berkeley, California is currently owned and occupied by Delicor Inc., a vending machine sales and service company. In November 1991, Miller Environmental Company, Inc. (MEC) was retained by Delicor to perform a Phase I Assessment of the property for a real estate transaction. The assessment revealed that foundry activities had been performed at the site prior to Delicors' occupancy.

Peerless Lighting Corporation retained Subsurface Consultants, Inc. (SCI) to review MEC's assessment and perform additional research and studies as necessary to characterize environmental conditions existing at the site. SCI's assessment included (1) research of historical uses of the site and nearby properties, (2) performing a detailed site reconnaissance, (3) drilling and sampling 18 test borings, and (4) analyzing selected soil and groundwater samples for contaminants.

The results of SCI's assessment indicates that the site has been occupied by at least three different companies which conducted foundry type activities from the early 1920's to the late 1950's. Studies to date have confirmed the presence of foundry sand and debris overlying the north half of the property and along the western property line. The foundry sand and debris layer which varies in thickness from 1 to 3 feet, contains elevated concentrations of arsenic, chromium, copper, lead, zinc, and oil and grease. Elevated concentrations of oil and grease have also

been identified near previous air compressor locations. In addition, groundwater from a test boring situated near the northwest corner of the property contains significant concentration of petroleum hydrocarbons.

Groundwater in the area has been impacted at contiguous properties by trichlorethene (TCE), 1,1,1-trichloroethane (TCA) and pentachlorophenol (PCP). The TCE appears to be a regional problem and the TCA and PCP are believed to related to point source releases on the property to the north. These compounds were not detected in the grab groundwater sample obtained from the site.

As shown herein the property has several environmental conditions which should be remediated and\or mitigated. Based on the limited studies we have identified the following environmental concerns.

1. The layer of foundry sand and debris contains heavy metals exceeding hazardous waste criteria and hence will likely require remediation. While the layer is relatively thin, it is widespread as it extends beneath existing structures. The remediation method(s) employed should take into consideration the future use of the property and will likely require the existing structures to be removed.

2. The oil and grease contamination near the two previous compressor areas exist in concentrations which will likely require remediation. Although the contamination is believed to be relatively localized additional investigation should be performed to define the lateral and vertical extent.

3. Petroleum hydrocarbons exist in the groundwater beneath the site. The source of these contaminants is unknown. In addition, contamination sources are known to have impacted groundwater at adjacent sites. A groundwater investigation should be conducted to (1) evaluate the source of petroleum hydrocarbons, (2) access the impacts of on-site contamination, and (3) evaluate water quality in the area.

1.0 INTRODUCTION

This report records the results of an environmental assessment conducted by Subsurface Consultants, Inc. (SCI) for the property at 705 Bancroft Way in Berkeley, California. The site occupies the southwest corner of the city block surrounded by Bancroft Way, Allston Way, Fourth Street and a Southern Pacific Railroad right-of-way as shown on the Site Plan, Plate 1.

Miller Environmental Company Inc. (MEC) was retained by the current property owner, Delicor Inc., to perform a Phase I assessment at the site. The purpose of the MEC assessment was to evaluate the potential of environmental contamination existing at the site. MEC's research revealed that foundry activities were performed at the site from the 1930's through the 1950's.

Peerless retained SCI to review MEC's report and perform additional research and studies as necessary to characterize environmental conditions which may exist. As outlined in the proposal dated November 6,1991, the scope of services for SCI's assessment was to include the following phases:

Phase I - Historic Use Research

> Research the historical use of the site and neighboring properties, conduct a detailed site reconnaissance and draw conclusions regarding the likelihood of on-site and off-site sources of contamination impacting the site.

Phase II - Sampling and Analytical Testing

> Sample and analyze samples from test borings drilled in areas of environmental concern to check for contamination.

2.0 SITE CONDITIONS

2.1 Geology

The site is located on a broad alluvial plain bordered by the Berkeley Hills on the east and San Francisco Bay on the west. According to a geologic map by Radbruch[1], the site is underlain by the Temescal formation, an alluvial fan deposit comprised of interfingered lenses of clayey gravel, sandy silty clay, and sand-clay-silt mixtures. The 1856 bay shoreline, as shown by the U.S. Coast and Geodetic Survey[2], extended parallel to the west side of the current railroad right-of-way.

2.2 Surface Conditions

The relatively level, nearly rectangular site measures about 130 by 300 feet in plan and comprises just less than 1 acre. It is bordered by Bancroft Way to the south, a Southern Pacific Railroad right-a-way (formally Third Street) to the west and commercial/light industrial developments to the north and east. The site is currently occupied by the five structures shown on Plate 1. The buildings are currently used for office space, warehousing of food and machine parts, truck repair, vending machine repair, and truck parking.

---

[1] "Areal and Engineering Geology of the Oakland West Quadrangle, California", USGS Map I-239

[2] Unpublished U.S. Coast and Geodetic Survey planetable sheets, Numbers XXIV and XXV, U.S. Coast Survey, San Francisco Bay, California, 1856.

Adjacent to the south side of the cold food warehouse building is a steam cleaning station currently used by Delicor. Reportedly, vending machines and trucks are cleaned in the station. Water from the station is collected in a sump. It is unclear whether the sump discharges to the sanitary or storm water sewer.

A concrete pad was observed adjacent to the east side of the main warehouse. The pad is believed to be the foundation for a previous air compressor. Inside the warehouse are several air line ports.

A retaining wall extends along the west side of the property, with the adjacent neighboring ground surface about 3 to 4 feet lower than the subject property. The northern portion of the wall is composed of galvanized steel, the remaining wall consists of wood. The galvanized wall is badly corroded in an area approximately 110 feet south of the northwest corner of the property. Materials exposed in the corroded area appear to be foundry sands and wastes, and miscellaneous debris. The corroded area is shown on Plate 1.

3.0 SITE USAGE HISTORY

3.1 General

Our understanding of the past use of the site and neighboring parcels is based upon information obtained from the following sources:

1. Sanborn Fire Insurance maps,
2. Historical telephone directories,
3. Building plans and permits,
4. Phone interview with Mr. Fred Stadelhofer, a previous property owner,
5. Fire department records,
6. Historic Atlas Map of Alameda County,
7. Regulatory agency files, and
8. Aerial photographs[3].

3.2 705 Bancroft Way

The site is situated in an area which has been developed since the late 1800's. Historic uses are graphically summarized on Plate 2 and described in the following paragraphs. Copies of pertinent reference materials are presented in Appendix B.

The Historic Atlas Map of Alameda County (Thompson & West, 1878) indicates that the property was originally part of the Berkeley L. T. I. Association Tract. The tract extended from

---

[3] Pacific Aerial Surveys photographs reviewed are summarized in Appendix A.

Bancroft to beyond University to the north, and from the shoreline to about San Pablo Avenue to the east. The site in particular was bordered on the west by the Northern Railway right-of-way. The shoreline in 1878 was shown to be situated near the present eastern side of the Berkeley Aquatic Park.

The earliest information regarding past site uses was obtained from historic phone directories and Sanborn Fire Insurance Maps. The 1911 Sanborn map shows that the central portion of the site was occupied by the Century Mercantile Company and a Southern Pacific Railroad Depot was situated near the southwest corner of the site. Historic phone directories indicate that the mercantile was on-site from about 1908 through 1917.

In about 1925, the Oakland Furnace and Foundry Company occupied the subject property and the neighboring property to the east. A 1929 Sanborn map shows that the mercantile and depot structures were removed and two new buildings were constructed. The main new structure extended across the central portion of the properties and housed a foundry and a pattern storage area. The second structure was a small warehouse situated in the southwest corner of the subject property. The foundry, which apparently had an earthen floor was present on the subject property. It is unclear when Oakland Furnace and Foundry Company ceased operation. Based on aerial photograph review, structures present in 1947 were oriented in similar patterns as presented in the 1929 map.

In about 1949, Armco Drainage and Metal Products company occupied the property. The main Oakland Furnace and Foundry

structure was removed and a new foundry building was constructed across the northern 1/3 of the site. The foundry had an earthen floor. A dust collector and a compressor house were located just outside the south side of the structure. It appears that foundry patterns were stored in the small structure which had been a warehouse for the Oakland Furnace and Foundry Company. Another smaller storage building also existed just to the east of the pattern warehouse. Armco remained at the site through the 1950's.

Near the end of the 1950's the property was purchased by the Stadelhofer family of Berkeley. The Stadelhofer family used the site as income property through the 1970's. Reportedly, tenants used the property for newspaper storage, automobile restoration, pump repair, and printing. Improvements to the property made during the Stadelhofer ownership included surfacing the main structure (which had housed the Armco foundry) with concrete, constructing the current office, truck repair and cold storage warehouse buildings, and paving access ways.

In the late 1970's Coffee System Inc. (CSI), now known as Delicor, purchased the property from the Stadelhofer family. A 5000 gallon underground storage tank was installed at the site in 1984. The tank stored unleaded gasoline used to fuel CSI delivery trucks. The tank was permitted and it's installation was inspected by the Berkeley Fire Department. The tank was removed on September 26, 1991. Soil samples obtained from below the tank contained non-detectable concentrations of fuel constituents. Soil excavated from the tank area was disposed of at an appropriate landfill and

the excavation was backfilled with clean imported soil. The City of Berkeley has recommended site closure status for the tank area.

3.3 Surrounding Neighborhood

The surrounding neighborhood has been utilized by a mix of residential, commercial, retail and light industrial developments. According to Sanborn maps, and current observations, non-residential uses that have occurred within the area include an elevator company, iron works, nurseries, paint manufactures, a soap factory, warehouses , a creamery, and electric light manufacturing.

4.0 ENVIRONMENTAL CONCERNS

Based on a review of a Phase I Assessment performed by MEC and our own research during the Historic Use Research phase of our assessment several on-site and off-premises environmental concerns were revealed. These concerns are addressed in the following sections.

4.1 On-Site

Current and past uses of the site raise a number of environmental concerns. The concerns are summarized below.

1. Near surface soils in the areas of the previous foundries may contain heavy metals, petroleum hydrocarbons, oil and grease and solvents.

2. Soils near the existing and previous compressor pads may contain oil and grease.

An investigation program was developed to check for the existence and extent of soil contamination associated with the previous foundries. The program is described in more detail in Section 5.0.

4.2 Off-Premises

Based on a review of environmental cases compiled by the San Francisco Regional Water Quality Control Board (RWQCB), the California Department of Health Services (DHS) and the Federal Environmental Protection Agency (EPA), there are 16 documented environmental cases within about 2000 feet of the site. The addresses of these cases and their locations are shown on the Environmental Case Plan, Plate 3.

The site adjacent to the north has had documented releases requiring agency oversight. A brief summary of information contained in the agency file is described below.

747 Bancroft Way and 2220 Fourth Street

In 1983, Brown and Caldwell (B&C) performed an investigation to identify the presence or absence of priority pollutant pesticides in subsurface soils at the site. Elevated levels of aldrin, heptachlor, and chlordane were detected in the soil. IT Corporation removed contaminated soil and the area was backfilled with the approval of the DOHS. At the request of the RWQCB, a groundwater investigation was implemented by B&C. B&C installed four wells which they monitored from 1985 through 1987. Although no pesticides were detected in the water samples, various organic priority pollutants, including 1,2-Dichloroethane (DCA), trans-1,2-Dichloroethene (DCE), trichloroethene (TCE), pentachlorophenol (PCP), chloroform and chloroethane were detected.

In 1988, the Mark Group (MG) performed a groundwater investigation at the site. Six wells were sampled during the MG investigation. The same organic priority pollutants were detected as when B&C performed the investigation. MG concluded that the presence of TCE was representative of a regional problem. The presence of the other organics were attributed to local point source releases.

Documents also indicate that an empty, unused underground storage tank was removed from the 2220 Fourth Street property in

1987. Samples obtained below the tank contained total fuel hydrocarbons at or below the detection limit.

5.0 FIELD EXPLORATION

Based on the environmental concerns identified during this study, an investigation program was developed to preliminarily assess soil and groundwater quality. In general, subsurface conditions were investigated by drilling and sampling 18 test borings. Numerous soil samples were retained from the borings. In addition, a grab groundwater sample was obtained from within one of the borings. Boring locations are shown on Plate 1.

Test Borings B-2 thru B-4 and B-10 thru B-13 were drilled using 4.0-inch-diameter, trailer mounted, solid flight auger equipment. Due to limited access the remaining borings were drilled utilizing a portable "Minute Man" rig equipped with 3-inch-diameter solid flight augers. At the completion of drilling, all the borings except B-5, B-9 and B-14 were backfilled with cement grout and capped with either concrete or asphalt as appropriate to match existing conditions. These borings were was also backfilled with cement grout and capped following collection of a grab groundwater sample from B-9 and groundwater depth data.

Our engineer observed drilling operations and prepared logs of the soils encountered. The Logs of Test Borings are presented on Plates 4 through 12. The soils are classified in accordance with the Unified Soil Classification System described on Plate 13. Undisturbed soil samples were obtained from the test borings at frequent intervals. The samples were retained in brass sample liners. Teflon sheets were placed over the liner ends prior to capping, taping and labeling. The samples were refrigerated until delivery to the analytical laboratory. The samples were accompanied by Chain-of-Custody forms, copies of which are presented in Appendix C. Drilling and sampling equipment was steam cleaned prior to each use. Soil cuttings generated during drilling and steam cleaning water were placed in DOT approved 55-gallon drums and left on site for later disposal by others.

Soil from each sampling interval were placed in plastic "Ziplock" bags and screened for organic vapors using an organic vapor meter (OVM-580A). No organic vapors were encountered in any of the samples.

6.0 SUBSURFACE CONDITIONS

6.1 Soil Conditions

Based upon the results of our field exploration, it appears that a majority of the site is blanketed by a thin layer of fill. The fill consists of fine-grained sand and miscellaneous debris. The sand contains varying quantities of gravel and rock fragments, and its' color varies from light brown to black. The debris consists of metal fragments, slag, wire, and glass. Given the history of the site and the consistency of the fill, we judge the fill is previous foundry sand and wastes.

The foundry fill, which appears to vary from 1 to 3 feet thick, is underlain by interbedded alluvial deposits of the Temescal Formation. The upper few feet of alluvium consists of silty clays. Medium dense clayey sands were encountered beneath the clays in some of the borings.

6.2 Groundwater Conditions

Test borings B-5, B-9 and B-14 were left open after drilling to check the depth to groundwater. Two days after drilling, groundwater had risen to a depth of about 11 feet below the groundsurface in boring B-9. Boring B-14 was moist at the bottom one day after drilling and boring B-5 was dry two days after drilling. Based on data generated by others at adjacent properties, groundwater appeared to be stabilized at a depth of about 11 feet in 1988. The reported groundwater gradient was toward the north-north west.

A hydrocarbon odor was observed while obtaining the grab groundwater sample from boring B-9. However no free product nor sheen was noted on the sample.

7.0 ANALYTICAL TESTING

Selected soil samples and a grab groundwater sample were analyzed by Curtis & Tompkins, LTD, a State of California Department of Health Services (DHS) certified analytical laboratory for the tests performed. The analytical test reports are presented in Appendix C. The analytical test results are summarized in Tables 1 and 2.

The testing program implemented during the assessment included screening selected samples for total petroleum hydrocarbons, total oil and grease, total metals, and semi-volatile and volatile organics. Specific test methods utilized are summarized below.

1. Total petroleum hydrocarbons, as diesel (TPH), sample preparation and analysis using EPA methods 3550 (sonication) and 8015 (modified, gas chromatograph coupled to a flame ionization detector), and

2. Purgeable Aromatic Hydrocarbons, sample preparation and analysis using EPA methods 5030 and 8020 (gas chromatograph coupled to a flame ionization detector).

3. Purgeable halocarbons, sample preparation and analysis using EPA methods 5030 and 8010 (gas chromatograph and electrolytic conductivity detector),

4. Semi-volatile organics and PCB's, sample preparation and analysis using EPA methods 3550 and 8270 (gas chromatograph with mass spectroscope).

5. Total and soluble metals, analysis using EPA methods, and

6. Total oil and grease, analysis using SMWW17:5520.

Based on the results of the initial analyses, it became apparent that some of the samples obtained elevated concentration of several heavy metals including arsenic, copper, lead, silver, and zinc. Selected samples were subsequently analyzed for soluble metal concentrations.

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 General

Based upon the results of this investigation, we conclude that there are several on-site environmental concerns that will require further study and subsequent remediation. These concerns include (1) foundry wastes containing heavy metals exceeding hazardous waste concentrations, (2) oil and grease contamination in excess of regulatory limits near previous compressors, and (3) petroleum hydrocarbon contamination in groundwater beneath the site. Our findings regarding these concerns are addressed in the following sections.

8.2 Foundry Wastes

Foundry wastes blanket the north and western portions of the site. These materials contain widely varying concentrations of heavy metals as well as oil and grease. Concentrations of arsenic, copper, lead and zinc within these materials are well above those detected in apparently uncontaminated on-site samples. In addition, numerous samples exceed California hazardous wastes

criteria. Highlighted in Table 1 are samples which exceed either the Total Threshold Limit Concentration (TTLC) or the Soluble Threshold Limit Concentration (STLC) criteria as defined in the CAC Title 26. It appears that the most prevalent contaminant exceeding regulatory criteria is soluble lead.

8.3 Compressor Areas

8.3.1 Oil and Grease

Shallow soil samples from Borings B-5, B-6 and B-13 which were situated near previous air compressor locations contained concentrations of 660, 1100 and 12,000 parts per million (ppm) of hydrocarbon oil and grease, respectively. Regulatory guidelines for hydrocarbon contamination require remediation of concentrations in excess of 1000 ppm. Where concentrations over 100 ppm exist, a groundwater investigation is required. Depending on the results of the groundwater investigation and the risk of future groundwater impacts, hydrocarbon clean up levels significantly less then 1000 ppm may be required. At this time, the extent of hydrocarbon contamination is not defined.

8.3.2 Lead

The shallow soil sample from boring B-5 situated adjacent to the existing compressor pad contained total lead in excess of lead's TTLC hazardous waste criteria. The extent of lead contamination in this area is unknown.

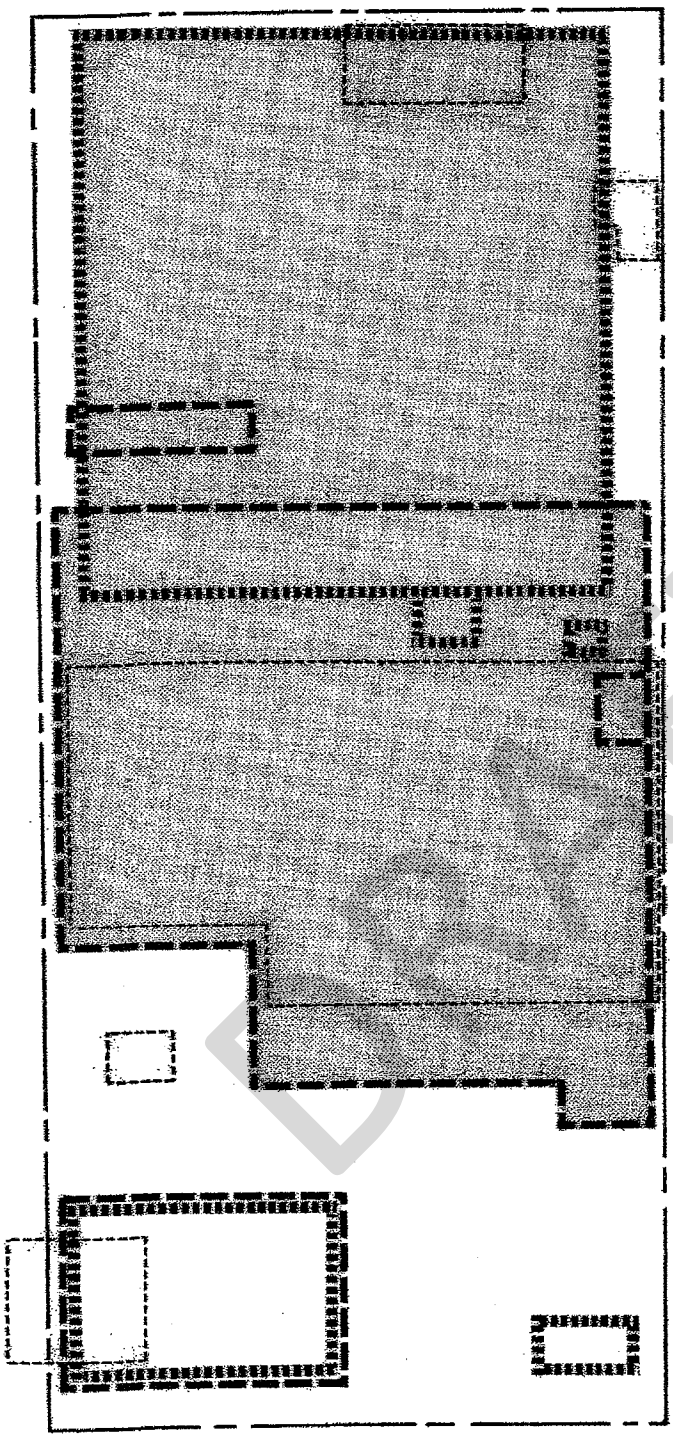
8.4 Groundwater Contamination

8.4.1 On-Site Contamination

The results of the analysis of the grab groundwater sample indicate that significant concentrations of gasoline, diesel and toluene exist in groundwater beneath the previous Armco Foundry area. To date, the source and/or extent of groundwater contamination is unknown. Review of the groundwater data from adjacent sites does not indicate a significant currently identified off-site source. Hence, we conclude that an on-site source of groundwater contamination, which has not been identified by the limited studies to date, could exist. Additional investigation is required to assess the groundwater contamination issues.

8.4.2 Off-Site Contamination

Several significant off-site contaminant sources were identified during our investigation. The impact of these sources on groundwater quality at the site should be evaluated during future groundwater studies.



HISTORIC USES SITE PLAN

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705 BANCROFT WAY – BERKELEY, CA

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PLATE 2

9.0 LIMITATIONS

This study was intended to provide a preliminary means of evaluating the risk of soil and groundwater contamination, based upon the previous known uses of the site, limited subsurface investigation and analytical testing. If areas of contamination exist on other portions of the property, away from the areas investigated, it is probable that they would not have been detected by the analyses. In addition, if chemicals that were not tested for exist at the site, they would not have been detected during this study.

List of Attached Plates:

Plate 1	-	Site Plan
Plate 2	-	Environmental Case Plan
Plate 3	-	Historic Use Site Plan
Plates 4 through 12	-	Logs of Test Borings
Plate 13	-	Unified Soil Classification System

Appendix:

Appendix A	Aerial Photograph Review List
Appendix B	Reference Material
Appendix C	Analytical Test Reports
	Chain-of-Custody Forms

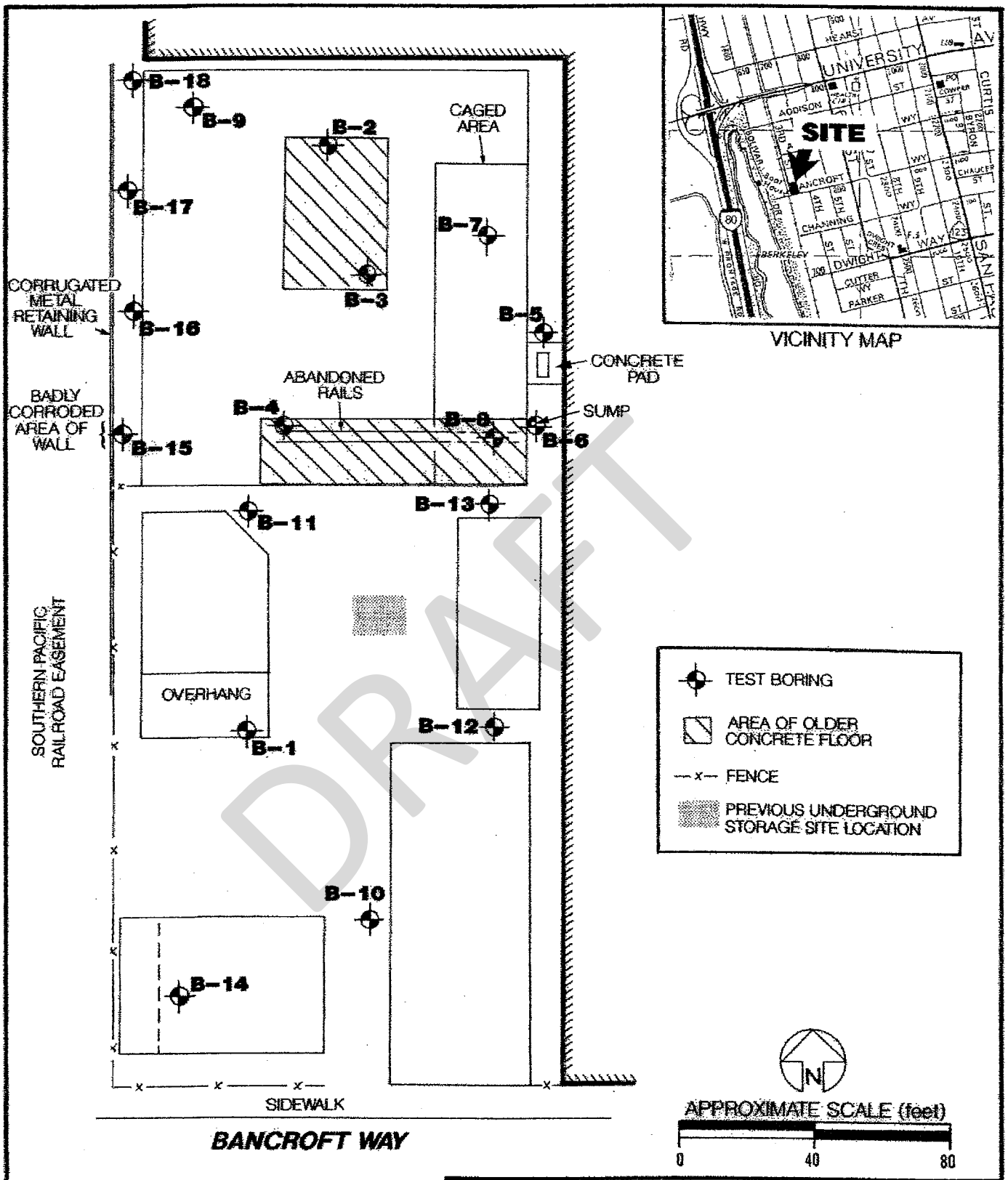
List of Tables:

Table 1	Contaminants In Soil
Table 2	Contaminants in Grab Groundwater Sample

Distribution:

5 copies: Mr. Richard Kraber
Chief Operating Officer
Peerless Lighting Corporation
2246 Fifth Street
Berkeley, California 94702-0556

JNA:RWR:JPB:ddh



SITE PLAN

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705 BANCROFT WAY – BERKELEY, CA

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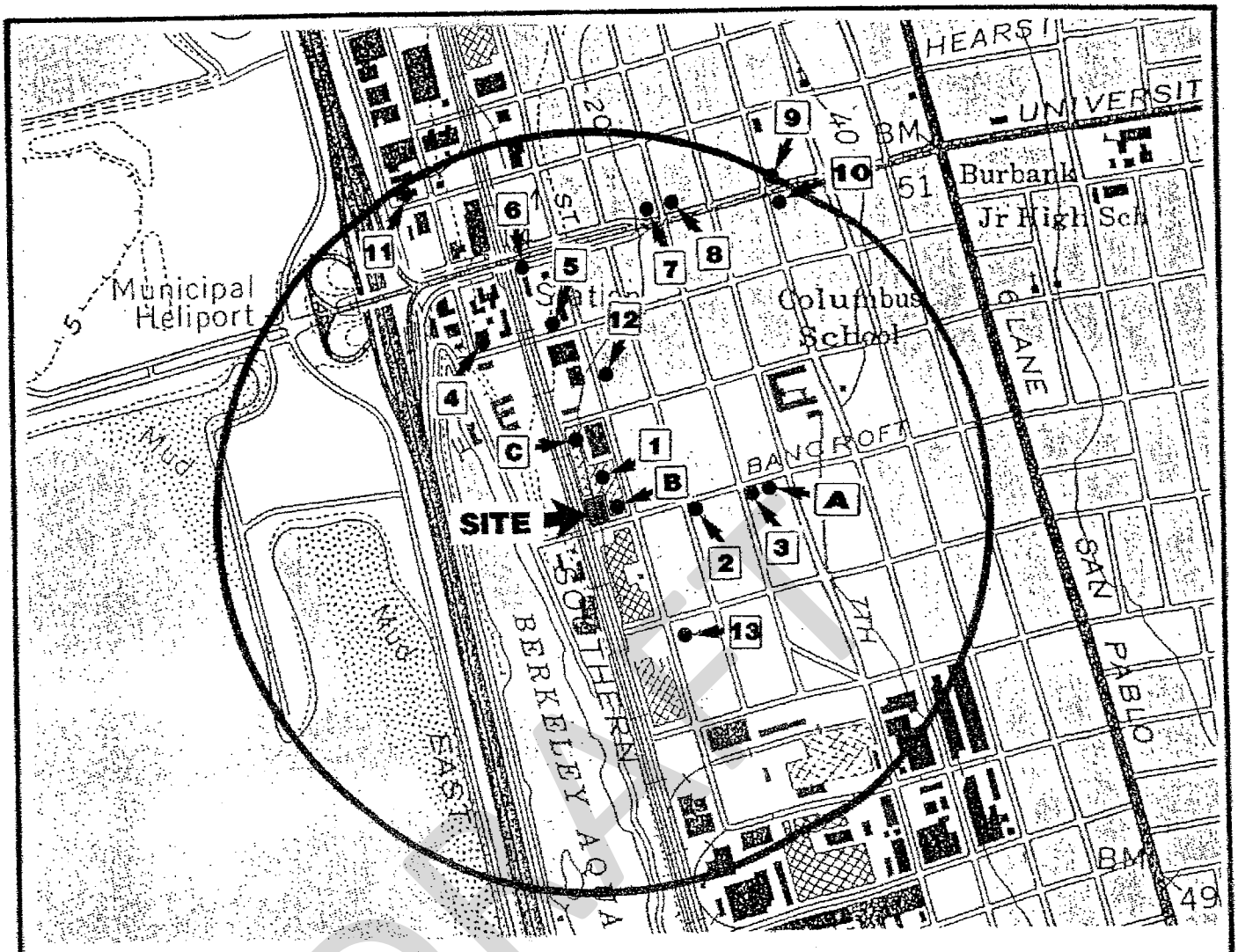
PLATE 1



RWQCB FUEL LEAK SITES

1 – PEERLESS LIGHTING
2220 4th Street

2 – BERKELEY PUMP
Bancroft Way at 5th Street

3 – TRANSAMERICA DELAVAL
829 Bancroft Way

4 – BLOCK PROPERTY
651 Addison Street

5 – NUMANO SAKE
708 Addison Street

6 – BERKELEY WAREHOUSE'S DRAYAGE
636 University Avenue

7 – TEXACO
833 University Avenue

8 – UNOCAL
849 University Avenue

9 – UNIVERSITY ASSOCIATES
901–921 University Avenue

10 – SUPER–7
950 University Avenue

11 – DE CANION IMPORT TILE
611 Hearst Avenue

12 – SIERRA DESIGN
2039 4th Street

13 – TRUST SECURITY MANAGEMENT
2321 4th Street

RWQCB TOXIC CASE SITES

A – IMO DELAVAL BERKELEY MACHINE SHOP
827 Bancroft Way

B – PEERLESS ELECTRIC COMPANY
747 Bancroft Way

C – TRIANGLE PAINT FACTORY
2222 Third Street

ENVIRONMENTAL CASE PLAN

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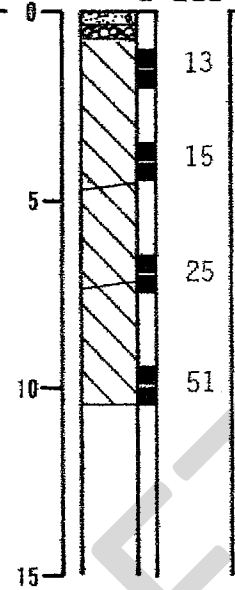
PLATE 3

LOG OF TEST BORING B-1

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/25/91
ELEVATION --



CONCRETE SLAB - 5" thick
BASE ROCK
DARK GRAY SILTY CLAY (CL)
medium stiff, moist, with some glass and metal fragments
GRAY BROWN SILTY CLAY (CL)
medium stiff, moist, with abundant calcite
BROWN SILTY CLAY (CL)
stiff, moist, with some small rock fragments and sand pockets

GROUNDWATER NOT ENCOUNTERED DURING DRILLING

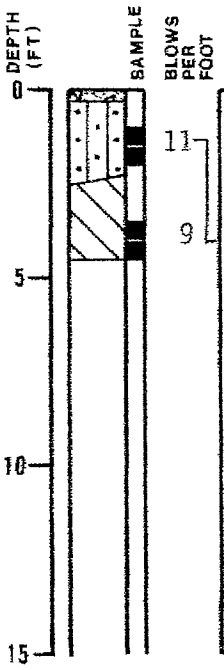
Boring backfilled with cement

SAMPLER TYPE:
CALIFORNIA DRIVE
O.D.: 2.5 inches
I.D.: 2.0 inches

HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

LOG OF TEST BORING B-2

EQUIPMENT 4" Solid Flight Auger
DATE DRILLED 11/25/91
ELEVATION --



CONCRETE SLAB - 4" thick
BLACK SILTY SAND (SM)
loose, moist, with glass and metal fragments
6 inch layer of red clayey sand
GRAY BROWN SILTY CLAY (CL)
soft, moist

GROUNDWATER NOT ENCOUNTERED DURING DRILLING

Boring backfilled with cement

HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

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JOB NUMBER	DATE	APPROVED
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PLATE 4

LOG OF TEST BORING B-3

EQUIPMENT 4" Solid Flight Auger
DATE DRILLED 11/25/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			CONCRETE SLAB - 5" thick
					9	DARK BROWN CLAYEY SAND (SC) loose, moist, with metal and glass fragments
					10	
			5			DARK GRAY SILTY CLAY (CL) medium stiff, moist, with some rock fragments
					36	
						BROWN SILTY CLAY (CL) stiff, moist, with some sand
			10			GROUNDWATER NOT ENCOUNTERED DURING DRILLING
						Boring backfilled with cement
			15			

HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

LOG OF TEST BORING B-4

EQUIPMENT 4" Solid Flight Auger
DATE DRILLED 11/25/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			CONCRETE SLAB - 5" thick
					14	BLACK SILTY SAND (SP) medium dense, moist
					11	DARK GRAY SILTY CLAY (CL) medium stiff, moist
			5			GROUNDWATER NOT ENCOUNTERED DURING DRILLING
						Boring backfilled with cement
			10			
			15			

HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

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705 BANCROFT WAY - BERKELEY, CA

JOB NUMBER 698.001 | DATE 12/18/91 | APPROVED

PLATE 5

LOG OF TEST BORING B-5

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/25/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0		8	BLACK CLAYEY SILT (ML) medium stiff, moist, with some sand
					14	GRAY BROWN SILTY CLAY (CL) medium stiff, moist, with some rock fragments
			5		45	BROWN CLAYEY SAND (SC) dense, moist, with some rock fragments
			10			GROUNDWATER NOT ENCOUNTERED DURING DRILLING
						Boring was left open for 2 days to check groundwater depth. Boring was dry, and subsequently backfilled with cement.
			15			

HAMMER WEIGHT: 70 pounds
HAMMER DROP: 30 inches

LOG OF TEST BORING B-6

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/25/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0		10	BLACK CLAYEY SILT (ML) medium dense, moist
						GRAY CLAYEY SAND (SC) medium dense, moist
			5			GROUNDWATER NOT ENCOUNTERED DURING DRILLING
						Boring backfilled with cement
			10			
			15			

HAMMER WEIGHT: 70 pounds
HAMMER DROP: 30 inches

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PLATE 6

LOG OF TEST BORING B-7

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/25/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			CONCRETE SLAB - 5" thick
					5	BLACK SILTY SAND (SM) loose, moist, with metal and glass fragments
					25	GRAY BROWN SILTY CLAY (CL) medium stiff, moist
			5			BROWN SILTY CLAY (CL) stiff, moist, with some sand and rock fragments
						GROUNDWATER NOT ENCOUNTERED DURING DRILLING
			10			Boring backfilled with cement
			15			

HAMMER WEIGHT: 70 pounds
HAMMER DROP: 30 inches

LOG OF TEST BORING B-8

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/25/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			CONCRETE SLAB - 5 1/2" thick
						CONCRETE SLAB - 5 1/2" thick
					16	BLACK SILTY SAND (SM) loose, moist, with metal and glass fragments
			5			DARK GRAY SILTY CLAY (CL). medium stiff, moist
						GROUNDWATER NOT ENCOUNTERED DURING DRILLING
			10			Boring backfilled with cement
			15			

HAMMER WEIGHT: 70 pounds
HAMMER DROP: 30 inches

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JOB NUMBER	DATE	APPROVED
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PLATE 7

LOG OF TEST BORING B-9

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/25/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			CONCRETE SLAB - 6" thick
					6	BLACK SILTY SAND (SM) loose, moist
					10	GRAY SILTY CLAY (CL) medium stiff, moist
			5			BROWN SILTY CLAY (CL)
					41	stiff, moist, with some rocks
			10			GROUNDWATER LEVEL 11/27/91
						BROWN CLAYEY SAND (SC) dense, moist
						GROUNDWATER NOT ENCOUNTERED DURING DRILLING
			15			Boring backfilled with cement after allowing to stabilize

HAMMER WEIGHT: 70 pounds
HAMMER DROP: 30 inches

LOG OF TEST BORING B-10

EQUIPMENT 4" Solid Flight Auger
DATE DRILLED 11/26/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			CONCRETE SLAB - 6" thick
						BASE ROCK
					12	DARK GRAY SILTY CLAY (CL) medium stiff, moist, with some small rocks
					19	
			5			LIGHT GRAY BROWN SILTY CLAY (CL)
					26	stiff, moist, with calcite
						GROUNDWATER NOT ENCOUNTERED DURING DRILLING
			10			Boring backfilled with cement
			15			

HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

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PLATE 8

LOG OF TEST BORING B-11

EQUIPMENT 4" Solid Flight Auger
DATE DRILLED 11/26/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			ASPHALTIC CONCRETE - 2" thick
						BASE ROCK
					9	BLACK SILTY SAND (SM)
						medium dense, moist, with metal
					10	and glass fragments
			5			DARK GRAY SILTY CLAY (CL)
						medium stiff, moist
					24	GRAY BROWN SILTY CLAY (CL)
						medium stiff, moist, with
						abundant calcite precipitate
			10			GROUNDWATER NOT ENCOUNTERED
						DURING DRILLING
						Boring backfilled with cement
			15			

HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

LOG OF TEST BORING B-12

EQUIPMENT 4" Solid Flight Auger
DATE DRILLED 11/26/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			ASPHALTIC CONCRETE - 8" thick
						BLACK SILTY SAND (SM)
					16	medium stiff, moist, with some
						metal and glass fragments
			5			DARK GRAY SILTY CLAY (CL)
						medium stiff, moist
					21	color change to gray brown below
						5 feet
			10			GROUNDWATER NOT ENCOUNTERED
						DURING DRILLING
						Boring backfilled with cement
			15			

HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

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PLATE 9

LOG OF TEST BORING B-15

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/26/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0		24	MOTTLED BLACK AND BROWN SILTY SAND (SM) medium dense, moist, with some rock and metal fragments (fill)
			5		10	DARK GRAY SILTY CLAY (CL) medium stiff, moist
			10			GROUNDWATER NOT ENCOUNTERED DURING DRILLING
			15			Boring backfilled with cement

HAMMER WEIGHT: 70 pounds
HAMMER DROP: 30 inches

LOG OF TEST BORING B-16

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/26/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0		7	BLACK SILTY SAND (SM) loose, moist, with metal fragments
			5			MOTTLED GRAY BROWN SILTY CLAY (CL) soft, moist
			10			GROUNDWATER NOT ENCOUNTERED DURING DRILLING
			15			Boring backfilled with cement

HAMMER WEIGHT: 70 pounds
HAMMER DROP: 30 inches

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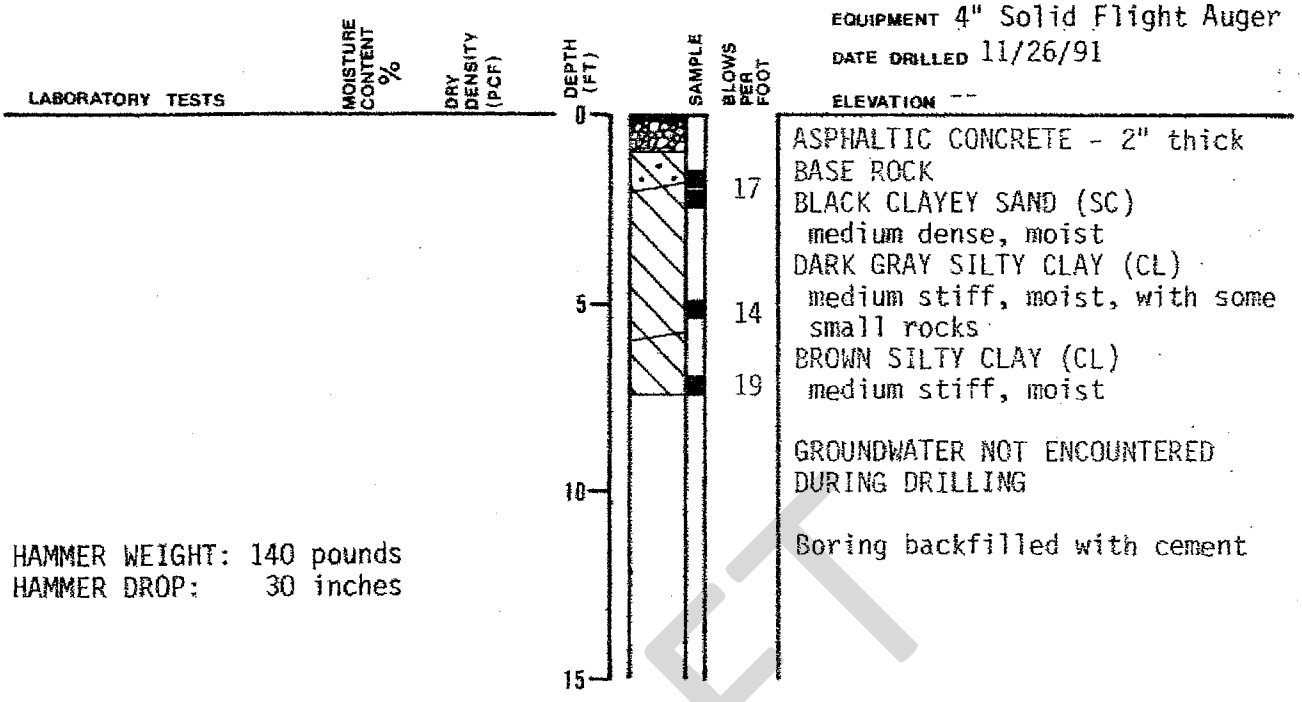
705 BANCROFT WAY - BERKELEY, CA

JOB NUMBER 698.001 | DATE 12/18/91 | APPROVED

PLATE 11

LOG OF TEST BORING B-13

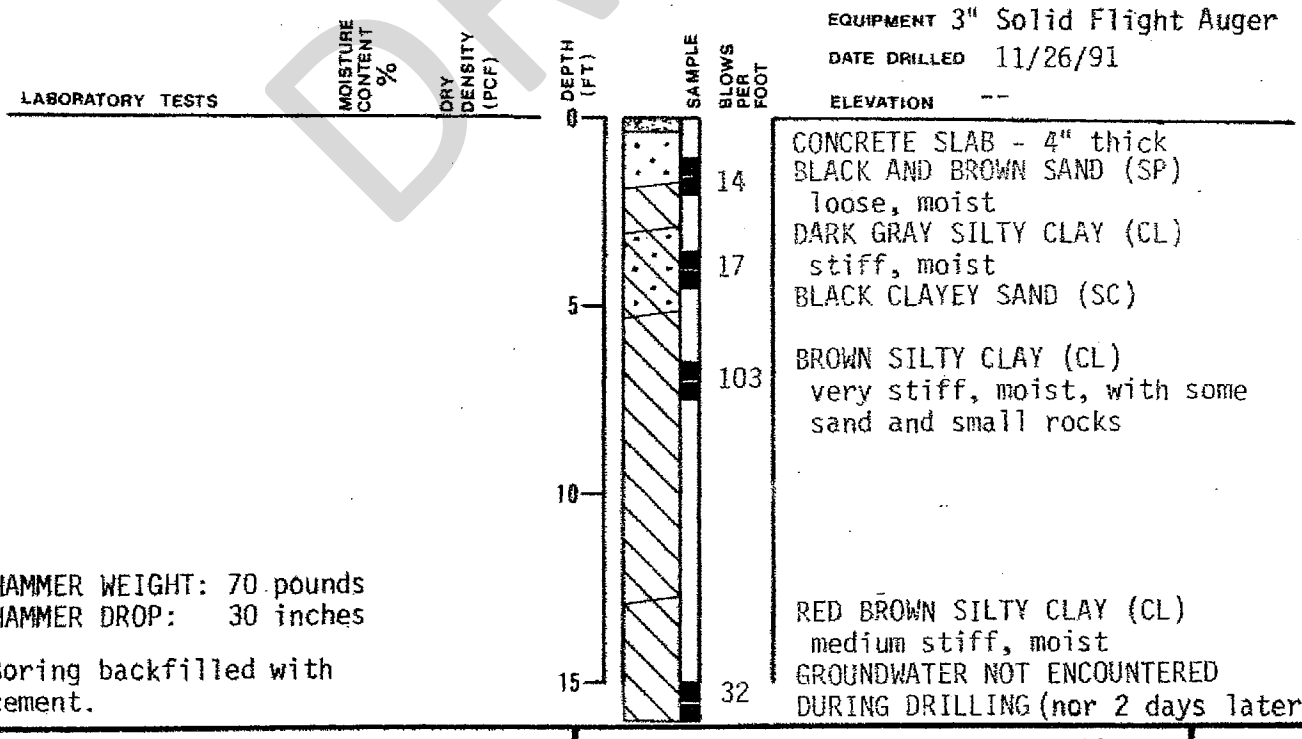
EQUIPMENT 4" Solid Flight Auger
DATE DRILLED 11/26/91
ELEVATION --



HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

LOG OF TEST BORING B-14

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/26/91
ELEVATION --



HAMMER WEIGHT: 70 pounds
HAMMER DROP: 30 inches

Boring backfilled with cement.

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705 BANCROFT WAY - BERKELEY, CA

JOB NUMBER	DATE	APPROVED	PLATE
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LOG OF TEST BORING B-17

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/26/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			BLACK AND BROWN SILTY SAND (SM) loose, moist
					6	DARK GRAY SILTY CLAY (CL) medium stiff, moist
			5			GROUNDWATER NOT ENCOUNTERED DURING DRILLING
						Boring backfilled with cement
			10			
			15			

HAMMER WEIGHT: 70 pounds
HAMMER DROP: 30 inches

LOG OF TEST BORING B-18

EQUIPMENT 3" Solid Flight Auger
DATE DRILLED 11/26/91
ELEVATION --

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			BALCK SILTY SAND (SM) loose, moist
					7	DARK GRAY SILTY CLAY (CL) medium stiff, moist
			5			GROUNDWATER NOT ENCOUNTERED DURING DRILLING
						Boring backfilled with cement
			10			
			15			

HAMMER WEIGHT: 70 pounds
HAMMER DROP: 30 inches

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705 BANCROFT WAY - BERKELEY, CA

JOB NUMBER 698.001 | DATE 12/18/91 | APPROVED

PLATE 12

GENERAL SOIL CATEGORIES			SYMBOLS	TYPICAL SOIL TYPES
COARSE GRAINED SOILS More than half is larger than No. 200 sieve	GRAVEL More than half coarse fraction is larger than No. 4 sieve	Clean Gravel with little or no fines	GW	Well Graded Gravel, Gravel-Sand Mixtures
			GP	Poorly Graded Gravel, Gravel-Sand Mixtures
		Gravel with more than 12% fines	GM	Silty Gravel, Poorly Graded Gravel-Sand-Silt Mixtures
			GC	Clayey Gravel, Poorly Graded Gravel-Sand-Clay Mixtures
	SAND More than half coarse fraction is smaller than No. 4 sieve	Clean sand with little or no fines	SW	Well Graded Sand, Gravelly Sand
			SP	Poorly Graded Sand, Gravelly Sand
		Sand with more than 12% fines	SM	Silty Sand, Poorly Graded Sand-Silt Mixtures
			SC	Clayey Sand, Poorly Graded Sand-Clay Mixtures
FINE GRAINED SOILS More than half is smaller than No. 200 sieve	SILT AND CLAY Liquid Limit Less than 50%		ML	Inorganic Silt and Very Fine Sand, Rock Flour, Silty or Clayey Fine Sand, or Clayey Silt with Slight Plasticity
			CL	Inorganic Clay of Low to Medium Plasticity, Gravelly Clay, Sandy Clay, Silty Clay, Lean Clay
			OL	Organic Clay and Organic Silty Clay of Low Plasticity
	SILT AND CLAY Liquid Limit Greater than 50%		MH	Inorganic Silt, Micaceous or Diatomaceous Fine Sandy or Silty Soils, Elastic Silt
			CH	Inorganic Clay of High Plasticity, Fat Clay
			OH	Organic Clay of Medium to High Plasticity, Organic Silt
HIGHLY ORGANIC SOILS			PT	Peat and Other Highly Organic Soils

UNIFIED SOIL CLASSIFICATION SYSTEM

Subsurface Consultants

705 BANCROFT WAY - BERKELEY, CA

JOB NUMBER	DATE	APPROVED	PLATE
698.001	12/19/91		13

Tables

Table 1.
Contaminants In Soil
(In PPM Unless Otherwise Noted)

	B-1@1.5'	B-1@4'	B-2@1.5'	B-2@4.0'	B-3@1.0'	B-3@3.0'	B-4@1.0'	B-5@1.0'	B-5@4.0'	B-6@1.5'	B-7@1.5'	B-7@4.0'	B-8@2.0'	Regulatory Criteria TTLC
Total Metals														
Antimony	--	<3.0	6.4	--	<3.0	<3.0	<3.0	17.1	<3.0	<3.0	<3.0	--	<3.0	500
Arsenic	--	<2.5	40.5	<2.5	<2.5	<2.5	<2.5	3.7	<2.5	<2.5	<2.5	<2.5	<2.5	500
Barium	--	298	125	--	60.5	137	51.4	431	96.0	71.8	267	--	171	10000
Beryllium	--	0.54	0.17	--	<0.1	0.5	0.15	0.27	0.47	0.14	0.65	--	0.56	75
Cadmium	--	0.65	1.7	--	0.32	<0.25	0.36	8.2	<0.25	<.25	0.56	--	<0.25	100
Chromium (total)	--	35.0	38.1	32.0	29.0	32.0	20.2	24.2	27.6	21.1	32.7	34.8	32.3	2500
Chromium (Hexavalant)	--	--	--	--	--	--	--	--	--	--	--	--	--	500
Cobalt	--	18.5	26.3	--	9.6	15.8	5.1	7.2	9.7	7.5	9.2	--	9.1	8000
Copper	--	23.0	267	16.5	22.5	23.0	20.1	322	17.5	78.4	40.5	15.1	22.4	2500
Lead	--	3.4	258	<3.0	51.4	12.3	48.8	1750	6.4	155	163	<3.0	6.0	1000
Mercury	--	<0.1	<0.1	--	<0.1	<0.1	0.16	<0.1	<0.1	<0.1	1.0	--	<0.1	20
Molybdenum	--	<0.7	1.7	--	0.68	0.69	1.0	3.6	<0.7	<0.7	<0.7	--	<0.7	3500
Nickel	--	74.4	44.3	--	25.2	29.9	16.0	30.0	22.5	36.0	27.5	--	26.1	2000
Selenium	--	<2.5	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	--	<2.5	100
Silver	--	<0.5	<0.5	--	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	--	<0.5	500
Thallium	--	<2.5	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	--	<2.5	700
Vanadium	--	31.9	55.0	--	24.8	30.3	20.1	16.1	16.8	17.0	33.7	--	29.3	2400
Zinc	--	30.0	355	27.4	79.7	27.6	115	3600	32.3	116	165	29.8	111	5000
Soluble Metals														STLC
Arsenic	--	--	<0.5	--	--	--	--	--	--	--	--	--	--	5
Copper	--	--	13.2	--	--	--	--	33.8	--	--	--	--	--	25
Lead	--	--	3.0	--	0.19	--	1.57	63	--	16	15	--	--	5
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	5
Zinc	--	--	8.68	--	--	--	--	255	--	--	--	--	--	250
														RWQCB
Total Oil and Grease	<50	<50	90	<50	<50	<50	76	660	<50	1100	<50	<50	<50	1000
Total Extractable Hydrocarbons	2.0	1.3	6.1	--	20	1.3	26	64	1.0	100	30	--	2.4	1000
Semi-Volatile Organics														
PCBs	--	--	--	--	ND	--	--	--	--	--	--	--	--	
PNAs	--	--	--	--	13	--	--	--	--	--	--	--	--	
Dinitroluene	--	--	--	--	ND	--	--	--	--	--	--	--	--	
Others	--	--	--	--	ND	--	--	--	--	--	--	--	--	
Purgeable Halocarbons														
Methylene Chloride	--	ND	--	--	10ppb	--	--	--	--	ND	--	--	--	
Freon	--	ND	--	--	ND	--	--	--	--	5.6ppb	--	--	--	
Others	--	ND	--	--	ND	--	--	--	--	ND	--	--	--	
Volatile Aromatic Hydrocarbons														
Toluene	--	ND	--	--	ND	--	--	--	--	ND	--	--	--	
Xylene	--	ND	--	--	13ppb	--	--	--	--	ND	--	--	--	
Others	--	ND	--	--	ND	--	--	--	--	ND	--	--	--	

*TTLC = Total Threshold Limit Concentration
*STLC = Soluble Threshold Limit Concentration
*RWQCB = Regional Water Quality Control Board

Table 1.
Contaminants In Soil
(In PPM Unless Otherwise Noted)

	B-9@1.5'	B-9@3.0'	B-10@1.5'	B-11@2.0'	B-11@4.0'	B-12@2.5'	B-13@1.5'	B-13@4.5'	B-14@1.0'	B-14@4.0'	B-15@0.5'	B-15@3.5'	B-17@2.0'	Regulatory Criteria TTLC
Total Metals														
Antimony	<3.0	--	<3.0	<3.0	<3.0	<3.0	<3.0	3.7	<3.0	<3.0	<3.0	--	4.3	500
Arsenic	5.3	<2.5	6.7	<2.5	<2.5	<2.5	<2.5	<2.5	7.2	<2.5	9.3	<2.5	5.1	500
Barium	122	--	93.3	65.9	163	244	48.9	190	106	95.5	92.1	--	58.7	10000
Beryllium	0.23	--	0.30	0.26	0.59	0.65	0.27	0.62	0.23	0.57	<1.0	--	0.19	75
Cadmium	1.3	--	0.48	1.5	0.28	<0.25	<0.25	0.28	0.33	<0.25	5.6	--	1.5	100
Chromium (total)	19.7	31.2	29.0	30.0	28.5	33.7	11.8	31.8	24.7	28.3	120	34.6	17.3	2500
Chromium (Hexavalant)	--	--	--	--	--	--	--	--	--	--	<0.06	--	--	500
Cobalt	11.3	--	24.3	7.6	13.4	10.8	7.3	16.7	19.4	10.4	33.9	--	4.2	8000
Copper	3700	17.1	52.1	84.3	19.9	24.2	9.2	24.6	43.7	21.1	285	27.3	78.5	2500
Lead	331	<3.0	63.2	701	5.0	9.5	11.8	4.5	75.6	<3.0	110	46	266	1000
Mercury	0.13	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.27	<0.1	<0.1	--	<0.1	20
Molybdenum	<0.7	--	1.8	2.1	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	15.2	--	2.0	3500
Nickel	25.9	--	21.9	85.1	30.0	28.1	12.7	33.3	28.0	27.7	62.9	--	15.9	2000
Selenium	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	--	<2.5	100
Silver	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	58.7	--	0.62	500
Thallium	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	--	<2.5	700
Vanadium	26.8	--	25.7	17.0	21.2	27.6	16.1	28.6	26.8	25.8	39.6	--	8.4	2400
Zinc	507	41.9	87.7	227	24.2	43.1	35.9	30.4	106	25.7	894	291	452	5000
Soluble Metals														STLC
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	5
Copper	388	--	--	--	--	--	--	--	--	--	3.01	--	--	25
Lead	6.3	--	2	0.94	--	--	--	--	4.4	--	0.4	--	34	5
Silver	--	--	--	--	--	--	--	--	--	--	0.44	--	--	5
Zinc	35.8	--	--	--	--	--	--	--	--	--	5.88	--	--	250
														RWQCB
Total Oil and Grease	60	66	<50	66	<50	<50	12000	<56	110	<50	<50	310	<50	1000
Total Extractable Hydrocarbons	10	--	4.0	6.7	1.9	2.8	150	2.0	27	7.8	24	--	7.5	1000
Semi-Volatile Organics														
PCBs	ND	--	--	--	--	--	ND	--	--	--	ND	--	--	
PNAs	ND	--	--	--	--	--	ND	--	--	--	3.8ppb	--	--	
Dinitroluene	150ppb	--	--	--	--	--	ND	--	--	--	ND	--	--	
Others	ND	--	--	--	--	--	ND	--	--	--	ND	--	--	
Purgeable Halocarbons														
Methylene Chloride	170ppb	--	--	--	--	--	35ppb	--	--	--	--	--	--	
Freon	ND	--	--	--	--	--	ND	--	--	--	--	--	--	
Others	ND	--	--	--	--	--	ND	--	--	--	--	--	--	
Volatile Aromatic Hydrocarbons														
Toluene	100ppb	--	--	--	--	--	57ppb	--	--	--	--	--	--	
Xylene	14ppb	--	--	--	--	--	7.0ppb	--	--	--	--	--	--	
Others	ND	--	--	--	--	--	ND	--	--	--	--	--	--	

*TTLC = Total Threshold Limit Concentration
*STLC = Soluble Threshold Limit Concentration
*RWQCB = Regional Water Quality Control Board

Table 2.
Contaminants in Grab Groundwater Sample

	Concentration (ppb)
Total Extractable Hydrocarbons	54000 (diesel range)
Total Volatile Hydrocarbons	650 (gasoline range)
Purgeable Halocarbons	ND
Volatile Aromatic Hydrocarbons	
Ethylbenzene	17
Xylenes	260
Others	ND
Phenolic Compounds	ND
Title 26 Metals	
Barium	162
Others	ND

Appendix A
Aerial Photograph Review List

Pacific Aerial Surveys Photographs

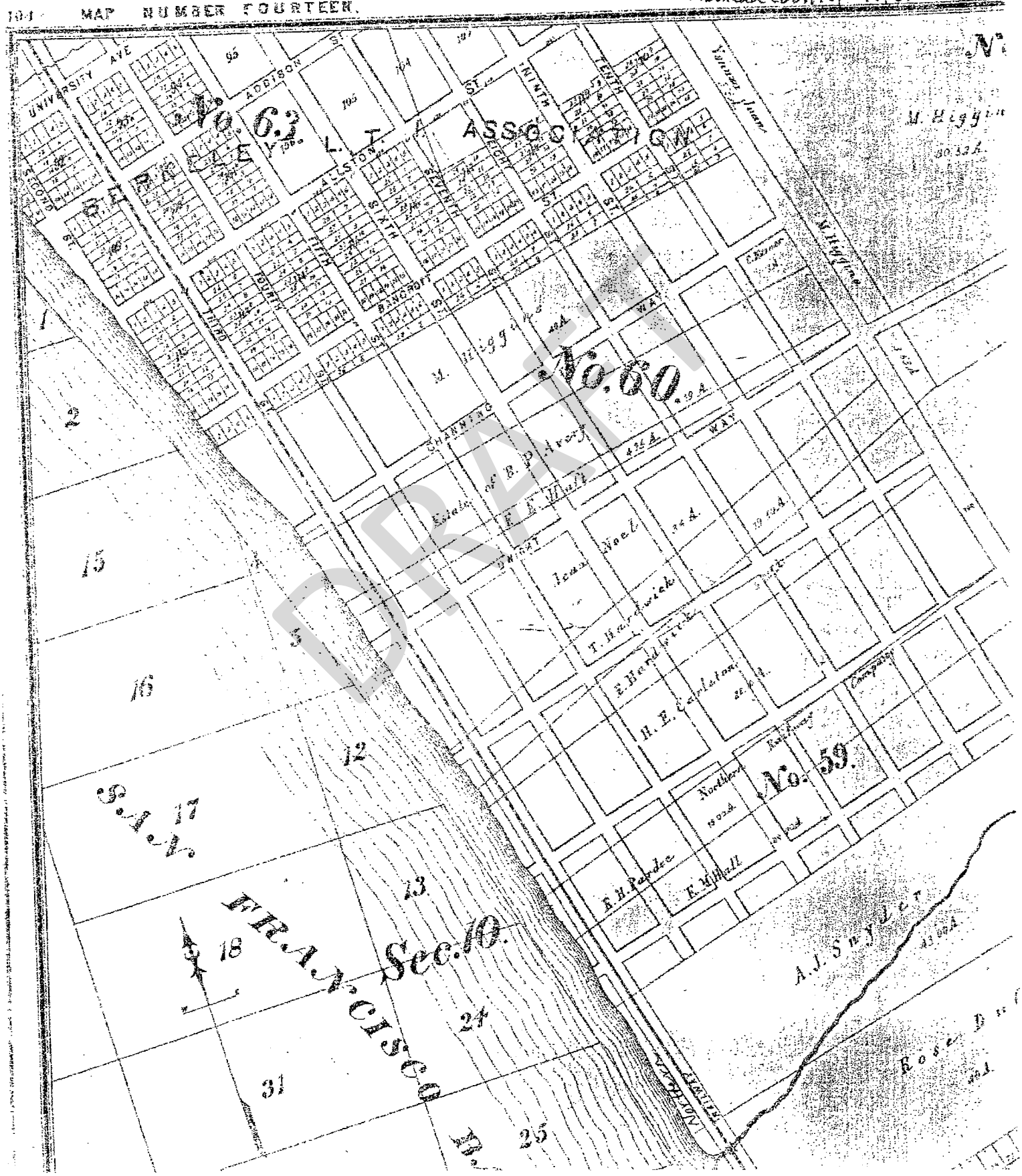
AV11-05-11/12	(1947)
AV28-11-31/32	(1949)
AV119-08-22/23	(1953)
AV253-07-17/18	(1957)
AV337-07-19/20	(1959)
AV550-08-19/20	(1963)
AV710-08-25/26	(1966)
AV902-06-15/16	(1969)
AV1100-05-15/16	(1973)
AV1377-06-15/16	(1977)
AV2040-07-14/15	(1981)
AV3268-06-16/17	(1988)
AV3845-06-16/17	(1990)

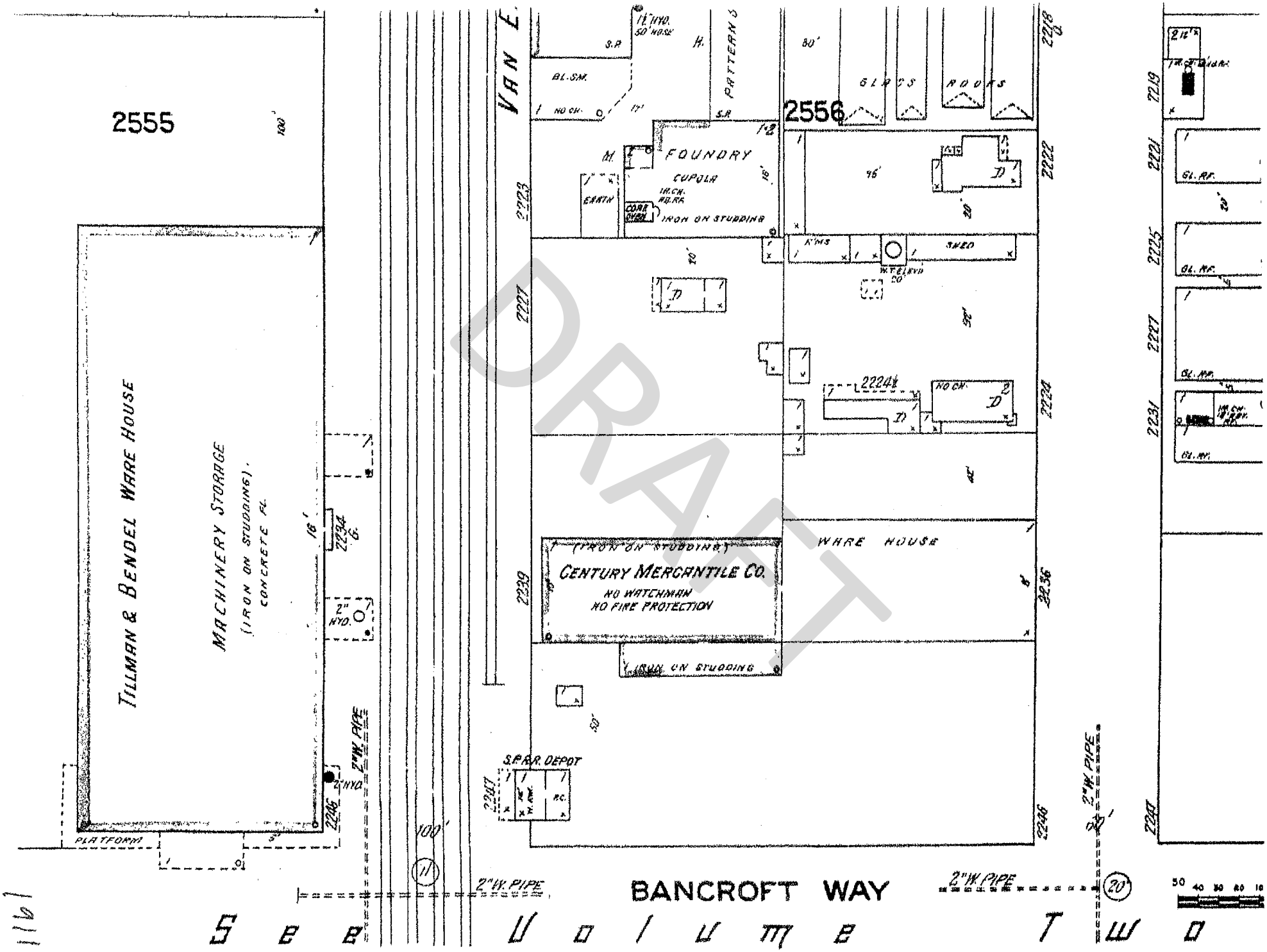
Appendix B
Reference Materials

1878

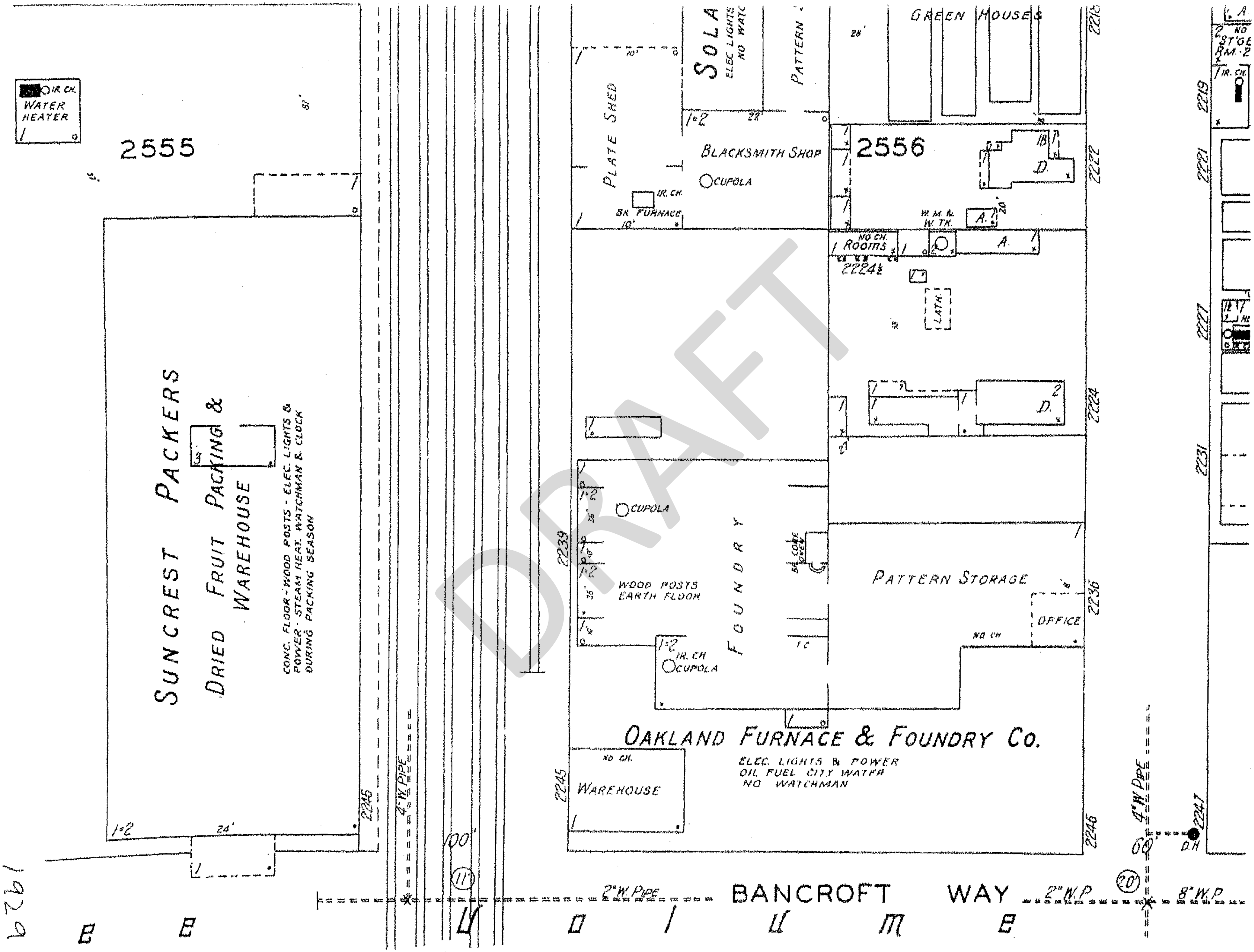
Alameda County Atlas. SEE PA

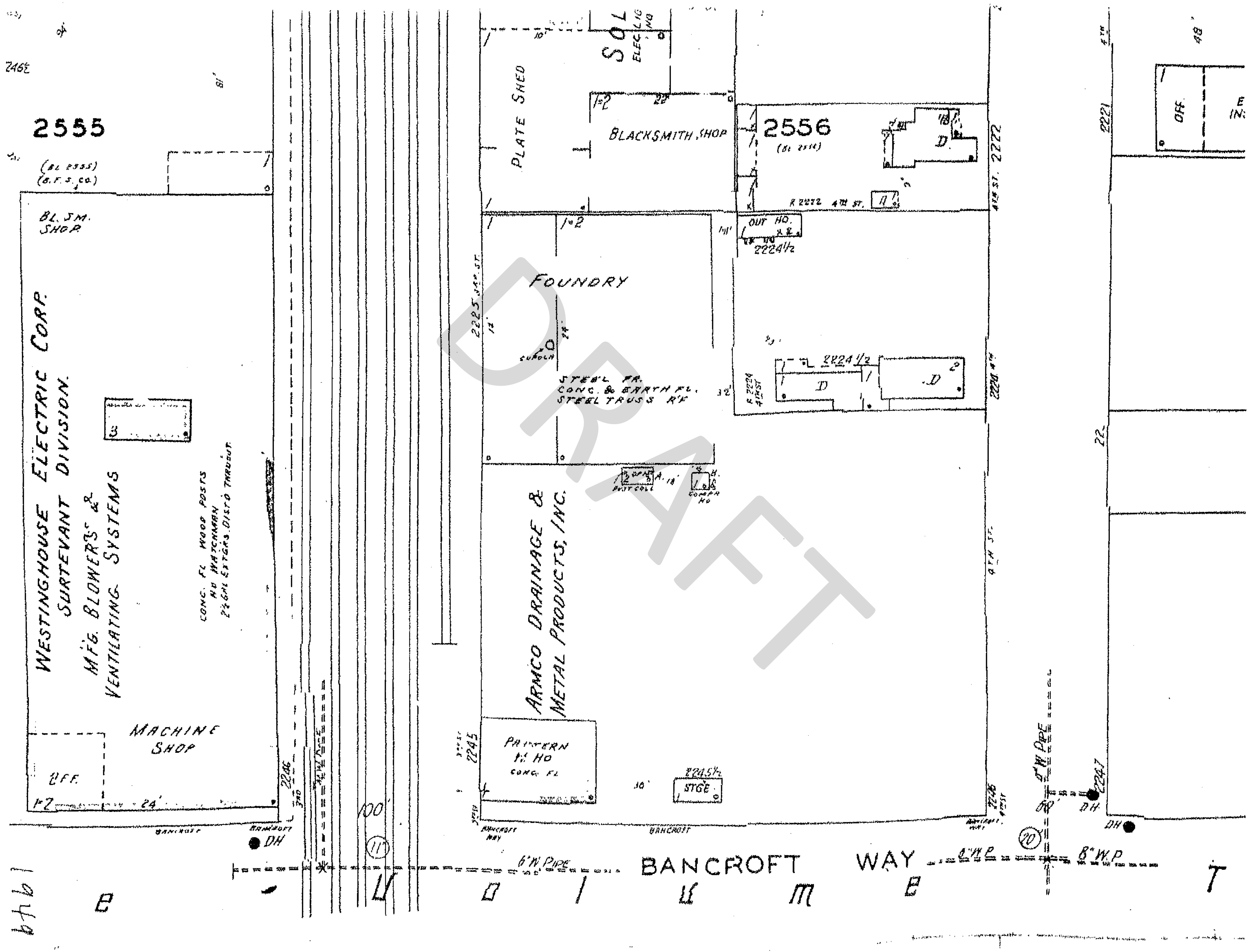
MAP NUMBER FOURTEEN.





See Volume TWO


2555
WATER HEATER
IR. CH.
SUNCREST PACKERS
DRIED FRUIT PACKING & WAREHOUSE
CONC. FLOOR - WOOD POSTS - ELEC. LIGHTS & POWER - STEAM HEAT. WATCHMAN & CLOCK DURING PACKING SEASON
2245
4" W. PIPE
100'
PLATE SHED
BR. FURNACE
SOLA
ELEC. LIGHTS NO WATC
PATTERN
GREEN HOUSES
BLACKSMITH SHOP
CUPOLA
2556
W. M. & W. TK.
NO CH. ROOMS
2224½
LATH.
D.
A.
2218
2222
2224
2236
2246
2239
FOUNDRY
WOOD POSTS EARTH FLOOR
CUPOLA
IR. CH. CUPOLA
CORE OVEN
PATTERN STORAGE
OFFICE
NO CH.
OAKLAND FURNACE & FOUNDRY CO.
ELEC. LIGHTS & POWER
OIL FUEL CITY WATER
NO WATCHMAN
WAREHOUSE
2245
2219
2221
2227
2231
2241
4" W. PIPE
D.H.
2" W. PIPE
BANCROFT WAY
2" W.P.
8" W.P.
E E V o l u m e
1929


2555
(BL 2555)
(B.F.S. CO.)
WESTINGHOUSE ELECTRIC CORP.
SURTEVANT DIVISION.
MFG. BLOWERS & VENTILATING SYSTEMS
BL. SM. SHOP
MACHINE SHOP
OFF.
CONC. FL. WOOD POSTS
NO WATCHMAN
2½ GAL EXTGRS. DISTD THROUT.
PLATE SHED
BLACKSMITH SHOP
2556
FOUNDRY
CUPOLA
STEEL FR.
CONC. & EARTH FL.
STEEL TRUSS R'F
ARMCO DRAINAGE & METAL PRODUCTS, INC.
PATTERN ST. HO
CONC. FL.
STGE.
OUT HO.
2224½
2222
2221
2225
2245
2246
2247
OFF.
BANCROFT WAY
6"W. PIPE
8"W.P.
DH
1949

	B-1@1.5'	B-1@4'	B-2@1.5'	B-2@4.0'	B-3@1.0'
Total Metals					
Antimony	--	<3.0	6.4	--	<3.0
Arsenic	--	<2.5	40.5	<2.5	<2.5
Barium	--	298	125	--	60.5
Beryllium	--	0.54	0.17	--	<0.1
Cadmium	--	0.65	1.7	--	0.32
Chromium (total)	--	35.0	38.1	32.0	29.0
Chromium (Hexavalant)	--	--	--	--	--
Cobalt	--	18.5	26.3	--	9.6
Copper	--	23.0	267	16.5	22.5
Lead	--	3.4	258	<3.0	51.4
Mercury	--	<0.1	<0.1	--	<0.1
Molybdenum	--	<0.7	1.7	--	0.68
Nickel	--	74.4	44.2	--	25.2
Selenium	--	<2.5	<2.5	--	<2.5
Silver	--	<0.5	<0.5	--	<0.5
Thallium	--	<2.5	<2.5	--	<2.5
Vanadium	--	31.9	55.0	--	24.8
Zinc	--	30.0	355	27.4	79.7
Soluble Metals					
Arsenic	--	--	<0.5	--	--
Copper	--	--	13.2	--	--
Lead	--	--	3.0	--	0.19
Silver	--	--	--	--	--
Zinc	--	--	8.68	--	--
Total Oil and Grease	<50	<50	90	<50	<50
Total Extractable Hydrocarbons	2.0	1.3	6.1	--	20
Semi-Volatile Organics					
PCBs	--	--	--	--	ND
PNAs	--	--	--	--	13
Dinitroluene	--	--	--	--	ND
Others	--	--	--	--	ND
Purgeable Halocarbons					
Methylene Chloride	--	ND	--	--	10ppb
Freon	--	ND	--	--	ND
Others	--	ND	--	--	ND
Volatile Aromatic Hydrocarbons					
Toluene	--	ND	--	--	ND
Xylene	--	ND	--	--	13ppb
Others	--	ND	--	--	ND

*TTLC = Total Threshold Limit Concentration
*STLC = Soluble Threshold Limit Concentration
*RWQCB = Regional Water Quality Control Board

Table 1.
Contaminants In Soil
(In PPM Unless Otherwise Noted)

3-3@3.0'	B-4@1.0'	B-5@1.0'	B-5@4.0'	B-6@1.5'	B-7@1.5'	B-7@4.0'
<3.0	<3.0	17.1	<3.0	<3.0	<3.0	--
<2.5	<2.5	3.7	<2.5	<2.5	<2.5	<2.5
137	51.4	431	96.0	71.8	267	--
0.5	0.15	0.27	0.47	0.14	0.65	--
<0.25	0.36	8.2	<0.25	<.25	0.56	--
32.0	20.2	24.2	27.6	21.1	32.7	34.8
--	--	--	--	--	--	--
15.8	5.1	7.2	9.7	7.5	9.2	--
23.0	20.1	322	17.5	76.4	40.5	15.1
12.3	48.8	1750	6.4	155	163	<3.0
<0.1	0.16	<0.1	<0.1	<0.1	1.0	--
0.69	1.0	3.6	<0.7	<0.7	<0.7	--
29.9	16.0	30.0	22.5	36.0	27.5	--
<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	--
<0.5	<0.5	1.2	<0.5	<0.5	<0.5	--
<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	--
30.3	20.1	16.1	16.8	17.0	33.7	--
27.6	115	3600	32.3	116	165	29.8
--	--	--	--	--	--	--
--	--	33.8	--	--	--	--
--	1.57	63	--	16	15	--
--	--	--	--	--	--	--
--	--	255	--	--	--	--
<50	76	660	<50	1100	<50	<50
1.3	26	84	1.0	100	30	--
--	--	--	--	--	--	--
--	--	--	--	--	--	--
--	--	--	--	--	--	--
--	--	--	--	--	--	--
--	--	--	--	ND	--	--
--	--	--	--	5.6ppb	--	--
--	--	--	--	ND	--	--
--	--	--	--	ND	--	--
--	--	--	--	ND	--	--
--	--	--	--	ND	--	--

B-8@2.0'	Regulatory Criteria TTLC
<3.0	500
<2.5	500
171	10000
0.56	75
<0.25	100
32.3	2500
--	500
9.1	8000
22.4	2500
6.0	1000
<0.1	20
<0.7	3500
26.1	2000
<2.5	100
<0.5	500
<2.5	700
29.3	2400
111	5000
	STLC
--	5
--	25
--	5
--	5
--	250
	RWQCB
<50	1000
2.4	1000
--	
--	
--	
--	
--	
--	
--	
--	
--	
--	

	B-9@1.5'	B-9@3.0'	B-10@1.5'	B-11@2.0'	B-11@4.0'
Total Metals					
Antimony	<3.0	--	<3.0	<3.0	<3.0
Arsenic	5.3	<2.5	6.7	<2.5	<2.5
Barium	122	--	93.3	65.9	163
Beryllium	0.23	--	0.30	0.26	0.59
Cadmium	1.3	--	0.48	1.5	0.28
Chromium (total)	19.7	31.2	29.0	30.0	28.5
Chromium (Hexavalant)	--	--	--	--	--
Cobalt	11.3	--	24.3	7.6	13.4
Copper	**3700**	17.1	52.1	84.3	19.9
Lead	331	<3.0	63.2	701	5.0
Mercury	0.13	--	<0.1	<0.1	<0.1
Molybdenum	<0.7	--	1.8	2.1	<0.7
Nickel	25.9	--	21.9	85.1	30.0
Selenium	<2.5	--	<2.5	<2.5	<2.5
Silver	<0.5	--	<0.5	<0.5	<0.5
Thallium	<2.5	--	<2.5	<2.5	<2.5
Vanadium	26.8	--	25.7	17.0	21.2
Zinc	507	41.9	87.7	227	24.2
Soluble Metals					
Arsenic	--	--	--	--	--
Copper	**388**	--	--	--	--
Lead	**6.3**	--	2	0.94	--
Silver	--	--	--	--	--
Zinc	35.8	--	--	--	--
Total Oil and Grease	60	66	<50	66	<50
Total Extractable Hydrocarbons	10	--	4.0	6.7	1.9
Semi-Volatile Organics					
PCBs	ND	--	--	--	--
PNAs	ND	--	--	--	--
Dinitroluene	150ppb	--	--	--	--
Others	ND	--	--	--	--
Purgeable Halocarbons					
Methylene Chloride	170ppb	--	--	--	--
Freon	ND	--	--	--	--
Others	ND	--	--	--	--
Volatile Aromatic Hydrocarbons					
Toluene	100ppb	--	--	--	--
Xylene	14ppb	--	--	--	--
Others	ND	--	--	--	--

*TTLC = Total Threshold Limit Concentration
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Table 1.
Contaminants In Soil
(In PPM Unless Otherwise Noted)

B-12@2.5'	B-13@1.5'	B-13@4.5'	B-14@1.0'	B-14@4.0'	B-15@0.5'	B-15@3.5'
<3.0	<3.0	3.7	<3.0	<3.0	<3.0	--
<2.5	<2.5	<2.5	7.2	<2.5	9.3	<2.5
244	48.9	190	106	95.5	92.1	--
0.65	0.27	0.62	0.23	0.57	<1.0	--
<0.25	<0.25	0.28	0.33	<0.25	5.6	--
33.7	11.8	31.8	24.7	28.3	120	34.6
--	--	--	--	--	<0.06	--
10.8	7.3	16.7	19.4	10.4	33.9	--
24.2	9.2	24.6	43.7	21.1	285	27.3
9.5	11.8	4.5	75.6	<3.0	110	46
<0.1	<0.1	<0.1	0.27	<0.1	<0.1	--
<0.7	<0.7	<0.7	<0.7	<0.7	15.2	--
28.1	12.7	33.3	28.0	27.7	62.9	--
<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	--
<0.5	<0.5	<0.5	<0.5	<0.5	58.7	--
<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	--
27.6	16.1	28.6	26.8	25.8	39.6	--
43.1	35.9	30.4	106	25.7	894	291
--	--	--	--	--	--	--
--	--	--	--	--	3.01	--
--	--	--	4.4	--	0.4	--
--	--	--	--	--	0.44	--
--	--	--	--	--	5.88	--
<50	12000	<56	110	<50	<50	310
2.8	150	2.0	27	7.8	24	--
--	ND	--	--	--	ND	--
--	ND	--	--	--	3.8ppb	--
--	ND	--	--	--	ND	--
--	ND	--	--	--	ND	--
--	35ppb	--	--	--	--	--
--	ND	--	--	--	--	--
--	ND	--	--	--	--	--
--	57ppb	--	--	--	--	--
--	7.0ppb	--	--	--	--	--
--	ND	--	--	--	--	--

3-17@2.0'	Regulatory Criteria TTLC
4.3	500
5.1	500
58.7	10000
0.19	75
1.5	100
17.3	2500
--	500
4.2	8000
78.5	2500
266	1000
<0.1	20
2.0	3500
15.9	2000
<2.5	100
0.62	500
<2.5	700
8.4	2400
452	5000
	STLC
--	5
--	25
34	5
--	5
--	250
	RWQCB
<50	1000
7.5	1000
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2213 FOURTH STREET

(CURTIS & TOMPKINS, LTD., 2015)


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 264142
ANALYTICAL REPORT

Fugro West Inc.	Project : 04.B0698004
1000 Broadway	Location : Peerless Lighting
Oakland, CA 94607	Level : II

Sample ID	Lab ID
SP-1	264142-001

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

Signature: Isabelle Choy Date: 01/27/2015

Isabelle Choy
Project Manager
isabelle.choy@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**264142**
Client:	**Fugro West Inc.**
Project:	**04.B0698004**
Location:	**Peerless Lighting**
Request Date:	**01/23/15**
Samples Received:	**01/23/15**

This data package contains sample and QC results for one soil sample, requested for the above referenced project on 01/23/15. The sample was received on ice and intact, directly from the field.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High surrogate recoveries were observed for 1,2-dichloroethane-d4 in SP-1 (lab # 264142-001) and the method blank/LCS/MS/MSD for batch 219700. Methylene chloride was detected between the MDL and the RL in SP-1 (lab # 264142-001); this analyte is a common laboratory contaminant. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A) Soil:
Zinc was detected between the MDL and the RL in the method blank for batch 219770; this analyte was detected in the sample at a level at least 10 times that of the blank. No other analytical problems were encountered.

Metals (EPA 6010B) WET Leachate:
No analytical problems were encountered.

264142

FF-02 CHAIN OF CUSTODY

PAGE 1 OF 1

PROJECT NAME: Peerless Lighting Sampling

PROJECT NO.: 04.B0698004 LAB: C&T

PROJECT CONTACT: Jeriann Alexander **TURNAROUND: 48 HOUR**

SAMPLED BY: K. Emery (SCA Environmental)

LABORATORY I.D. NUMBER	FIELD SAMPLE I.D.	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	CONTAINERS: VOA	CONTAINERS: LITER	CONTAINERS: PINT	CONTAINERS: TUBE	CONTAINERS: glass jar	PRESERVATIVE: HCL	PRESERVATIVE: H_2SO_4	PRESERVATIVE: HNO_3	PRESERVATIVE: ICE	PRESERVATIVE: OTHER	PRESERVATIVE: NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	TPHg	TPHd/TPHmo with silica gel cleanup	VOCs (8260)	CAM 17 Metals	Soluble Cr & Pb (WET Method)	EDF Reporting
	SP-1		X						X				X			0 1	2 3	1 5	1110		X	X	X	X	X	

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
[signature] (SCA)	1/23/15 11:46	[signature]	1/23/15 11:46

COMMENTS & NOTES: **EMAIL RESULTS TO jalexander@fugro.com**

FUGRO CONSULTANTS, INC.
1000 Broadway, Suite 440
Oakland, California 94607
Tel: 510.268.0461 Fax: 510.268.0545

DRAFT

Approved by David Gardner, AC 71 Manager, Fugro West, Inc. 1/31/09
Note: If this is a printed copy, please check the online QMS to ensure that it is the latest version.

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 264142 Date Received 1/23/15 Number of coolers 0
Client FUGRO CONSULTANTS Project 04.B0698004

Date Opened 01/23/15 By (print) BL (sign)
Date Logged in 01/23/15 By (print) BL (sign)

1. Did cooler come with a shipping slip (airbill, etc)_____ YES (NO)
Shipping info_____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many _____ Name_____ Date_____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received?_____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form)___ (YES) NO
6. Indicate the packing in cooler: (if other, describe)_____

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C)_____

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present?_____ YES (NO)
If YES, what time were they transferred to freezer?_____
9. Did all bottles arrive unbroken/unopened?_____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
If YES, Who was called?_____ By_____ Date:_____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 264142

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

Client : Fugro West Inc.
Project : 04.B0698004
Location : Peerless Lighting

Client Sample ID : SP-1 Laboratory Sample ID : 264142-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	18	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	180		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Acetone	3.3	J	19	0.8	ug/Kg	As Recd	0.9363	EPA 8260B	EPA 5030B
Methylene Chloride	1.4	J	19	1.0	ug/Kg	As Recd	0.9363	EPA 8260B	EPA 5030B
Arsenic	6.1		0.24	0.069	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	140		0.24	0.051	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.42		0.095	0.012	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.89		0.24	0.024	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.24	0.060	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	10		0.24	0.029	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	24		0.24	0.079	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	56		0.24	0.066	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.18		0.016	0.0011	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Molybdenum	0.16	J	0.24	0.047	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	39		0.24	0.063	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	36		0.24	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	120		0.95	0.053	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	0.11	J	0.25	0.030	mg/L	STLC	10.00	EPA 6010B	WET
Lead	2.0		0.25	0.065	mg/L	STLC	10.00	EPA 6010B	WET

J = Estimated value
Y = Sample exhibits chromatographic pattern which does not resemble standard

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0698004	Analysis:	EPA 8015B
Field ID:	SP-1	Batch#:	219739
Matrix:	Soil	Sampled:	01/23/15
Units:	mg/Kg	Received:	01/23/15
Basis:	as received	Analyzed:	01/23/15
Diln Fac:	1.000		

Type: SAMPLE Lab ID: 264142-001

Analyte	Result	RL	MDL
Gasoline C7-C12	ND	1.0	0.077

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	78-138

Type: BLANK Lab ID: QC774565

Analyte	Result	RL	MDL
Gasoline C7-C12	ND	0.20	0.015

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	78-138

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0698004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC774564	Batch#:	219739
Matrix:	Soil	Analyzed:	01/23/15
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.019	102	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	78-138

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0698004	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	264129-001	Batch#:	219739
Matrix:	Soil	Sampled:	01/22/15
Units:	mg/Kg	Received:	01/22/15
Basis:	as received	Analyzed:	01/23/15

Type: MS Lab ID: QC774566

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.07656	10.31	9.327	90	50-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	78-138

Type: MSD Lab ID: QC774567

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	4.902	4.391	90	50-120	1	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	78-138

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0698004	Analysis:	EPA 8015B
Field ID:	SP-1	Batch#:	219782
Matrix:	Soil	Sampled:	01/23/15
Units:	mg/Kg	Received:	01/23/15
Basis:	as received	Prepared:	01/26/15
Diln Fac:	1.000	Analyzed:	01/27/15

Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 264142-001

Analyte	Result	RL	MDL
Diesel C10-C24	18 Y	1.0	0.31
Motor Oil C24-C36	180	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	93	59-140

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC774723

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	78	59-140

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0698004	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC774724	Batch#:	219782
Matrix:	Soil	Prepared:	01/26/15
Units:	mg/Kg	Analyzed:	01/27/15

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.55	41.31	83	58-137

Surrogate	%REC	Limits
o-Terphenyl	84	59-140

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 3550B
Project#:	04.B0698004	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	219782
MSS Lab ID:	264138-001	Sampled:	01/22/15
Matrix:	Soil	Received:	01/23/15
Units:	mg/Kg	Prepared:	01/26/15
Basis:	as received	Analyzed:	01/27/15
Diln Fac:	1.000		

Type: MS Lab ID: QC774725

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	1.886	49.98	52.59	101	46-154

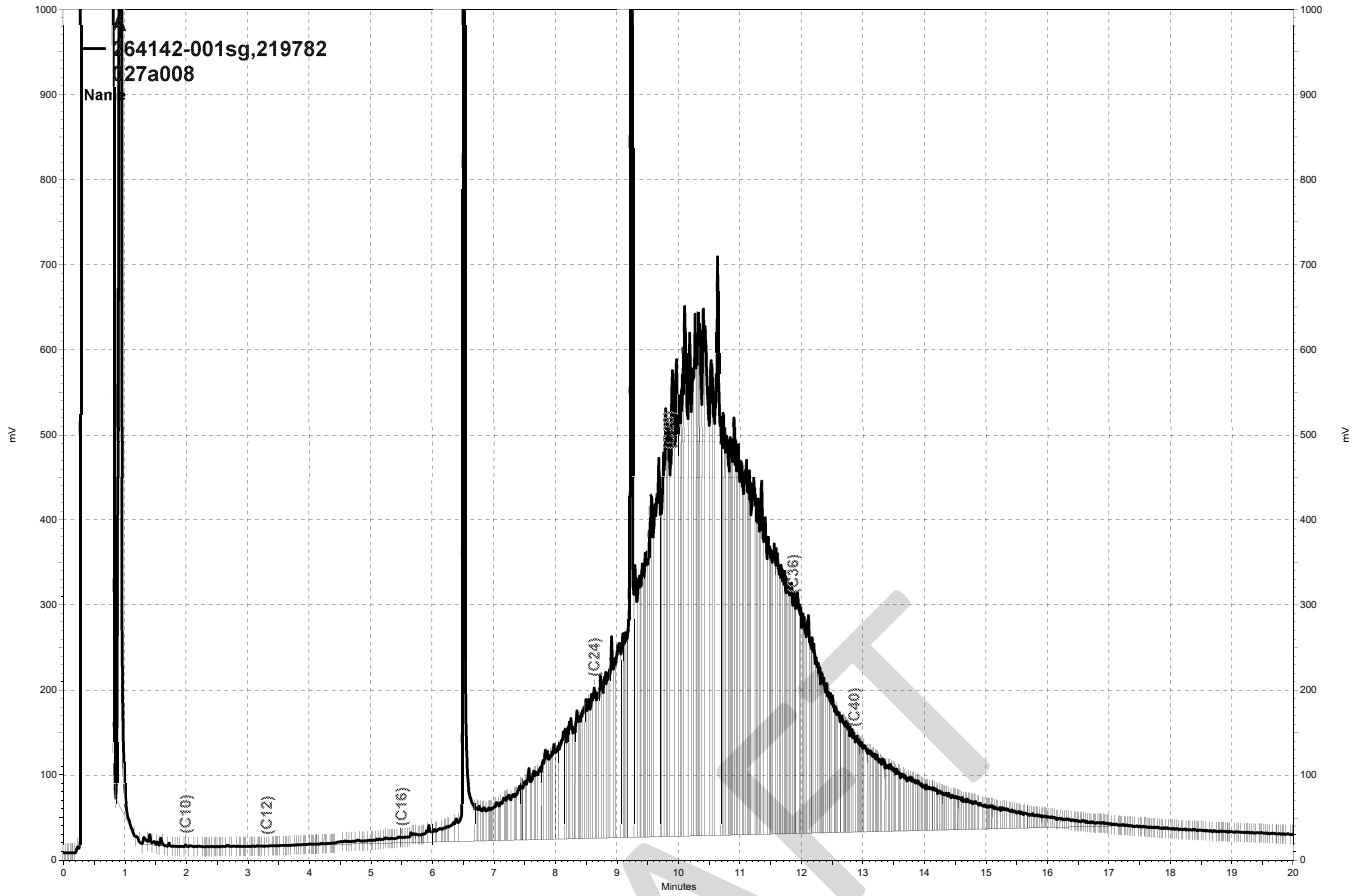
Surrogate	%REC	Limits
o-Terphenyl	96	59-140

Type: MSD Lab ID: QC774726

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.78	53.27	103	46-154	2	50

Surrogate	%REC	Limits
o-Terphenyl	103	59-140

RPD= Relative Percent Difference



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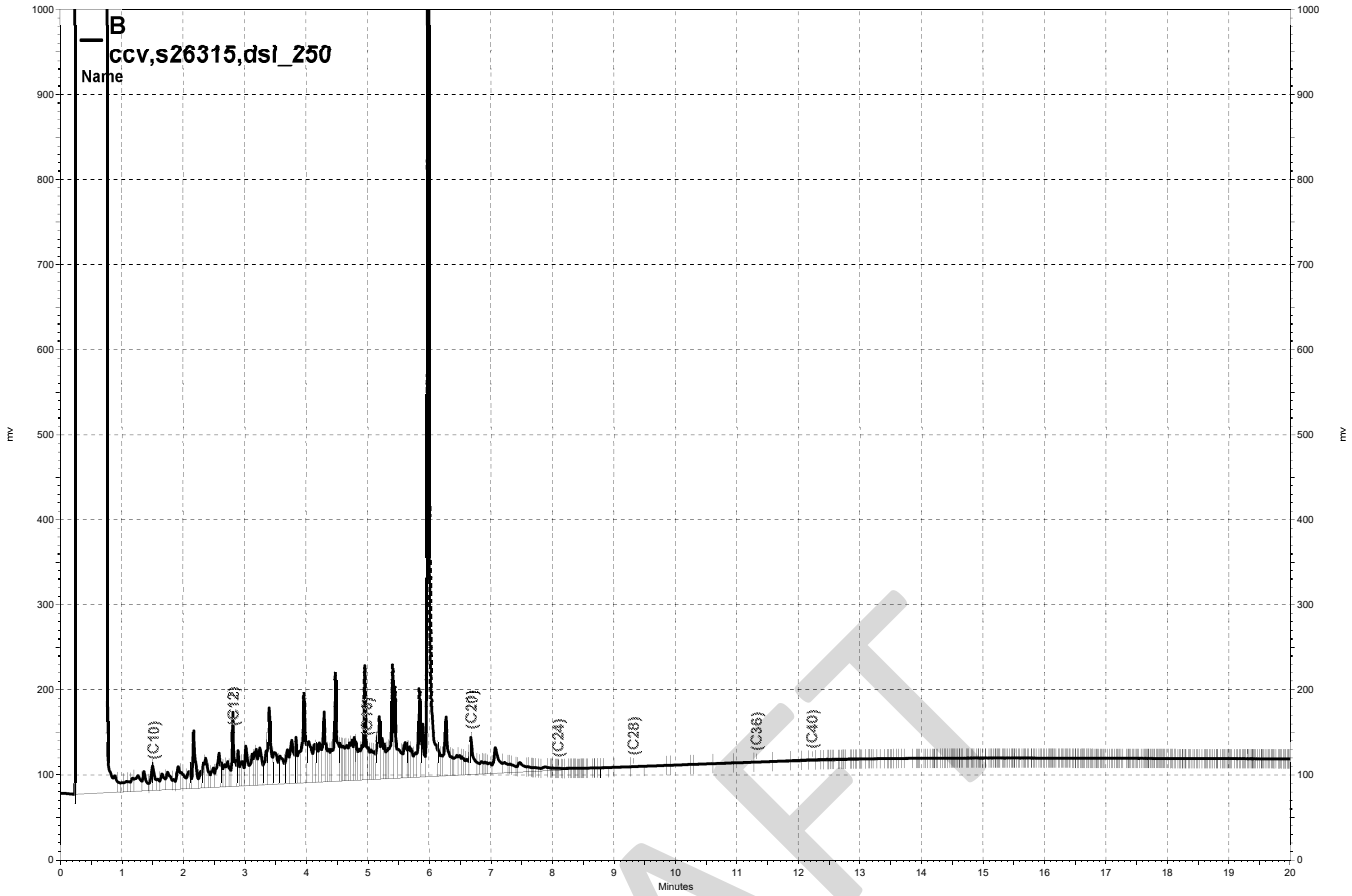

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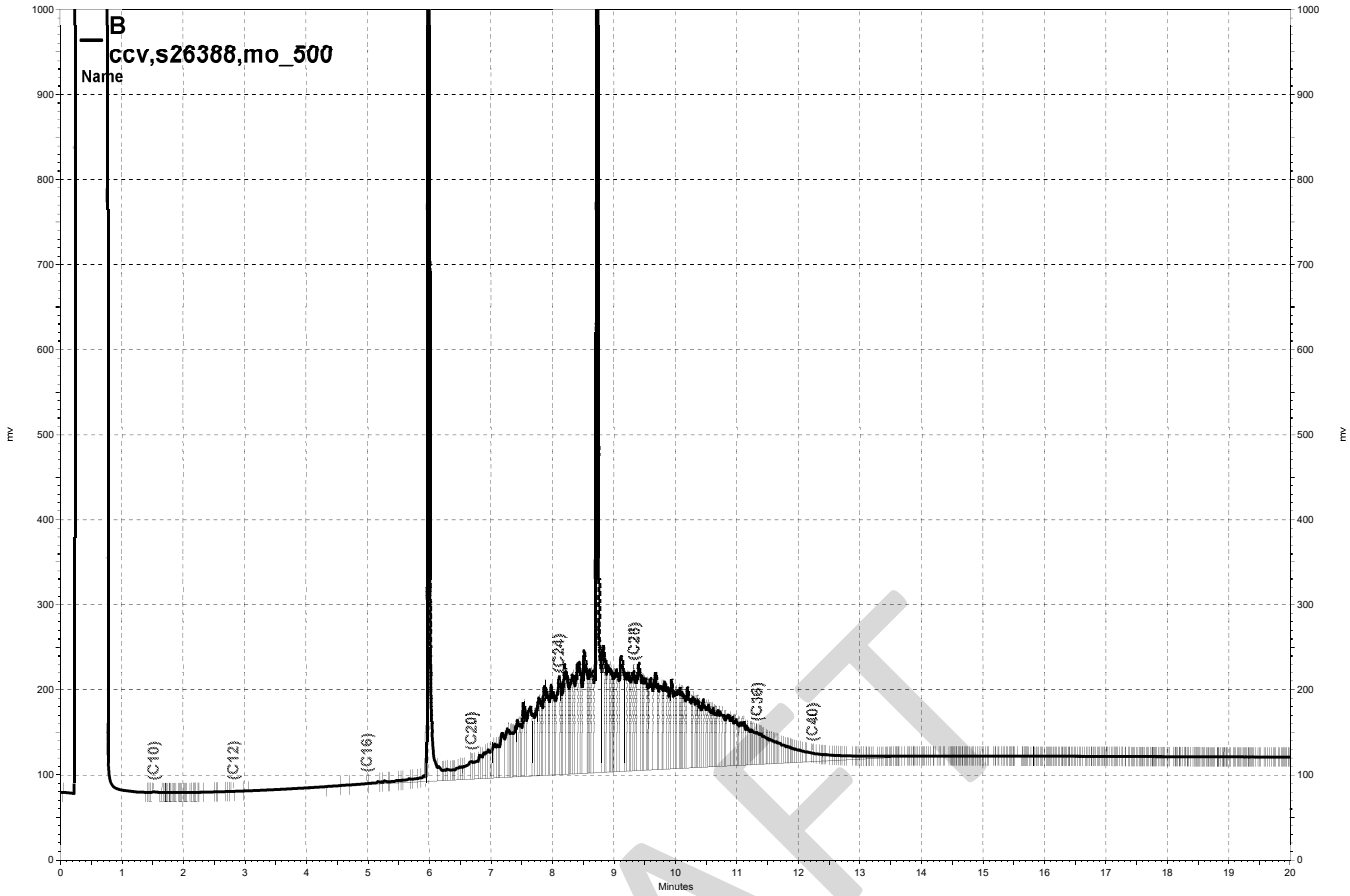

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0698004	Analysis:	EPA 8260B
Field ID:	SP-1	Diln Fac:	0.9363
Lab ID:	264142-001	Batch#:	219700
Matrix:	Soil	Sampled:	01/23/15
Units:	ug/Kg	Received:	01/23/15
Basis:	as received	Analyzed:	01/23/15

Analyte	Result	RL	MDL
Freon 12	ND	9.4	0.6
Chloromethane	ND	9.4	0.5
Vinyl Chloride	ND	9.4	0.4
Bromomethane	ND	9.4	0.3
Chloroethane	ND	9.4	0.4
Trichlorofluoromethane	ND	4.7	0.3
Acetone	3.3 J	19	0.8
Freon 113	ND	4.7	0.5
1,1-Dichloroethene	ND	4.7	0.6
Methylene Chloride	1.4 J	19	1.0
Carbon Disulfide	ND	4.7	0.6
MTBE	ND	4.7	0.5
trans-1,2-Dichloroethene	ND	4.7	0.6
Vinyl Acetate	ND	47	0.5
1,1-Dichloroethane	ND	4.7	0.7
2-Butanone	ND	9.4	0.6
cis-1,2-Dichloroethene	ND	4.7	0.5
2,2-Dichloropropane	ND	4.7	0.6
Chloroform	ND	4.7	0.6
Bromochloromethane	ND	4.7	0.1
1,1,1-Trichloroethane	ND	4.7	0.6
1,1-Dichloropropene	ND	4.7	0.6
Carbon Tetrachloride	ND	4.7	0.6
1,2-Dichloroethane	ND	4.7	0.6
Benzene	ND	4.7	0.7
Trichloroethene	ND	4.7	0.7
1,2-Dichloropropane	ND	4.7	0.5
Bromodichloromethane	ND	4.7	0.5
Dibromomethane	ND	4.7	0.2
4-Methyl-2-Pentanone	ND	9.4	0.6
cis-1,3-Dichloropropene	ND	4.7	0.4
Toluene	ND	4.7	0.7
trans-1,3-Dichloropropene	ND	4.7	0.4
1,1,2-Trichloroethane	ND	4.7	0.5
2-Hexanone	ND	9.4	0.6
1,3-Dichloropropane	ND	4.7	0.5
Tetrachloroethene	ND	4.7	0.6
Dibromochloromethane	ND	4.7	0.5
1,2-Dibromoethane	ND	4.7	0.5
Chlorobenzene	ND	4.7	0.6
1,1,1,2-Tetrachloroethane	ND	4.7	0.5
Ethylbenzene	ND	4.7	0.7
m,p-Xylenes	ND	4.7	1.3
o-Xylene	ND	4.7	0.6
Styrene	ND	4.7	0.5
Bromoform	ND	4.7	0.2
Isopropylbenzene	ND	4.7	0.6
1,1,2,2-Tetrachloroethane	ND	4.7	0.5
1,2,3-Trichloropropane	ND	4.7	0.6
Propylbenzene	ND	4.7	0.6
Bromobenzene	ND	4.7	0.2

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0698004	Analysis:	EPA 8260B
Field ID:	SP-1	Dil'n Fac:	0.9363
Lab ID:	264142-001	Batch#:	219700
Matrix:	Soil	Sampled:	01/23/15
Units:	ug/Kg	Received:	01/23/15
Basis:	as received	Analyzed:	01/23/15

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	4.7	0.6
2-Chlorotoluene	ND	4.7	0.6
4-Chlorotoluene	ND	4.7	0.6
tert-Butylbenzene	ND	4.7	0.7
1,2,4-Trimethylbenzene	ND	4.7	0.6
sec-Butylbenzene	ND	4.7	0.6
para-Isopropyl Toluene	ND	4.7	0.6
1,3-Dichlorobenzene	ND	4.7	0.5
1,4-Dichlorobenzene	ND	4.7	0.4
n-Butylbenzene	ND	4.7	0.6
1,2-Dichlorobenzene	ND	4.7	0.4
1,2-Dibromo-3-Chloropropane	ND	4.7	0.7
1,2,4-Trichlorobenzene	ND	4.7	0.1
Hexachlorobutadiene	ND	4.7	0.6
Naphthalene	ND	4.7	0.9
1,2,3-Trichlorobenzene	ND	4.7	0.2

Surrogate	%REC	Limits
Dibromofluoromethane	129	78-134
1,2-Dichloroethane-d4	147 *	80-138
Toluene-d8	96	80-120
Bromofluorobenzene	94	78-123

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0698004	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC774409	Batch#:	219700
Matrix:	Soil	Analyzed:	01/23/15
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.41	106	70-134
Benzene	25.00	24.38	98	80-123
Trichloroethene	25.00	27.15	109	80-128
Toluene	25.00	23.49	94	80-120
Chlorobenzene	25.00	25.52	102	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	113	78-134
1,2-Dichloroethane-d4	141 *	80-138
Toluene-d8	96	80-120
Bromofluorobenzene	92	78-123

*= Value outside of QC limits; see narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0698004	Analysis:	EPA 8260B
Type:	BLANK	Dil'n Fac:	1.000
Lab ID:	QC774410	Batch#:	219700
Matrix:	Soil	Analyzed:	01/23/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.6
Chloromethane	ND	10	0.5
Vinyl Chloride	ND	10	0.4
Bromomethane	ND	10	0.4
Chloroethane	ND	10	0.4
Trichlorofluoromethane	ND	5.0	0.3
Acetone	ND	20	0.8
Freon 113	ND	5.0	0.5
1,1-Dichloroethene	ND	5.0	0.6
Methylene Chloride	ND	20	1.1
Carbon Disulfide	ND	5.0	0.7
MTBE	ND	5.0	0.5
trans-1,2-Dichloroethene	ND	5.0	0.7
Vinyl Acetate	ND	50	0.5
1,1-Dichloroethane	ND	5.0	0.8
2-Butanone	ND	10	0.7
cis-1,2-Dichloroethene	ND	5.0	0.6
2,2-Dichloropropane	ND	5.0	0.6
Chloroform	ND	5.0	0.7
Bromochloromethane	ND	5.0	0.1
1,1,1-Trichloroethane	ND	5.0	0.7
1,1-Dichloropropene	ND	5.0	0.7
Carbon Tetrachloride	ND	5.0	0.6
1,2-Dichloroethane	ND	5.0	0.6
Benzene	ND	5.0	0.7
Trichloroethene	ND	5.0	0.7
1,2-Dichloropropane	ND	5.0	0.6
Bromodichloromethane	ND	5.0	0.5
Dibromomethane	ND	5.0	0.2
4-Methyl-2-Pentanone	ND	10	0.6
cis-1,3-Dichloropropene	ND	5.0	0.4
Toluene	ND	5.0	0.8
trans-1,3-Dichloropropene	ND	5.0	0.4
1,1,2-Trichloroethane	ND	5.0	0.5
2-Hexanone	ND	10	0.6
1,3-Dichloropropane	ND	5.0	0.5
Tetrachloroethene	ND	5.0	0.6
Dibromochloromethane	ND	5.0	0.5
1,2-Dibromoethane	ND	5.0	0.5
Chlorobenzene	ND	5.0	0.6
1,1,1,2-Tetrachloroethane	ND	5.0	0.5
Ethylbenzene	ND	5.0	0.7
m,p-Xylenes	ND	5.0	1.4
o-Xylene	ND	5.0	0.6
Styrene	ND	5.0	0.5
Bromoform	ND	5.0	0.2
Isopropylbenzene	ND	5.0	0.6
1,1,2,2-Tetrachloroethane	ND	5.0	0.5
1,2,3-Trichloropropane	ND	5.0	0.6
Propylbenzene	ND	5.0	0.7
Bromobenzene	ND	5.0	0.2
1,3,5-Trimethylbenzene	ND	5.0	0.6

*= Value outside of QC limits; see narrative
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0698004	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC774410	Batch#:	219700
Matrix:	Soil	Analyzed:	01/23/15
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.7
4-Chlorotoluene	ND	5.0	0.6
tert-Butylbenzene	ND	5.0	0.7
1,2,4-Trimethylbenzene	ND	5.0	0.6
sec-Butylbenzene	ND	5.0	0.6
para-Isopropyl Toluene	ND	5.0	0.6
1,3-Dichlorobenzene	ND	5.0	0.5
1,4-Dichlorobenzene	ND	5.0	0.5
n-Butylbenzene	ND	5.0	0.6
1,2-Dichlorobenzene	ND	5.0	0.5
1,2-Dibromo-3-Chloropropane	ND	5.0	0.8
1,2,4-Trichlorobenzene	ND	5.0	0.2
Hexachlorobutadiene	ND	5.0	0.6
Naphthalene	ND	5.0	1.0
1,2,3-Trichlorobenzene	ND	5.0	0.2

Surrogate	%REC	Limits
Dibromofluoromethane	122	78-134
1,2-Dichloroethane-d4	140 *	80-138
Toluene-d8	96	80-120
Bromofluorobenzene	89	78-123

*= Value outside of QC limits; see narrative
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 5030B
Project#:	04.B0698004	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	219700
MSS Lab ID:	264092-007	Sampled:	01/20/15
Matrix:	Soil	Received:	01/21/15
Units:	ug/Kg	Analyzed:	01/23/15
Basis:	as received		

Type: MS Diln Fac: 0.9634
Lab ID: QC774457

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5927	48.17	42.03	87	56-133
Benzene	<0.6906	48.17	41.83	87	57-120
Trichloroethene	<0.7193	48.17	45.38	94	49-145
Toluene	<0.7564	48.17	37.59	78	51-120
Chlorobenzene	<0.6201	48.17	41.40	86	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	117	78-134
1,2-Dichloroethane-d4	148 *	80-138
Toluene-d8	94	80-120
Bromofluorobenzene	92	78-123

Type: MSD Diln Fac: 0.9766
Lab ID: QC774458

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	48.83	43.43	89	56-133	2	46
Benzene	48.83	43.37	89	57-120	2	44
Trichloroethene	48.83	46.09	94	49-145	0	46
Toluene	48.83	39.50	81	51-120	4	47
Chlorobenzene	48.83	43.20	88	47-120	3	50

Surrogate	%REC	Limits
Dibromofluoromethane	116	78-134
1,2-Dichloroethane-d4	142 *	80-138
Toluene-d8	94	80-120
Bromofluorobenzene	93	78-123

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

California Title 22 Metals

Lab #:	264142	Project#:	04.B0698004
Client:	Fugro West Inc.	Location:	Peerless Lighting
Field ID:	SP-1	Diln Fac:	1.000
Lab ID:	264142-001	Sampled:	01/23/15
Matrix:	Soil	Received:	01/23/15
Units:	mg/Kg	Prepared:	01/26/15
Basis:	as received	Analyzed:	01/26/15

Analyte	Result	RL	MDL	Batch#	Prep	Analysis
Antimony	ND	0.48	0.14	219770	EPA 3050B	EPA 6010B
Arsenic	6.1	0.24	0.069	219770	EPA 3050B	EPA 6010B
Barium	140	0.24	0.051	219770	EPA 3050B	EPA 6010B
Beryllium	0.42	0.095	0.012	219770	EPA 3050B	EPA 6010B
Cadmium	0.89	0.24	0.024	219770	EPA 3050B	EPA 6010B
Chromium	39	0.24	0.060	219770	EPA 3050B	EPA 6010B
Cobalt	10	0.24	0.029	219770	EPA 3050B	EPA 6010B
Copper	24	0.24	0.079	219770	EPA 3050B	EPA 6010B
Lead	56	0.24	0.066	219770	EPA 3050B	EPA 6010B
Mercury	0.18	0.016	0.0011	219778	METHOD	EPA 7471A
Molybdenum	0.16 J	0.24	0.047	219770	EPA 3050B	EPA 6010B
Nickel	39	0.24	0.063	219770	EPA 3050B	EPA 6010B
Selenium	ND	0.48	0.15	219770	EPA 3050B	EPA 6010B
Silver	ND	0.24	0.038	219770	EPA 3050B	EPA 6010B
Thallium	ND	0.48	0.13	219770	EPA 3050B	EPA 6010B
Vanadium	36	0.24	0.054	219770	EPA 3050B	EPA 6010B
Zinc	120	0.95	0.053	219770	EPA 3050B	EPA 6010B

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 3050B
Project#:	04.B0698004	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC774671	Batch#:	219770
Matrix:	Soil	Prepared:	01/26/15
Units:	mg/Kg	Analyzed:	01/26/15

Analyte	Result	RL	MDL
Antimony	ND	0.50	0.15
Arsenic	ND	0.25	0.073
Barium	ND	0.25	0.054
Beryllium	ND	0.10	0.012
Cadmium	ND	0.25	0.026
Chromium	ND	0.25	0.063
Cobalt	ND	0.25	0.030
Copper	ND	0.25	0.083
Lead	ND	0.25	0.070
Molybdenum	ND	0.25	0.049
Nickel	ND	0.25	0.066
Selenium	ND	0.50	0.16
Silver	ND	0.25	0.040
Thallium	ND	0.50	0.14
Vanadium	ND	0.25	0.057
Zinc	0.69 J	1.0	0.056

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 3050B
Project#:	04.B0698004	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	219770
Units:	mg/Kg	Prepared:	01/26/15
Diln Fac:	5.000	Analyzed:	01/26/15

Type: BS Lab ID: QC774672

Analyte	Spiked	Result	%REC	Limits
Antimony	50.00	47.30	95	80-120
Arsenic	50.00	49.17	98	80-120
Barium	50.00	48.92	98	80-120
Beryllium	50.00	50.88	102	80-120
Cadmium	50.00	50.87	102	80-120
Chromium	50.00	49.28	99	80-120
Cobalt	50.00	47.10	94	80-120
Copper	50.00	47.44	95	80-120
Lead	50.00	47.33	95	80-120
Molybdenum	50.00	48.48	97	80-120
Nickel	50.00	48.57	97	80-120
Selenium	50.00	48.63	97	80-120
Silver	50.00	48.01	96	80-120
Thallium	50.00	48.23	96	80-120
Vanadium	50.00	51.07	102	80-120
Zinc	50.00	49.43	99	80-120

Type: BSD Lab ID: QC774673

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	50.00	46.55	93	80-120	2	20
Arsenic	50.00	48.69	97	80-120	1	20
Barium	50.00	48.85	98	80-120	0	20
Beryllium	50.00	48.45	97	80-120	5	20
Cadmium	50.00	50.83	102	80-120	0	20
Chromium	50.00	49.05	98	80-120	0	20
Cobalt	50.00	46.90	94	80-120	0	20
Copper	50.00	47.01	94	80-120	1	20
Lead	50.00	47.05	94	80-120	1	20
Molybdenum	50.00	48.04	96	80-120	1	20
Nickel	50.00	48.37	97	80-120	0	20
Selenium	50.00	48.05	96	80-120	1	20
Silver	50.00	47.61	95	80-120	1	20
Thallium	50.00	47.89	96	80-120	1	20
Vanadium	50.00	50.62	101	80-120	1	20
Zinc	50.00	49.28	99	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	EPA 3050B
Project#:	04.B0698004	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	219770
MSS Lab ID:	264091-002	Sampled:	01/21/15
Matrix:	Soil	Received:	01/21/15
Units:	mg/Kg	Prepared:	01/26/15
Basis:	as received	Analyzed:	01/26/15
Diln Fac:	5.000		

Type: MS Lab ID: QC774674

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<0.1466	47.17	17.27	37	15-120
Arsenic	2.119	47.17	44.63	90	69-120
Barium	88.69	47.17	140.7	110	35-154
Beryllium	0.3711	47.17	46.04	97	75-120
Cadmium	0.7834	47.17	45.78	95	71-120
Chromium	24.55	47.17	74.63	106	57-133
Cobalt	8.792	47.17	52.48	93	56-125
Copper	14.35	47.17	61.93	101	54-144
Lead	3.759	47.17	47.14	92	53-125
Molybdenum	0.06035	47.17	41.02	87	66-120
Nickel	18.36	47.17	65.38	100	44-141
Selenium	<0.1566	47.17	40.09	85	61-120
Silver	<0.03909	47.17	44.02	93	69-120
Thallium	<0.1377	47.17	42.25	90	59-120
Vanadium	50.12	47.17	98.52	103	52-144
Zinc	34.05	47.17	84.99	108	45-145

Type: MSD Lab ID: QC774675

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	48.08	17.27	36	15-120	2	41
Arsenic	48.08	42.40	84	69-120	7	35
Barium	48.08	115.9	57	35-154	20	36
Beryllium	48.08	44.12	91	75-120	6	20
Cadmium	48.08	44.49	91	71-120	5	25
Chromium	48.08	74.30	103	57-133	2	33
Cobalt	48.08	50.51	87	56-125	5	36
Copper	48.08	58.51	92	54-144	7	38
Lead	48.08	45.26	86	53-125	6	42
Molybdenum	48.08	40.00	83	66-120	4	20
Nickel	48.08	61.87	90	44-141	7	39
Selenium	48.08	38.80	81	61-120	5	33
Silver	48.08	42.01	87	69-120	7	22
Thallium	48.08	41.31	86	59-120	4	27
Vanadium	48.08	85.37	73	52-144	15	29
Zinc	48.08	78.35	92	45-145	9	39

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	METHOD
Project#:	04.B0698004	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	219778
Lab ID:	QC774704	Prepared:	01/26/15
Matrix:	Soil	Analyzed:	01/26/15
Units:	mg/Kg		

Result	RL	MDL
ND	0.017	0.0011

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	METHOD
Project#:	04.B0698004	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	219778
Matrix:	Soil	Prepared:	01/26/15
Units:	mg/Kg	Analyzed:	01/26/15
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC774705	0.2083	0.2028	97	80-120		
BSD	QC774706	0.2083	0.2079	100	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

California Title 22 Metals

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	METHOD
Project#:	04.B0698004	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	219778
MSS Lab ID:	264067-001	Sampled:	01/20/15
Matrix:	Soil	Received:	01/20/15
Units:	mg/Kg	Prepared:	01/26/15
Basis:	as received	Analyzed:	01/26/15

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC774707	0.1693	0.2016	0.3690	99	69-142		
MSD	QC774708		0.2049	0.3691	97	69-142	1	36

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	WET
Project#:	04.B0698004	Analysis:	EPA 6010B
Field ID:	SP-1	Sampled:	01/23/15
Matrix:	WET Leachate	Received:	01/23/15
Units:	mg/L	Prepared:	01/26/15
Diln Fac:	10.00	Analyzed:	01/27/15
Batch#:	219796		

Type: SAMPLE Lab ID: 264142-001

Analyte	Result	RL	MDL
Chromium	0.11 J	0.25	0.030
Lead	2.0	0.25	0.065

Type: BLANK Lab ID: QC774775

Analyte	Result	RL	MDL
Chromium	ND	0.25	0.030
Lead	ND	0.25	0.065

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	WET
Project#:	04.B0698004	Analysis:	EPA 6010B
Matrix:	WET Leachate	Batch#:	219796
Units:	mg/L	Prepared:	01/26/15
Diln Fac:	1.000	Analyzed:	01/27/15

Type: BS Lab ID: QC774776

Analyte	Spiked	Result	%REC	Limits
Chromium	0.1000	0.09516	95	80-120
Lead	0.1000	0.09190	92	80-120

Type: BSD Lab ID: QC774777

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chromium	0.1000	0.09399	94	80-120	1	20
Lead	0.1000	0.09216	92	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	264142	Location:	Peerless Lighting
Client:	Fugro West Inc.	Prep:	WET
Project#:	04.B0698004	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	219796
MSS Lab ID:	264095-001	Sampled:	01/21/15
Matrix:	WET Leachate	Received:	01/21/15
Units:	mg/L	Prepared:	01/26/15
Diln Fac:	10.00	Analyzed:	01/27/15

Type: MS Lab ID: QC774778

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chromium	0.03729	0.5000	0.5319	99	80-120
Lead	0.1611	0.5000	0.6208	92	67-120

Type: MSD Lab ID: QC774779

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chromium	0.5000	0.5230	97	80-120	2	20
Lead	0.5000	0.6235	92	67-120	0	23

RPD= Relative Percent Difference

Table 1. Summary of Laboratory Analytical Results for Grab Groundwater Samples
2213-2231 Fourth Street and 2212-2246 Fifth Street
Berkeley, California

		Sample Location ID	GW1	GW1-DUP	GW2	GW3	TB1	GW4	GW5	GW6	TB2
		Sample Depth (ft bgs)	17-27	17-27	17-27	10-20	--	13-28	9-19	13-28	
		Sample Date	4/23/2019	4/23/2019	4/24/2019	4/24/2019	4/18/2019	7/12/2019	7/10/2019	7/12/2019	7/10/2019
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Class	**Analyte**	ESL - Tier 1 [(1)]									
VOCs	Dichlorodifluoromethane	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Chloromethane	188	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Vinyl Chloride	0.0086	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**8.73**	<0.500	<0.500
VOCs	Bromomethane	7.5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Chloroethane	16	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Trichlorofluoromethane	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,1-Dichloroethene	3.2	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**1.16**	<0.500
VOCs	Trichlorotrifluoroethane	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Methylene Chloride	5.0	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
VOCs	Trans-1,2-Dichloroethene	10	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,1-Dichloroethane	5.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**2.08**	**1.06**	<0.500
VOCs	cis-1,2-Dichloroethene	6.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**52.6**	**1.43**	<0.500
VOCs	2,2-Dichloropropane	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Bromochloromethane	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Chloroform	0.81	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,1,1-Trichloroethane	62	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Carbon Tetrachloride	0.061	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,1-Dichloropropene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Benzene	0.42	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,2-Dichloroethane	0.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**2.50**	<0.500	<0.500
VOCs	Trichloroethene	1.2	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**0.860**	<0.500
VOCs	1,2-Dichloropropane	2.3	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Dibromomethane	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Bromodichloromethane	0.87	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	trans-1,3-Dichloropropene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Toluene	40	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**0.590**	<0.500	<0.500
VOCs	cis-1,3-Dichloropropene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,1,2-Trichloroethane	5.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Tetrachloroethene	0.64	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,3-Dichloropropane	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Dibromochloromethane	34	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,2-Dibromoethane	0.050	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Chlorobenzene	25	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,1,1,2-Tetrachloroethane	0.57	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Ethylbenzene	3.5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Xylene (M+P)	20	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**0.510**	<0.500	<0.500
VOCs	Xylene(O)	20	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Styrene	10	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Bromoform	80	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Isopropylbenzene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,1,2,2-Tetrachloroethane	1.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Bromobenzene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,2,3-Trichloropropane	0.0050	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	N-Propylbenzene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	2-Chlorotoluene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,3,5-Trimethylbenzene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	4-Chlorotoluene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	Tert-Butylbenzene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,2,4-Trimethylbenzene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	sec-Butylbenzene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,3-Dichlorobenzene	65	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	4-Isopropyl Toluene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,4-Dichlorobenzene	2.6	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	N-Butylbenzene	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,2-Dichlorobenzene	14	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,2-Dibromo-3-Chloropropane	0.028	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOCs	1,2,4-Trichlorobenzene	5.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
VOCs	Hexachlorobutadiene	0.14	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
VOCs	Naphthalene	0.17	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
VOCs	1,2,3-Trichlorobenzene	ne	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
TPH	Gasoline Range Organics (C6-C10)	100	<50	<50	<50	<50	--	<50	<50	<50	--
TPH	Diesel Range Organics (C12-C23)	100	<55.6	<62.5	<76.9	<64.1	--	<52.1	<54.9	<51.5	--
TPH	Heavy Range Organics (C24-C34)	100	<55.6	<62.5	<76.9	<64.1	--	<52.1	<54.9	<51.5	--

Notes
(1) - San Francisco Regional Water Quality Control Board Environmental Screening Levels - Tier 1 (RWQCB, July 2019, Rev. 2)
Green Shading = Result is greater than RWQCB Environmental Screening Level - Tier 1
ft bgs - Feet below ground surface/building foundation slab
ne - Screening Level is not established
VOCs - Volatile Organic Compounds
TPH - Total Petroleum Hydrocarbons
TB - Trip Blank sample
DUP - Duplicate Sample
< - Not detected at or above the respective laboratory method reporting limit
Results reported in micrograms per Liter (µg/L); detections in **bold** font

Table 2. Summary of Laboratory Analytical Results for Sub-Slab and Soil Vapor Samples
2213-2231 Fourth Street and 2212-2246 Fifth Street
Berkeley, California

		Sample Location ID	SV1	SV2	SV2-DUP	SV3	SV4	SSV1	SSV2	SSV3	SSV4	SSV5	SSV6	SSV7	SSV8	SSV9	SSV10	SSV11	SSV14	SV7	SSV12	SV5	SSV13	SV6	SSV15	SSV15DUP	SV8	SV9
		Sample Depth (ft bgs)	5.0	5.0	5.0	5.0	5.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5.0	0.5	5.0	0.5	5.0	0.5	0.5	5.0	5.0
		Sample Date	4/23/2019	4/23/2019	4/23/2019	4/24/2019	4/24/2019	4/23/2019	4/23/2019	4/23/2019	4/23/2019	4/23/2019	4/24/2019	4/24/2019	4/24/2019	4/24/2019	4/24/2019	4/24/2019	6/3/2019	6/3/2019	6/3/2019	6/3/2019	6/3/2019	6/3/2019	6/3/2019	6/3/2019	6/3/2019	6/3/2019
		Units	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3
Analyte	ESL-R	ESL-C																										
Dichlorodifluoromethane	ne	ne	**2.62**	**3.39**	**2.96**	**3.11**	**2.98**	**3.12**	<0.989	**3.39**	**2.89**	**3.32**	**2.59**	**2.80**	**0.644**	**2.48**	**2.58**	**2.92**	<1.98	<3.96	<1.98	<1.98	<0.495	**2.61**	**0.722**	**2.13**	**1.63**	<1.98
Dichlorotetrafluoroethane	ne	ne	<0.699	<0.699	<0.699	<0.699	<0.699	<0.699	<1.4	<0.699	<0.699	<0.699	<0.699	<0.699	<0.699	<0.699	<0.699	<0.699	<2.80	<5.59	<2.80	<2.80	<0.699	<0.699	<0.699	<0.699	<0.699	<2.80
Chloromethane	3.1E+03	1.3E+04	**0.590**	**54.6**	**1.13**	**0.448**	**0.442**	**1.32**	**27.1**	**0.778**	**2.60**	**1.67**	**0.447**	**0.600**	<0.413	<0.413	**0.774**	**4.68**	**3.09**	<1.65	**72.0**	**45.0**	**0.500**	**8.85**	**1.08**	**10.1**	**3.07**	**47.6**
Vinyl Chloride	0.32	5.2	<0.0895	<0.0895	<0.0895	<0.0895	<0.0895	<0.0895	**33.1**	<0.0895	**1.08**	<0.0895	<0.0895	<0.0895	**33.8**	<0.0895	<0.0895	<0.0895	**73.0**	**233**	**57.5**	**58.0**	<0.0895	**0.383**	**0.295**	**0.213**	**2.66**	**44.0**
Bromomethane	174	730	<0.388	**3.26**	<0.388	<0.388	<0.388	<0.388	**0.916**	<0.388	<0.388	<0.388	<0.388	<0.388	<0.388	<0.388	<0.388	**7.13**	<1.55	<3.11	<1.55	**6.36**	<0.388	<0.388	<0.388	<0.388	<0.388	<1.55
Chloroethane	3.5E+05	1.5E+06	<0.264	**1.78**	<0.264	<0.264	<0.264	**0.332**	**0.915**	<0.264	<0.264	<0.264	<0.264	<0.264	<0.264	<0.264	<0.264	**1.24**	**1.16**	<2.11	**1.13**	**4.68**	<0.264	**0.464**	<0.264	**0.536**	**0.605**	<1.06
Trichlorofluoromethane	ne	ne	**1.62**	**2.09**	**1.79**	**1.53**	**2.02**	**1.17**	<1.12	**1.78**	**1.03**	**1.27**	**1.18**	**1.45**	<0.562	<0.562	**1.54**	**1.36**	<4.50	<8.99	<4.50	<4.50	<1.12	<1.12	<1.12	<1.12	**1.88**	<4.50
1,1-Dichloroethene	2.4E+03	1.0E+04	<0.397	<0.397	**dff**	<0.397	<0.397	<0.397	<0.793	<0.397	<0.397	<0.397	<0.397	<0.397	**0.608**	<0.397	<0.397	<0.397	<1.59	<3.17	<1.59	<1.59	<0.397	<0.397	<0.397	<0.397	<0.397	<1.59
Trichlorotrifluoroethane	ne	ne	<3.83	<3.83	<3.83	<3.83	<3.83	<3.83	<7.66	<3.83	<3.83	<3.83	<3.83	<3.83	<3.83	<3.83	<3.83	<3.83	<15.3	<30.7	<15.3	<15.3	<3.83	<3.83	<3.83	<3.83	<3.83	<15.3
Methylene Chloride	34	409	<10.4	<10.4	<10.4	<10.4	<10.4	<10.4	<20.8	<10.4	<10.4	<10.4	<10.4	**17.1**	<10.4	**11.6**	<10.4	<10.4	<41.7	<83.4	<41.7	<41.7	<10.4	<10.4	<10.4	<10.4	<10.4	<41.7
trans-1,2-Dichloroethene	2.8E+03	1.2E+04	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.793	<0.396	<0.396	<0.396	<0.396	<0.396	**0.470**	<0.396	<0.396	<0.396	**1.93**	**6.48**	**3.32**	**5.08**	<0.396	<0.396	<0.396	<0.396	<0.396	<1.59
1,1-Dichloroethane	58	256	<0.405	<0.405	<0.405	**0.694**	<0.405	<0.405	**0.864**	<0.405	**1.65**	<0.405	<0.405	<0.405	<0.405	<0.405	<0.405	<0.405	<1.62	<3.24	**3.84**	**1.65**	<0.405	<0.405	<0.405	<0.405	<0.405	**1.79**
cis-1,2-Dichloroethene	2.8E+02	1.2E+03	<0.397	<0.397	<0.397	<0.397	<0.397	**1.20**	**7.64**	<0.397	<0.397	<0.397	<0.397	<0.397	**1.02**	<0.397	<0.397	<0.397	**6.92**	**40.6**	**13**	**10.6**	<0.397	<0.397	<0.397	<0.397	**0.630**	**20.8**
Chloroform	4.1	18	**15.2**	**33.9**	**27.3**	**2.47**	**2.27**	**4.00**	**10.7**	**3.09**	**4.80**	**6.02**	**6.20**	**12.0**	**4.46**	**13.4**	**2.77**	**6.76**	**8.51**	**6.18**	**13.5**	**149**	**11.3**	**2.88**	**4.34**	**4.27**	**3.06**	<1.95
1,1,1-Trichloroethane	3.5E+04	1.5E+05	<0.546	<0.546	<0.546	**62.0**	<0.546	<0.546	<1.09	<0.546	<0.546	<0.546	<0.546	**3.95**	<0.546	<0.546	<0.546	<0.546	<2.18	<4.37	<2.18	<2.18	<0.546	<0.546	<0.546	<0.546	<0.546	<2.18
1,2-Dichloroethane	3.6	16	<0.405	**1.22**	<0.405	**4.15**	<0.405	<0.405	<0.809	<0.405	<0.405	<0.405	<0.405	<0.405	<0.405	<0.405	<0.405	<0.405	<1.62	<3.24	<1.62	**11.4**	<0.405	<0.405	<0.405	<0.405	<0.405	<1.62
Benzene	3.2	14	**5.79**	**7.07**	**8.31**	**6.74**	**12.3**	**4.66**	**168**	<1.6	**3.05**	<1.6	<1.6	**6.66**	**6.73**	**13.0**	<1.6	**2.18**	**118**	**269**	**46.8**	**23.1**	**15.4**	**18.7**	**9.68**	**8.26**	**16.0**	**215**
Carbon Tetrachloride	15.6	68.1	<0.629	**1.32**	<0.629	<0.629	<0.629	<0.629	<1.26	<0.629	<0.629	<0.629	<0.629	<0.629	<0.629	<0.629	<0.629	<0.629	<2.52	<5.03	<2.52	<2.52	<0.629	<0.629	<0.629	<0.629	<0.629	<2.52
1,2-Dichloropropane	9.4	41	<0.462	<0.462	<0.462	<0.462	<0.462	<0.462	<0.924	<0.462	<0.462	<0.462	<0.462	<0.462	<0.462	<0.462	<0.462	<0.462	<1.85	<3.70	<1.85	<1.85	<0.462	<0.462	<0.462	<0.462	<0.462	<1.85
Trichloroethene	16	100	<0.537	<0.537	<0.537	<0.537	<0.537	<0.537	<1.07	<0.537	<0.537	<0.537	<0.537	<0.537	<0.537	<0.537	<0.537	<0.537	<2.15	<4.30	<2.15	<2.15	<0.537	<0.537	<0.537	<0.537	<0.537	<2.15
cis-1,3-Dichloropropene	ne	ne	<0.454	<0.454	<0.454	<0.454	<0.454	<0.454	<0.908	<0.454	<0.454	<0.454	<0.454	<0.454	<0.454	<0.454	<0.454	<0.454	<1.82	<3.63	<1.82	<1.82	<0.454	<0.454	<0.454	<0.454	<0.454	<1.82
trans-1,3-Dichloropropene	ne	ne	<0.454	<0.454	<0.454	<0.454	<0.454	<0.454	<0.908	<0.454	<0.454	<0.454	<0.454	<0.454	<0.454	<0.454	<0.454	<0.454	<1.82	<3.63	<1.82	<1.82	<0.454	<0.454	<0.454	<0.454	<0.454	<1.82
Toluene	1.0E+04	4.4E+04	**43.4**	**32.9**	**36.2**	**49.9**	**37.2**	**6.81**	**262**	**3.82**	**38.3**	**4.62**	**3.42**	**47.1**	**9.11**	**28.9**	**6.31**	**8.56**	**143**	**255**	**47.1**	**44.0**	**19.8**	**38.8**	**12.9**	**10.8**	**19.6**	**70.7**
1,1,2-Trichloroethane	5.8	26	<0.546	<0.546	<0.546	<0.546	<0.546	<0.546	<1.09	<0.546	<0.546	<0.546	<0.546	<0.546	<0.546	<0.546	<0.546	<0.546	<2.18	<4.37	<2.18	<2.18	<0.546	<0.546	<0.546	<0.546	<0.546	<2.18
1,2-Dibromoethane (EDB)	0.16	0.68	<0.768	<0.768	<0.768	<0.768	<0.768	<0.768	<1.54	<0.768	<0.768	<0.768	<0.768	<0.768	<0.768	<0.768	<0.768	<0.768	<3.07	<6.15	<3.07	<3.07	<0.768	<0.768	<0.768	<0.768	<0.768	<3.07
Tetrachloroethene	15	67	**10.7**	**2.00**	**1.47**	**10.4**	**1.53**	**1.66**	<1.36	**16.5**	**1.42**	**11.5**	**0.830**	**1.37**	<0.678	<0.678	**1.95**	**0.745**	<2.71	<5.43	<2.71	<2.71	<0.678	<0.678	<0.678	<0.678	<0.678	<2.71
Chlorobenzene	1.7E+03	7.3E+03	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.921	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<1.84	<3.68	<1.84	<1.84	<0.460	<0.460	<0.460	<0.460	<0.460	<1.84
Ethylbenzene	37	164	**7.87**	**6.32**	**6.95**	**9.93**	**12.4**	**2.67**	**66.2**	**1.84**	**78.8**	**2.18**	**1.55**	**152**	**2.28**	**6.72**	**1.87**	**1.72**	**47.3**	**59.7**	**12.1**	**7.44**	**5.44**	**10.8**	**2.99**	**2.29**	**5.83**	**10.4**
Xylene (M+P)	3.5E+03	1.5E+04	**19.9**	**14.9**	**16.9**	**24.7**	**31.4**	**4.87**	**356**	**3.32**	**423**	**4.37**	**3.15**	**907**	**5.66**	**14.7**	**4.67**	**4.01**	**244**	**183**	**39.9**	**18.1**	**13.9**	**23.9**	**9.06**	**5.53**	**13.7**	**47.4**
Styrene	3.1E+04	1.3E+05	<0.426	<0.426	<0.426	**3.00**	**0.455**	<0.426	<0.852	<0.426	<0.426	<0.426	<0.426	**1.41**	<0.426	<0.426	<0.426	<0.426	<1.70	<3.41	**2.46**	<1.70	**0.594**	**1.06**	<0.426	<0.426	**0.467**	<1.70
Xylene (O)	ne	ne	**5.52**	**4.97**	**5.58**	**7.83**	**8.84**	**1.81**	**242**	**1.34**	**251**	**1.80**	**1.35**	**326**	**2.32**	**5.21**	**1.66**	**1.63**	**191**	**118**	**16.6**	**6.45**	**5.54**	**12.1**	**4.86**	**2.44**	**7.19**	**44.8**
1,1-DFA (Leak Check Analyte)	ne	ne	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	**350**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
1,1,2,2-Tetrachloroethane	1.6	7.0	**2.18**	<0.687	<0.687	<0.687	<0.687	<0.687	<1.37	<0.687	<0.687	<0.687	<0.687	<0.687	<0.687	<0.687	<0.687	<0.687	<2.75	<5.49	<2.75	<2.75	<0.687	<0.687	<0.687	<0.687	<0.687	<2.75
1,3,5-Trimethylbenzene	ne	ne	**12.9**	**6.96**	**7.45**	**20.6**	**3.04**	**7.19**	**283**	**4.70**	**7.44**	**8.12**	**4.29**	**21.3**	**56.3**	**16.0**	**3.95**	**3.56**	**402**	**139**	**24.2**	**7.78**	**14.8**	**20.1**	**15.2**	**10.9**	**19.7**	**36.4**
1,2,4-Trimethylbenzene	ne	ne	**12.6**	**11.0**	**13.1**	**18.8**	**3.64**	**9.14**	**376**	**8.77**	**10.1**	**12.2**	**6.95**	**23.1**	**6.17**	**16.3**	**4.57**	**5.79**	**603**	**251**	**53.0**	**13.3**	**20.0**	**33.4**	**25.3**	**18.3**	**32.8**	**24.8**
1,3-Dichlorobenzene	ne	ne	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<1.2	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<2.41	<4.81	<2.41	<2.41	<0.601	<0.601	<0.601	<0.601	<0.601	<2.41
1,4-Dichlorobenzene	8.5	37	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<1.2	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<2.41	<4.81	<2.41	<2.41	<0.601	<0.601	<0.601	<0.601	<0.601	<2.41
1,2-Dichlorobenzene	7.0E+03	2.9E+04	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<1.2	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<0.601	<2.41	<4.81	<2.41	<2.41	<0.601	<0.601	<0.601	<0.601	<0.601	<2.41
1,2,4-Trichlorobenzene	70	292	<0.742	<0.742	<0.742	<0.742	<0.742	<0.742	<1.48	<0.742	<0.742	<0.742	<0.742	<0.742	<0.742	<0.742	<0.742	<0.742	<2.97	<5.94	<2.97	<2.97	<0.742	<0.742	<0.742	<0.742	<0.742	<2.97
Hexachlorobutadiene	4.3	19	<1.07	<1.07	<1.07	<1.07	<1.07	<1.07	<2.13	<1.07	<1.07	<1.07	<1.07	<1.07	<1.07	<1.07	<1.07	<1.07	<4.27	<8.53	<4.27	<4.27	<1.07	<1.07	<1.07	<1.07	<1.07	<4.27
Naphthalene	2.8	12	<0.786	<0.786	<0.786	**1.00**	<0.786	**1.02**	<1.57	<0.786	**7.87**	**2.14**	<0.786	<0.786	<0.786	<0.786	<0.786	<0.786	<3.15	<6.29	<3.15	<3.15	<0.786	**1.12**	<0.786	<0.786	**4.81**	<3.15

Notes

(1) - San Francisco Regional Water Quality Control Board (RWQCB) Environmental Screening Levels for Residential (ESL-R) and Commercial (ESL-C) Properties, (RWQCB, July 2019, Rev. 2)

ne - Screening Level is not established

ft bgs - Feet below ground surface/building foundation slab

DUP - Duplicate Sample

SSV# - Sub-Slab Vapor Sample Location (collected beneath the concrete slab)

Green Shading = Result is greater than RWQCB Environmental Screening Level for Commercial Properties

< - Not detected at or above the respective laboratory method reporting limit

Results reported in micrograms per cubic meter (µg/m^3); detections in **bold** font

1,1-Difluoroethane (1,1-DFA) utilized as leak check compound

Table 3. Summary of Laboratory Analytical Results for Indoor Air Samples
2213-2231 Fourth Street and 2212-2246 Fifth Street
Berkeley, California

				Sample Location ID	IA1	IA2	IA3	IA4	IA5	AA	IA6	IA6-DUP	IA7	IA8	AA2	AA3
				Sample Type	Interior	Interior	Interior	Interior	Interior	Ambient	Interior	Duplicate	Interior	Interior	Ambient	Ambient
				Sample Date	4/18/2019	4/18/2019	4/18/2019	4/18/2019	4/18/2019	4/18/2019	7/17/2019	7/17/2019	7/17/2019	7/17/2019	7/17/2019	7/17/2019
				Units	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3
Analyte	CAS	MRL	ESL-R [(1)]	ESL-C [(1)]												
Dichlorodifluoromethane	75-71-8	0.0495	ne	ne	**0.980**	**3.34**	**2.92**	**2.37**	**1.46**	**3.24**	**2.55**	**2.72**	**1.15**	**1.55**	**1.51**	**2.75**
Chloromethane	74-87-3	0.0413	94	3.9E+02	**0.322**	**1.11**	**0.998**	**0.804**	**0.527**	**1.93**	**0.826**	**1.00**	**0.374**	**0.515**	**0.567**	**0.938**
Dichlorotetrafluoroethane	76-14-2	0.0699	ne	ne	<0.0699	**0.140**	**0.122**	**0.0953**	**0.0809**	**0.132**	**0.130**	**0.151**	<0.0699	**0.0801**	**0.103**	**0.150**
Vinyl Chloride	75-01-4	0.00895	0.0095	0.16	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895
Bromomethane	74-83-9	0.0388	5.2	22	<0.0388	**0.0743**	<0.0388	<0.0388	<0.0388	<0.0388	**0.0433**	**0.0657**	<0.0388	<0.0388	<0.0388	<0.0388
Chloroethane	75-00-3	0.0264	1.0E+04	4.4E+04	<0.0264	**0.0372**	**0.0824**	**0.0347**	<0.0264	**0.384**	<0.0264	<0.0264	<0.0264	<0.0264	<0.0264	<0.0264
Trichlorofluoromethane	75-69-4	0.0562	ne	ne	**0.580**	**1.90**	**1.67**	**1.42**	**0.807**	**1.78**	**1.37**	**1.41**	**0.613**	**0.803**	**0.796**	**1.45**
1,1-Dichloroethene	75-35-4	0.0397	73	3.1E+02	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397
Trichlorotrifluoroethane	76-13-1	0.383	ne	ne	<0.383	**0.612**	**0.546**	**0.447**	<0.383	**0.602**	**0.558**	**0.641**	<0.383	<0.383	<0.383	**0.656**
Methylene Chloride	75-09-2	1.04	1.0	12	**1.37**	**1.74**	**1.49**	**1.36**	<1.04	**1.53**	**1.28**	**1.54**	**1.25**	<1.04	<1.04	**1.290**
trans-1,2-Dichloroethene	156-60-5	0.0396	83	3.5E+02	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396
1,1-Dichloroethane	75-34-3	0.0405	1.8	7.7	<0.0405	<0.0405	<0.0405	<0.0405	<0.0405	<0.0405	<0.0405	<0.0405	<0.0405	<0.0405	<0.0405	<0.0405
cis-1,2-Dichloroethene	156-59-2	0.0397	8.3	35	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397
Chloroform	67-66-3	0.0488	0.12	0.53	**0.0915**	**0.220**	**0.254**	**0.228**	**0.0942**	**0.189**	**0.103**	**0.119**	**0.0568**	**0.0782**	**0.194**	**0.123**
1,1,1-Trichloroethane	71-55-6	0.0546	1.0E+03	4.4E+03	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546
1,2-Dichloroethane	107-06-2	0.0405	0.11	0.47	**0.0516**	**0.129**	**0.119**	**0.111**	**0.0693**	**0.128**	**0.061**	**0.0583**	<0.0405	<0.0405	<0.0405	**0.0625**
Benzene	71-43-2	0.160	0.097	0.42	**0.167**	**0.515**	**0.413**	**0.358**	**0.167**	**0.482**	**0.170**	**0.195**	<0.16	<0.16	<0.16	**0.167**
Carbon Tetrachloride	56-23-5	0.0629	0.468	2.04	**0.176**	**0.563**	**0.562**	**0.453**	**0.285**	**0.472**	**0.459**	**0.199**	**0.212**	**0.287**	**0.285**	**0.517**
1,2-Dichloropropane	78-87-5	0.0462	0.28	1.2	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462
Trichloroethene	79-01-6	0.0537	0.48	3.0	<0.0537	<0.0537	<0.0537	<0.0537	<0.0537	<0.0537	<0.0537	<0.0537	<0.0537	<0.0537	<0.0537	<0.0537
cis-1,3-Dichloropropene	10061-02-6	0.0454	ne	ne	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454
trans-1,3-Dichloropropene	10061-01-5	0.0454	ne	ne	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454
Toluene	108-88-3	0.188	3.1E+02	1.3E+03	**0.584**	**1.54**	**2.02**	**1.10**	**0.445**	**1.33**	**0.487**	**0.685**	**0.271**	**0.391**	**0.231**	**0.524**
1,1,2-Trichloroethane	79-00-5	0.0546	0.18	0.77	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546
1,2-Dibromoethane	106-93-4	0.0768	0.0047	0.020	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768
Tetrachloroethene	127-18-4	0.0678	0.46	2.0	<0.0678	<0.0678	<0.0678	<0.0678	<0.0678	<0.0678	**0.28**	**0.379**	**0.567**	**0.245**	**1.07**	**0.339**
Chlorobenzene	108-90-7	0.0460	52	2.2E+02	<0.0460	<0.0460	<0.0460	<0.0460	<0.0460	<0.0460	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046
Ethylbenzene	100-41-4	0.0434	1.1	4.9	**0.138**	**0.479**	**0.296**	**0.298**	**0.205**	**0.276**	**0.132**	**0.158**	**0.0662**	**0.0933**	**0.0500**	**0.117**
Xylene (M+P)	1330-20-7	0.0868	1.0E+02	4.4E+02	**0.384**	**1.33**	**0.69**	**0.926**	**0.550**	**0.902**	**0.402**	**0.475**	**0.286**	**0.246**	**0.143**	**0.288**
Styrene	100-42-5	0.0426	9.4E+02	3.9E+03	<0.0426	**0.0477**	<0.0426	**1.78**	<0.0426	<0.0426	**0.102**	**0.176**	**0.0809**	**0.0984**	<0.0426	<0.0426
Xylene (O)	95-47-6	0.0434	ne	ne	**0.137**	**0.515**	**0.241**	**0.312**	**0.156**	**0.293**	**0.174**	**0.176**	**0.0789**	**0.151**	**0.077**	**0.212**
1,1,2,2-Tetrachloroethane	79-34-5	0.0687	0.048	0.21	<0.0687	<0.0687	<0.0687	<0.0687	<0.0687	<0.0687	<0.0667	<0.0667	<0.0667	<0.0667	<0.0667	<0.0667
1,3,5-Trimethylbenzene	108-67-8	0.0492	ne	ne	<0.0492	**0.141**	<0.0492	**0.152**	<0.0492	**0.230**	<0.0492	<0.0492	<0.0492	<0.0492	<0.0492	<0.0492
1,2,4-Trimethylbenzene	95-63-6	0.0492	ne	ne	**0.133**	**0.366**	**0.118**	**0.479**	**0.102**	**0.733**	**0.179**	**0.219**	**0.0849**	**0.0569**	**0.0865**	**0.103**
1,3-Dichlorobenzene	541-73-1	0.0601	ne	ne	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601
1,4-Dichlorobenzene	106-46-7	0.0601	0.26	1.1	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601
1,2-Dichlorobenzene	95-50-1	0.0601	2.1E+02	8.8E+02	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601
1,2,4-Trichlorobenzene	120-82-1	0.0742	2.1	8.8	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742
Hexachlorobutadiene	87-68-3	0.107	0.13	0.56	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107
Naphthalene	91-20-3	0.0786	0.083	0.36	<0.0786	<0.0786	<0.0786	<0.0786	<0.0786	<0.0786	<0.0786	<0.0786	<0.0786	<0.0786	<0.0786	<0.0786

Notes

(1) - San Francisco Regional Water Quality Control Board Environmental Screening Levels for Residential (ESL-R) and Commercial (ESL-C) Properties, (RWQCB, July 2019, Rev. 2)

ne - Screening Level is not established

Green Shading = Result is greater than Environmental Screening Level for Commercial Properties

< - Not detected at or above the respective laboratory method reporting limit

Ambient Air Sample Locations: AA, AA2, and AA3

Results reported in micrograms per cubic meter (µg/m^3); detections in **bold** font

Sample Location "AA" is an ambient air sampling location collected from the roof top (upwind side of building)

PES Environmental, Inc.
Engineering & Environmental Services

Site Location
Limited Phase II Investigation
Bancroft Way, Fourth and Fifth Streets
Berkeley, California

PLATE
1

881.108.01.001	88110801008_SVR_1-4	DRAFT	3/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Explanation

- Approximate Property Boundary
- (7) Tenant ID
- GW1 — Grab Groundwater Sample
- SSV8 — Soil Sub-Slab Gas Sample
- SV4 — 5-foot Soil Gas Sample
- IA2 — Indoor Air Sample
- AA (Roof) — Ambient Air Sample
- MW-11 — Offsite Veriflo Groundwater Monitoring Well

ID	Address	Tenant
5	2221 Fourth Street	Jason Michael Axelrod
6	2216 Fifth Street	Keen Builders
7	2222 Fifth Street	Ironies
8D	2213 Fourth Street	Wine.com
9	2212 Fifth Street	Vacant
10	2231 Fourth Street	Vacant
11	2246 Fifth Street	Vacant

Tenant IDs correlate with the Tenant IDs shown in PES' Draft Phase I ESA (PES, 2019)

N

0 80

SCALE IN FEET

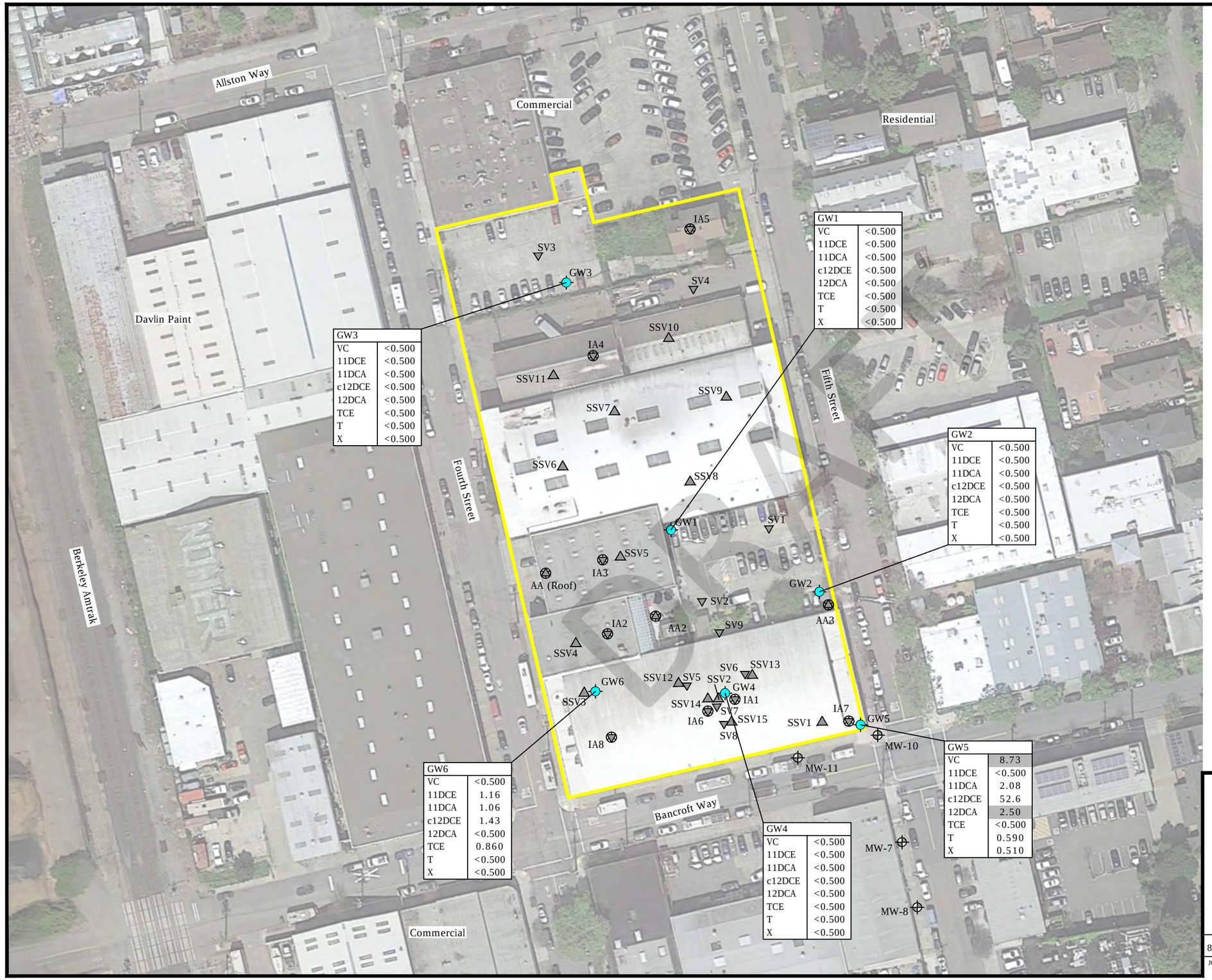
Aerial Photograph: May 10, 2018 (Google 2019)

PES Environmental, Inc.
Engineering & Environmental Services

Site Plan and Sample Locations
Limited Phase II Investigation
Fourth and Fifth Streets
Berkeley, California

PLATE 2

JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE
881.108.01.008	88110801008_SVR_1-4	DRAFT	4/19



Explanation

- Approximate Property Boundary
- GW1 — Grab Groundwater Sample
- SSV8 — Soil Sub-Slab Gas Sample
- SV4 — 5-foot Soil Gas Sample
- IA2 — Indoor Air Sample
- AA (Roof) — Ambient Air Sample
- MW-11 — Offsite Veriflo Groundwater Monitoring Well
- 0.590 — Vapor concentrations reported in micrograms per liter (µg/L)
- <0.05 — Not detected at or above the laboratory method reporting limit
- 2.50 — Shaded results are greater than the July 2019 RWQCB Environmental Screening Level (ESL) - Tier 1

Abbrev.	Analyte	ESL (ug/L)
VC	Vinyl Chloride	0.0086
11DCE	1,1-Dichloroethene	3.2
11DCA	1,1-Dichloroethane	5.0
c12DCE	cis-1,2-Dichloroethene	6.0
12DCA	1,2-Dichloroethane	0.50
TCE	Trichloroethene	1.2
T	Toluene	40
X	Xylene (M+P)	20

N

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SCALE IN FEET

Aerial Photograph: May 10, 2018 (Google 2019)

PES Environmental, Inc.
Engineering & Environmental Services

Groundwater Results
Limited Phase II Investigation
Fourth and Fifth Streets
Berkeley, California

PLATE 3

881.108.01.008	88110801008_SVR_1-4	DRAFT	4/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Explanation

- Approximate Property Boundary
- GW1 — Grab Groundwater Sample
- SSV8 — Soil Sub-Slab Gas Sample
- SV4 — 5-foot Soil Gas Sample
- IA2 — Indoor Air Sample
- AA (Roof) — Ambient Air Sample - Rooftop
- 13.4 — Vapor concentrations reported in micrograms per cubic meter (µg/m^3)
- <0.0895 — Not detected at or above the laboratory method reporting limit
- SSV9 [0.5] — Sample ID and collection depth in feet below grade
- 33.8 — Shaded results are greater than the July 2019 RWQCB Environmental Screening Level (ESL) for Commercial Properties

Abbrev.	Analyte	ESL (ug/m^3)
CHCl3	Chloroform	18
BZ	Benzene	14
VC	Vinyl Chloride	4.2

N

0 80

SCALE IN FEET

Aerial Photograph: May 10, 2018 (Google 2019)

PES Environmental, Inc.
Engineering & Environmental Services

Sub-Slab and Soil Vapor Results
Limited Phase II Investigation
Fourth and Fifth Streets
Berkeley, California

PLATE 4

881.108.01.008	88110801008_SVR_1-4	DRAFT	6/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Explanation

- Approximate Property Boundary
- GW1 — Grab Groundwater Sample
- SSV8 — Soil Sub-Slab Gas Sample
- SV4 — 5-foot Soil Gas Sample
- IA2 — Indoor Air Sample
- AA (Roof) — Ambient Air Sample - Rooftop
- 0.194 — Vapor concentrations reported in micrograms per cubic meter (µg/m^3)
- <0.16 — Not detected at or above the laboratory method reporting limit
- 0.482 — Shaded results are greater than the July 2019 RWQCB Environmental Screening Level (ESL) for Commercial Properties

Abbrev.	Analyte	ESL (ug/m^3)
CHCl3	Chloroform	0.53
BZ	Benzene	0.42

N

0 80

SCALE IN FEET

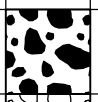
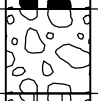
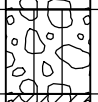
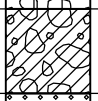
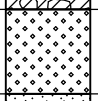
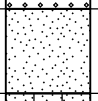
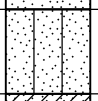
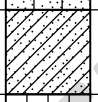
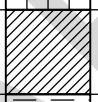
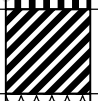
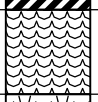
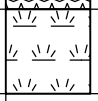
Aerial Photograph: May 10, 2018 (Google 2019)

PES Environmental, Inc.
Engineering & Environmental Services

Indoor Air Results
Limited Phase II Investigation
Fourth and Fifth Streets
Berkeley, California

PLATE 5

881.108.01.008	88110801008_SVR_1-4	DRAFT	5/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LESS THAN 15% FINES	GW		WELL-GRADED GRAVELS WITH OR WITHOUT SAND
			GP		POORLY-GRADED GRAVELS WITH OR WITHOUT SAND
		GRAVELS WITH 15% OR MORE FINES	GM		SILTY GRAVELS WITH OR WITHOUT SAND
			GC		CLAYEY GRAVELS WITH OR WITHOUT SAND
	SANDS MORE THAN HALF COARSE FRACTION IS FINER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 15% FINES	SW		WELL-GRADED SANDS WITH OR WITHOUT GRAVEL
			SP		POORLY-GRADED SANDS WITH OR WITHOUT GRAVEL
		SANDS WITH 15% OR MORE FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OL		ORGANIC SILTS OR CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CH		INORGANIC CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OH		ORGANIC SILTS OR CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
HIGHLY ORGANIC SOILS			PT		PEAT AND OTHER HIGHLY ORGANIC SOILS

ABBREVIATION KEY

PID (PPM) - Photo Ionization Detector readings in parts per million from field headspace sample screening.

BLOWS/6" - Blows required to drive sampler 6 inches as indicated on the logs using sample drive hammer weight of 140 pounds falling 30 inches.

2.5YR 6/2 - Soil Color according to Munsell Soil Color Charts (1994 Revised Edition)

feet MSL - feet above Mean Seal Level

feet BGS - feet below ground surface

SYMBOLS KEY

- No Soil Sample Recovered
- Partial Soil Sample Recovered
- Undisturbed Soil Sample Recovered
- Soil Sample Submitted for Laboratory Analysis
- Hydropunch Sample
- First Encountered Groundwater Level
- Piezometric Groundwater level

USCS CHART1 881_SKB-EB_V1.GPJ PES_ENV.GDT 8/8/19

PES Environmental, Inc.
Engineering & Environmental Services

Unified Soil Classification System Chart
5th and Bancroft (East Block)
Berkeley, CA

PLATE
B-0

881.108.01	USCS CHART1	DRAFT	
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

PES Environmental, Inc.
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LOG OF BORING GW-1

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				VERY DARK GRAYISH BROWN SILTY SAND (SM) (2.5Y 3/2), moist, very fine- to coarse-grained sand, sub angular to sub rounded gravel to 0.25 inch diameter (5% gravel, 75% sand, 20% fines)
0				
				VERY DARK GRAY CLAY (CL) (2.5Y 3/1), moist, very stiff (~3 tsf), very fine- to medium-grained sand, (0% gravel, 5% sand, 95% fines)
0				
0				
		5		
0				
				Color change to dark gray (5Y 4/1) at 6 feet bgs.
0				Increase in sand to (0% gravel, 10% sand, 90% fines), color change to dark grayish brown (2.5Y 4/2) at 6.75 feet bgs.
				DARK GRAYISH BROWN CLAY WITH SAND (CL) (2.5Y 4/2), moist, hard (>4.0 tsf), very fine- to medium-grained sand, (0% gravel, 15% sand, 85% fines) Increase in sand to (0% gravel, 25% sand, 75% fines) at 8.5 feet bgs.
0				
		10		
0				DARK GREENISH GRAY SANDY CLAY (CL) (10Y 4/1), moist, very stiff (~3.25 tsf), very fine- to fine-grained sand, (0% gravel, 30% sand, 70% fines)
0				Increase in sand to (0% gravel, 35% sand, 65% fines) at 12.25 feet bgs.
				OLIVE GRAY CLAY WITH SAND (CL) (5Y 4/2), moist, hard (>4.0 tsf), very fine- to coarse-grained sand, subangular to subrounded gravel to 0.25 inch diameter, (5% gravel, 20% sand, 75% fines)
0				
0		15		
0				DARK GREENISH GRAY CLAYEY SAND WITH GRAVEL (SC) (10Y 4/1), moist, very fine- to coarse-grained sand, subangular to subrounded gravel to 1 inch diameter, (10% gravel, 65% sand, 25% fines)
0			▽	Wet at 17 feet bgs.
0				DARK OLIVE GRAY SILTY SAND (SM) (5Y 3/2), wet, very fine- to coarse-grained sand, subangular to subrounded gravel to 0.75 inch diameter, (10% gravel, 65% sand, 25% fines) Color change to Brown (10YR 4/3), increase in sand to (10% gravel, 70% sand, 20% fines) at 18.25 feet bgs.
0				
0.2		20		
				BROWN SILTY SAND WITH GRAVEL (SM) (10YR 4/3), wet, very fine- to coarse-grained sand, subangular to subrounded gravel to 1 inch diameter, (15% gravel, 65% sand, 20% fines)
0				BROWN CLAYEY SAND WITH GRAVEL (SC) (10YR 4/3), wet, very fine- to coarse-grained sand, subangular to subrounded gravel to 1 inch diameter, (15% gravel, 65% sand, 20% fines)
0				BROWN CLAYEY SAND (SC) (10YR 4/3), wet, very fine- to coarse-grained sand, subangular to subrounded gravel to 0.75 inch diameter, (10% gravel, 70% sand, 20% fines)
0				BROWN WELL GRADED SAND (SW) (10YR 4/3), wet, very fine- to coarse-grained sand, (0% gravel, 95% sand, 5% fines)
0		25		DARK YELLOWISH BROWN CLAY (CL) (10YR 4/4), moist, very stiff (~2.75 tsf), very fine- to medium-grained sand, (0% gravel, 10% sand, 90% fines)
0				
				Bottom of boring at 27 feet bgs. Grab groundwater samples GW1 and GW1-DUP collected from boring. Boring backfilled with neat cement grout.
		30		

PROJECT	5th and Bancroft (East Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	27 feet
JOB NUMBER	881.108.01	DRILL RIG	TEG - Powerprobe 9635
LOGGED BY	CNP	DATE STARTED	4/23/19
REVIEWED BY	DRAFT	DATE COMPLETED	4/23/19

PLATE

B-1

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW-2

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
0				VERY DARK GRAY SANDY SILT (ML) (2.5Y 3/1), moist, stiff (~1.75 tsf), very fine- to coarse-grained sand, (0% gravel, 30% sand, 70% fines)
0				VERY DARK GRAY CLAY (CL) (2.5Y 3/1), moist, very stiff (~3 tsf), very fine- to medium-grained sand, (0% gravel, 5% sand, 95% fines)
0				
0		5		
0				Color change to dark gray (5Y 4/1) at 5.5 feet bgs.
0				DARK GRAY CLAY WITH SAND (CL) (5Y 4/1), moist, very fine- to medium-grained sand, hard (>4.0 tsf), (0% gravel, 15% sand, 85% fines)
0				
0		10		Increase in very fine- to medium-grained sand to (0% gravel, 25% sand, 75% fines)
0				
0				
0		15		DARK GREENISH GRAY CLAYEY SAND WITH GRAVEL (SC) (10Y 4/1), moist, very fine- to coarse-grained sand, subangular to subrounded gravel to 1 inch diameter, (10% gravel, 65% sand, 25% fines)
0.1				BROWN SANDY CLAY (CL) (10YR 4/3), wet, very fine- to coarse-grained sand, (0% gravel, 30% sand, 70% fines)
0				BROWN CLAYEY SAND (SC) (10YR 4/3), wet very fine- to coarse-grained sand, subangular to subrounded gravel to 0.75 inch, (5% gravel, 55% sand, 40% fines)
0				BROWN SANDY CLAY (CL) (10YR 4/3), moist, very fine- to coarse-grained sand, hard (>4.0 tsf), subangular to subrounded gravel to 0.5 inch diameter, (5% gravel, 25% sand, 70% fines)
0		20		DARK YELLOWISH BROWN CLAY (CL) (10YR 4/4), moist, hard (>4.0 tsf), very fine- to medium-grained sand, (0% gravel, 10% sand, 90% fines)
0				
0				
0				DARK YELLOWISH BROWN SANDY CLAY (CL) (10YR 4/3), moist, stiff (~1.5 tsf), very fine- to coarse-grained sand, subangular to subrounded gravel to 0.75 inch diameter, (10% gravel, 30% sand, 60% fines)
0				DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/4), moist, very stiff (~3.25 tsf), very fine- to coarse-grained sand, (0% gravel, 20% sand, 80% fines)
0		25		
				Bottom of boring at 27 feet bgs. Grab groundwater sample GW2 collected from boring. Boring backfilled with neat cement grout.
		30		

PROJECT	5th and Bancroft (East Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	27 feet
JOB NUMBER	881.108.01	DRILL RIG	TEG - Powerprobe 9635
LOGGED BY	CNP	DATE STARTED	4/23/19
REVIEWED BY	DRAFT	DATE COMPLETED	4/23/19

PLATE **B-2**

LOG OF BORING/WELL 881_SKB-EB_V1.GPJ PES_ENV.GDT 8/8/19

PES Environmental, Inc.
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LOG OF BORING GW-3

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
0				BLACK CLAY (CL) (2.5Y 2/1), moist, very stiff (~2.5 tsf), very fine- to fine-grained sand, (0% gravel, 5% sand, 95% fines)
0				DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/7), moist, stiff (~1.75 tsf), very fine- to medium-grained sand, (0% gravel, 15% sand, 20% fines)
0				Increase in sand to (0% gravel, 25% sand, 75% fines) at 3.25 feet bgs.
0				
		5		
0				Increase in subangular to subrounded greavel to 0.25 inch diameter, (trace% gravel, 25% sand, 75% fines) at 6 feet bgs.
0				
0				BROWN CLAYEY SAND (SC) (10YR 4/3), moist, very fine- to coarse-grained sand, subangular to subrounded gravel to 1 inch diameter, (10% gravel, 65% sand, 25% fines)
		10		▽ Color change to dark brown (10YR 3/3) at 10 feet bgs. Wet at 10.25 feet bgs.
0				Increase in fines to (10% gravel, 55% sand, 35% fines) at 11 feet bgs.
0				
0				DARK YELLOWISH BROWN CLAYEY SAND WITH GRAVEL (SC) (10YR 4/4), wet, very fine- to coarse-grained sand, subangular to subrounded gravel to 0.75 inch diameter, (20% gravel, 55% sand, 25% fines)
		15		Increase in fines to (15% gravel, 45% sand, 40% fines), moist at 15 feet bgs.
0				
0				Decrease in fines to (20% gravel, 60% sand, 20% fines), wet at 16.5 feet bgs.
0				
0				
		20		Botoom of boring at 20 feet bgs. Grab groundwater sample GW3 collected from boring. Boring backfilled with neat cement grout.
		25		

PROJECT	5th and Bancroft (East Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	20 feet
JOB NUMBER	881.108.01	DRILL RIG	TEG - Powerprobe 9635
LOGGED BY	CNP	DATE STARTED	4/24/19
REVIEWED BY	DRAFT	DATE COMPLETED	4/24/19

PLATE **B-3**

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW-4

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
0.5				BLACK CLAYEY SAND (SC) (2.5Y 2.5/1), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (trace gravel, 55% sand, 45% fines)
0.3				VERY DARK GRAY CLAY (CL) (2.5Y 3/1), moist, very stiff (~2.5 tsf), very fine-grained sand, (0% gravel, 5% sand, 95% fines)
0				
0		5		
0				
0				DARK OLIVE GRAY CLAY WITH SAND (CL) (5Y 3/2), moist, very stiff (~3.0 tsf), very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.25-inch diameter, (trace gravel, 15% sand, 85% fines)
0				Increase in sand to (0% gravel, 20% sand, 80% fines) at 8.5 feet bgs
0		10		
0				
0				
0				
0		15		
0				Increase in subangular to subrounded gravel up to 0.25-inch diameter to (trace gravel, 25% sand, 75% fines), color change to DARK YELLOWISH BROWN (10YR 4/4) at 15.5 feet bgs
0				DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/4), moist, hard (>4.0 tsf), very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (trace gravel, 30% sand, 70% fines)
0				
0		20		
0				
0				
0		25		Increase in subangular to subgrounded gravel up to 0.75-inch diameter to (5% gravel, 40% sand, 55% fines) at 25 feet bgs
0				
0				▽ Decrease in sand to (5% gravel, 30% sand, 65% fines) at 27 feet bgs
				Bottom of boring at 28 feet bgs. Grab groundwater sample GW4 collected from boring. Boring backfilled with neat cement grout.
		30		

PROJECT	5th and Bancroft (East Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	28 feet
JOB NUMBER	881.108.01	DRILL RIG	ECA - Geoprobe
LOGGED BY	CNP	DATE STARTED	7/10/19
REVIEWED BY	DRAFT	DATE COMPLETED	7/10/19

PLATE **B-4**

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW-5

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
0				BLACK CLAYEY SAND (SC) (2.5Y 2.5/1), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5% gravel, 55% sand, 40% fines)
0				VERY DARK GRAY CLAY (CL) (2.5Y 3/1), moist, very stiff (~2.5 tsf), very fine-grained sand, (0% gravel, 5% sand, 95% fines)
0				
0		5		
0				DARK GRAYISH BROWN CLAY WITH SAND (CL) (2.5Y 4/2), moist, very stiff (~3.75 tsf), very fine- to medium-grained sand, subangular to subrounded gravel up to 0.75-inch diameter, (trace gravel, 15% sand, 85% fines)
				DARK YELLOWISH BROWN CLAYEY SAND (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5% gravel, 55% sand, 40% fines) Increase in subangular to subrounded gravel up to 1.25-inch diameter to (10% gravel, 70% sand, 20% fines) at 7 feet bgs
0				
0				
0		10		DARK YELLOWISH BROWN CLAYEY SAND WITH GRAVEL (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 1.25-inch diameter, (20% gravel, 65% sand, 15% fines) Color change to DARK GREENISH GRAY (5GY 4/1) at 10.5 feet bgs
0				
				▽
				DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/4), moist, very stiff (~3.0 tsf), very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.25-inch diameter, (trace gravel, 15% sand, 85% fines)
0		15		
				DARK GRAYISH BROWN SANDY CLAY (CL) (2.5Y 4/2), wet, stiff (~1.25 tsf), very fine- to coarse-grained sand, subangular to subrounded gravel up to 1-inch diameter, (10% gravel, 25% sand, 65% fines)
0				DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/4), moist, very stiff (~3.0 tsf), very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.25-inch diameter, (trace gravel, 15% sand, 85% fines)
				Bottom of boring at 19 feet bgs. Grab groundwater sample GW5 collected from boring. Boring backfilled with neat cement grout.
		20		
		25		

PROJECT	5th and Bancroft (East Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	19 feet
JOB NUMBER	881.108.01	DRILL RIG	ECA - Geoprobe
LOGGED BY	CNP	DATE STARTED	7/10/19
REVIEWED BY	DRAFT	DATE COMPLETED	7/10/19

PLATE **B-5**

LOG OF BORING/WELL 881_SKB-EB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW-6

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
0				BLACK CLAYEY SAND (SC) (2.5Y 2.5/1), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5% gravel, 55% sand, 40% fines)
0				VERY DARK GRAYISH BROWN CLAY (CL) (2.5Y 3/2), moist, very stiff (~2.5 tsf), very fine-grained sand, (0% gravel, 5% sand, 95% fines)
0.2				BLACK SANDY SILT (ML) (2.5Y 2.5/1), moist, very stiff (~2.5 tsf), very fine- to medium-grained sand, subangular to subrounded gravel up to 1-inch diameter, (5% gravel, 25% sand, 70% fines)
0				
		5		VERY DARK GRAY CLAY (CL) (2.5Y 3/1), moist, very stiff (~2.5 tsf), very fine-grained sand, (0% gravel, 5% sand, 95% fines)
0				
0				
0				VERY DARK GREENISH GRAY CLAY WITH SAND (CL) (10Y 3/1), moist, hard (>4.0 tsf), very fine- to medium-grained sand, subangular to subrounded gravel up to 0.25-inch diameter, (trace gravel, 20% sand, 80% fines)
0				VERY DARK GREENISH GRAY CLAYEY SAND WITH GRAVEL (SC) (10Y 3/1), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (15% gravel, 70% sand, 15% fines)
		10		
0.5				DARK GREENISH GRAY CLAY WITH SAND (CL) (10Y 4/1), moist, hard (>4.0 tsf), very fine- to fine-grained sand, (0% gravel, 15% sand, 85% fines)
0				
0				
0				Increase in subangular to subrounded gravel up to 0.5-inch diameter, very fine- to medium-grained sand, (5% gravel, 20% sand, 75% fines)
		15		
0				DARK YELLOWISH BROWN CLAY (CL) (10YR 4/4), moist, hard (> 4.0 tsf), very fine- to fine-grained sand, (0% gravel, 10% sand, 90% fines)
0				DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/4), moist, very stiff (~3.0 tsf), very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.25-inch diameter, (trace gravel, 15% sand, 85% fines)
0		20		Increase in sand to (trace gravel, 20% sand, 80% fines) at 20 feet bgs
0				
0				
0		25		
				Bottom of boring at 28 feet bgs. Grab groundwater sample GW6 collected from boring. Boring backfilled with neat cement grout.
		30		

PROJECT	5th and Bancroft (East Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	28 feet
JOB NUMBER	881.108.01	DRILL RIG	ECA - Geoprobe
LOGGED BY	CNP	DATE STARTED	7/10/19
REVIEWED BY	DRAFT	DATE COMPLETED	7/10/19

PLATE **B-6**

LOG OF BORING/WELL 881_SKB-EB_V1.GPJ PES_ENV.GDT 8/8/19

Table 1a. Summary of Laboratory Analytical Results for Grab Groundwater Samples - Volatile Organic Carbons
West Block (701-705, 747 Bancroft Way; 2200-2220 Fourth Street)
Berkeley, California

		Sample Location ID	GW1	GW1-DUP	GW2	GW3	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW11-DUP	GW12	GW13	M-1	M-4	M-5	M-6	S-7	S-7-DUP	S-8	S-9	S-10	TB1	TB1 061919	TB-1	EB-1
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Analyte	**MCL**	**ESL - Tier 1 [1]**																													
Dichlorodifluoromethane	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	188	188	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Vinyl Chloride	0.50	0.0086	**0.67**	**0.7**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**0.59**	**0.59**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	7.5	7.5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroethane	20857	16	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorofluoromethane	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethene	6.0	3.2	**4.95**	**4.99**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**9.43**	**42.5**	<0.500	**0.53**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Methylene Chloride	5.0	5.0	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
Trans-1,2-Dichloroethene	10	10	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**1.03**	<0.500	**3.2**	**1.25**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloroethane	5.0	5.0	**12.7**	**12.6**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**12.1**	**47.1**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene	6.0	6.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**14**	**0.86**	**13.3**	**64.5**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
2,2-Dichloropropane	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromochloromethane	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	80	0.81	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,1-Trichloroethane	200	62	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**0.56**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Carbon Tetrachloride	0.50	0.061	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloropropene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Benzene	1.0	0.42	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	0.50	0.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**1.89**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene	5.0	1.2	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**71.2**	**23.1**	**12.8**	**30.2**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloropropane	5.0	2.3	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Dibromomethane	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromodichloromethane	80	0.87	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
trans-1,3-Dichloropropene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Toluene	40	40	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**0.50**	**0.72**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,3-Dichloropropene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2-Trichloroethane	5.0	5.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene	5.0	0.64	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3-Dichloropropane	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Dibromochloromethane	80	34	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dibromoethane	0.05	0.050	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chlorobenzene	70	25	**22.8**	**22.6**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,1,2-Tetrachloroethane	0.57	0.57	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	30	3.5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**1.11**	**1.57**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylene (M+P)	20	20	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**0.66**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**1.63**	**1.97**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Xylene(O)	20	20	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**1.72**	<0.500	<0.500	<0.500	**2.11**	**2.85**	**1.15**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Styrene	10	10	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromoform	80	80	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2,2-Tetrachloroethane	1.0	1.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromobenzene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,3-Trichloropropane	0.005	0.0050	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
N-Propylbenzene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
2-Chlorotoluene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
4-Chlorotoluene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tert-Butylbenzene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3-Dichlorobenzene	600	65	**6.89**	**6.73**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
4-Isopropyl Toluene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,4-Dichlorobenzene	5.0	2.6	**30.1**	**29.9**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**0.66**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
N-Butylbenzene	ne	ne	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichlorobenzene	100	14	**82.1**	**80.7**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dibromo-3-Chloropropane	0.20	0.028	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	5.0	5.0	**3.29**	**3.28**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Hexachlorobutadiene	0.14	0.14	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Naphthalene	0.17	0.17	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2,3-Trichlorobenzene	ne	ne	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00

Notes
(1) - San Francisco Regional Water Quality Control Board Environmental Screening Levels - Tier 1 (RWQCB, July 2019, Rev. 2)
Green Shading = Result is greater than RWQCB Environmental Screening Level - Tier 1
MCL - State of California Maximum Contaminant Level for Drinking Water
ft bgs - Feet below ground surface/building foundation slab
ne - Screening Level is not established
TB - Trip Blank sample
DUP - Duplicate Sample
< - Not detected at or above the respective laboratory method reporting limit
µg/L - micrograms per liter (detections in **bold** font)

Table 1b. Summary of Laboratory Analytical Results for Grab Groundwater Samples - Hydrocarbons, Pesticides, and Metals
West Block (701-705, 747 Bancroft Way; 2200-2220 Fourth Street)
Berkeley, California

		Sample Location ID	GW1	GW2	GW3	GW4	GW5	GW6	GW7	GW8	GW9	GW10	GW11	GW12	GW13	GW14	M-1	M-4	M-5	M-6	S-7	S-8	S-9	S-10
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Analyte	**MCL**	**ESL - Tier 1 [(1)]**																						
Total Petroleum Hydrocarbons (TPH)																								
Gasoline Range Organics (C6-C10)	759	100	**0.139**	<rl	<0.050	<rl	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--	**0.238**	**0.055**	<rl	**0.054**	**1.23**	**0.079**	**0.512**	**12.6**
Heavy Range Organics (C24-C34)	409	100	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**152**	<rl	<rl	**481**	<rl	<rl	<rl	**82**	<rl	<rl	<rl
Diesel Range Organics (C12-C23)	199	100	**76**	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**1370**	**660**	<rl	**2070**
Organochlorine Pesticides (OCPs)																								
Pentachlorophenol	1.0	1.0	na	na	na	na	na	na	na	na	na	**1.97**	**1.99**	**3.05**	<rl	<0.562	**126**	<1.00	<1.00	<1.00	**7530**	**4590**	**8.34**	**4090**
a-BHC	ne	ne	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl
b-BHC	ne	ne	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl
Lindane	0.20	0.016	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.0082**
Heptachlor	0.010	0.00021	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.644**
d-BHC	ne	ne	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.0626**	<rl	<rl	**0.145**
Aldrin	0.00092	0.00014	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.14**
Heptachlor Epoxide	0.010	0.00011	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.0082**	<rl	**0.14**	**0.0047**
Endosulfan I	ne	ne	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.0105**	<rl	**0.0098**	**0.324**
4,4'-DDE	0.046	0.00059	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.0049**
Dieldrin	0.00071	0.00014	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.006**	**0.0203**	<rl	<rl	<rl	**0.122**	**0.0959**	**1.43**	**1.23**
Endrin	2.0	0.0023	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.0474**	**0.0386**	<rl	**0.0575**
4,4'-DDD	0.031	0.00084	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.0076**	<rl	<rl	**0.0401**
Endosulfan II	ne	ne	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl
4,4'-DDT	0.23	0.00059	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.0432**
Endrin Aldehyde	ne	ne	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.0117**	<rl	<rl
Endosulfan Sulfate	ne	ne	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.0074**
Methoxychlor	30	0.0030	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl
Chlordane	0.10	0.013	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.024**	**0.0804**	<rl	<rl	<rl	**0.291**	**0.0409**	**0.196**	**16.6**
Toxaphene	3.0	0.00020	<rl	<rl	na	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	<rl	**0.312**
Metals																								
Arsenic	10	10.00	**26.9**	**121**	na	**68.4**	**101**	**84.7**	**198**	**36.4**	**322**	**3.25**	**30.6**	**124**	**59.1**	**16.5**	**3.12**	**30.4**	**3.94**	**12.5**	**6.7**	**4.25**	**4.43**	**8.86**
Copper	1000	1000.00	**162**	**1780**	na	**1590**	**2720**	**3160**	**2830**	**314**	**2420**	**29.1**	**150**	**1300**	**999**	**80.5**	**14.8**	**189**	**18.3**	**75**	**66.3**	**139**	**63.8**	**97**
Lead	15	15.00	**38.2**	**352**	na	**270**	**535**	**842**	**768**	**58.3**	**786**	**4.34**	**45.5**	**1200**	**172**	**23.7**	**1.84**	**47**	**3.21**	**20.2**	**9.69**	**58.4**	**330**	**23.5**
Zinc	5000	5000.00	**306**	**3430**	na	**3260**	**6220**	**6800**	**5600**	**684**	**8900**	**48.8**	**276**	**2010**	**2340**	**171**	**16.6**	**360**	**34.7**	**151**	**27.7**	**154**	**128**	**145**

Notes

(1) - San Francisco Regional Water Quality Control Board Environmental Screening Levels - Tier 1 (RWQCB, July 2019, Rev. 2)

Green Shading = Result is greater than RWQCB Environmental Screening Level - Tier 1

MCL - State of California Maximum Contaminant Level for Drinking Water

ft bgs - Feet below ground surface/building foundation slab

ne - Screening Level is not established

na - Not analyzed

TB - Trip Blank sample

DUP - Duplicate Sample

< - Not detected at or above the respective laboratory method reporting limit

µg/L - micrograms per liter (detections in **bold** font)

Table 2. Summary of Laboratory Analytical Results for Sub-Slab and Soil Vapor Samples
West Block (701-705, 747 Bancroft Way; 2200-2220 Fourth Street)
Berkeley, California

	Screening Levels[1]		Sample Locations and Concentrations (ug/m^3)																			
Analyte	ESL-R	ESL-C	SV1	SV2	SSV1	SSV2	SSV3	SSV4	SSV4-DUP	SSV5	SSV5-DUP	SSV6	SSV7	SSV8	SSV9	SSV10	SSV11	SSV12	SSV13	SSV14	SSV15	SSV16	SSV17
Dichlorodifluoromethane	ne	ne	**6.10**	**1.51**	**3.49**	**3.53**	**3.26**	**14.8**	**1.92**	<4.95	<4.95	**4.02**	<2470	<7.91	**4.48**	<7.91	<98.9	**5.05**	<7.91	**4.42**	<7.91	<24.7	**7.3**
Dichlorotetrafluoroethane	ne	ne	<0.699	<0.699	<0.699	<0.699	<0.699	<5.59	<5.59	<6.99	<6.99	<0.699	<3500	<11.2	<0.699	<11.2	<140	<1.4	<11.2	<0.699	<11.2	<35	<2.8
Chloromethane	ne	ne	**1.67**	<0.207	<0.207	<0.207	<0.207	<1.65	**1.13**	<2.07	<2.07	**0.609**	<1030	<3.3	**0.414**	<3.3	<41.3	**6.60**	<3.3	**1.10**	<3.3	<10.3	**1.81**
Vinyl Chloride	0.32	5.2	**0.130**	**1.39**	<0.0895	**1.10**	<0.0895	<0.716	**1.61**	<2.56	<2.56	**0.140**	<1280	**2.14**	**0.437**	**2.49**	<51.1	**0.480**	**2.50**	<0.0895	**2.39**	<12.8	**1.50**
Bromomethane	ne	ne	**0.444**	<0.388	<0.388	<0.388	<0.388	<3.11	<3.11	<3.88	<3.88	<0.388	<1940	<6.21	<0.388	<6.21	<77.7	<0.777	<6.21	<0.388	<6.21	<19.4	<1.55
Chloroethane	ne	ne	**0.461**	**3.28**	<0.264	<0.264	<0.264	<2.11	**1.10**	<2.64	<2.64	<0.264	<1320	<4.22	<0.264	<4.22	<52.8	**0.646**	<4.22	<0.264	<4.22	<13.2	<1.06
Trichlorofluoromethane	ne	ne	**1.48**	**2.78**	**1.78**	<1.12	**2.16**	**171**	**191**	<5.62	<5.62	**2.91**	<2810	<18	**1.77**	<18	<112	<2.25	<18	**1.78**	<18	<28.1	<4.5
1,1-Dichloroethene	ne	ne	<0.397	<0.397	<0.397	<0.397	<0.397	<3.17	<3.17	**36.4**	**38.5**	<0.397	**3010**	<6.34	<0.397	<6.34	**172**	<0.793	**7.95**	<0.397	<6.34	<19.8	<1.59
Trichlorotrifluoroethane	ne	ne	<3.83	<3.83	<3.83	<3.83	<3.83	<30.7	<30.7	<7.66	<7.66	<3.83	<3830	<61.3	<3.83	<61.3	<153	<7.66	<61.3	<3.83	<61.3	<38.3	<15.3
Methylene Chloride	34	409	**14.8**	**18.1**	<10.4	**11.4**	<10.4	<83.4	<83.4	<3.47	<3.47	<10.4	<1740	<167	<10.4	<167	<69.5	<20.8	<167	<10.4	<167	<17.4	<41.7
trans-1,2-Dichloroethene	ne	ne	<0.396	<0.396	<0.396	<0.396	<0.396	<3.17	<3.17	<3.96	<3.96	<0.396	<1980	<6.34	<0.396	<6.34	<79.3	<0.793	<6.34	<0.396	<6.34	<19.8	**4.92**
Benzene	3.2	14	**27.3**	**81.5**	**17.0**	**39.6**	**9.10**	<12.8	**5.89**	<3.19	<3.19	<1.6	<1600	<25.6	<1.6	<25.6	<63.9	<3.19	<25.6	<1.6	<25.6	<16	<6.39
cis-1,2-Dichloroethene	ne	ne	<0.397	<0.397	<0.397	<0.397	<0.397	<3.17	<3.17	<3.97	<3.97	<0.397	<1980	<6.34	<0.397	<6.34	<79.3	<0.793	<6.34	<0.397	<6.34	<19.8	<1.59
1,1,2,2-Tetrachloroethane	1.6	7.0	<0.687	<0.687	<0.687	<0.687	<0.687	<5.49	<5.49	<6.87	<6.87	<0.687	<3430	<11	<0.687	<11	<137	<1.37	<11	<0.687	<11	<34.3	<2.75
1,1-Dichloroethane	58	256	<0.405	<0.405	<0.405	<0.405	<0.405	<3.24	<3.24	**6.96**	**5.59**	**0.536**	**97,500**	<6.48	<0.405	<6.48	**3,490**	**3.60**	**438**	<0.405	<6.48	<20.2	<1.62
Chloroform	4.1	18	<0.488	<0.488	**6.04**	**6.10**	**5.24**	**6.21**	**5.65**	<4.88	<4.88	**1.58**	<2440	<7.81	**0.526**	<7.81	**133**	**3.12**	**9.61**	<0.488	<7.81	<24.4	<1.95
1,1,1-Trichloroethane	34,762	146,000	<0.546	<0.546	<0.546	<0.546	<0.546	<4.37	<4.37	**869**	**795**	**1.72**	**312,000**	**647**	**1.59**	**227**	**17,400**	**132**	**1,160**	**1.99**	**647**	**2,950**	**77.3**
1,2-Dichloroethane	3.6	16	<0.405	<0.405	<0.405	<0.405	<0.405	<3.24	<3.24	<4.05	<4.05	<0.405	<2020	<6.48	<0.405	<6.48	<80.9	<0.809	<6.48	<0.405	<6.48	<20.2	<1.62
1,2-Dichloropropane	9.4	41	<0.462	<0.462	<0.462	<0.462	<0.462	<3.7	<3.7	<4.62	<4.62	<0.462	<2310	<7.39	<0.462	<7.39	<92.4	<0.924	<7.39	<0.462	<7.39	<23.1	<1.85
Trichloroethene	16	100	<0.537	<0.537	<0.537	**2.00**	<0.537	<4.3	<4.3	**10.4**	**9.78**	<0.537	<2690	<8.6	<0.537	**12.9**	<107	**2.25**	<8.6	**3.23**	<8.6	<26.9	**200**
cis-1,3-Dichloropropene	ne	ne	<0.454	<0.454	<0.454	<0.454	<0.454	<3.63	<3.63	<4.54	<4.54	<0.454	<2270	<7.26	<0.454	<7.26	<90.8	<0.908	<7.26	<0.454	<7.26	<22.7	<1.82
trans-1,3-Dichloropropene	ne	ne	<0.454	<0.454	<0.454	<0.454	<0.454	<3.63	<3.63	<4.54	<4.54	<0.454	<2270	<7.26	<0.454	<7.26	<90.8	<0.908	<7.26	<0.454	<7.26	<22.7	<1.82
Toluene	ne	ne	**28.1**	**49.4**	**48.2**	**116**	**42.3**	**61.1**	**42.4**	**5.16**	**5.05**	**2.32**	<1880	<30.1	**5.55**	**725**	<75.4	**4.67**	<30.1	<1.88	<30.1	<18.8	<7.54
1,1,2-Trichloroethane	5.8	26	<0.546	<0.546	<0.546	<0.546	<0.546	<4.37	<4.37	<5.46	<5.46	<0.546	<2730	<8.73	<0.546	<8.73	<109	<1.09	<8.73	<0.546	<8.73	<27.3	<2.18
1,2-Dibromoethane (EDB)	0.16	0.68	<0.768	<0.768	<0.768	<0.768	<0.768	<6.15	<6.15	<7.68	<7.68	<0.768	<3840	<12.3	<0.768	<12.3	<154	<1.54	<12.3	<0.768	<12.3	<38.4	<3.07
Tetrachloroethene	15	67	<0.678	**3.91**	**19.6**	<0.678	<0.678	<5.43	**2.37**	<6.78	**6.78**	**7.55**	<3390	<10.9	<0.678	**16.8**	<136	**3.85**	**20.6**	**1.57**	<10.9	<33.9	**85.2**
Chlorobenzene	ne	ne	<0.46	<0.46	<0.46	<0.46	<0.46	<3.68	<3.68	<4.6	<4.6	<0.46	<2300	<7.37	<0.46	<7.37	<92.1	<0.921	<7.37	<0.46	<7.37	<23	<1.84
Ethylbenzene	37	164	**7.32**	**22.4**	**10.9**	**26.1**	**10.1**	**11.4**	**17.2**	**5.51**	**5.56**	**0.473**	<2170	<6.95	<0.434	<6.95	<86.8	<0.868	<6.95	**0.666**	<6.95	<21.7	<1.74
Xylene (M+P)	ne	ne	**16.0**	**29.5**	**37.2**	**77.1**	**33.2**	**39.8**	**49.3**	**28.6**	**29.3**	**2.11**	<4340	<13.9	**1.22**	<13.9	<174	**1.94**	**19.5**	**3.56**	<13.9	<43.4	<.3.47
Styrene	ne	ne	**0.601**	**1.68**	<0.426	**0.738**	<0.426	<3.41	<3.41	<4.26	<4.26	<0.426	<2130	<6.81	<0.426	<6.81	<85.2	<0.852	<6.81	<0.426	<6.81	<21.3	<1.7
Xylene (O)	ne	ne	**6.09**	**13.6**	**11.3**	**25.2**	**9.69**	**11.6**	**11.9**	**12.3**	**12.0**	**0.668**	<2170	<6.95	**0.526**	<6.95	<86.8	<0.868	**9.74**	**1.48**	<6.95	<21.7	<1.74
Naphthalene	2.8	12	<0.786	**2.95**	**1.25**	**1.92**	**1.08**	<6.29	<6.29	<5.24	<5.24	**1.31**	<2620	<12.6	**1.74**	<12.6	<105	**1.70**	<12.6	**0.819**	<12.6	<26.2	**4.07**
1,3,5-Trimethylbenzene	ne	ne	**6.10**	**12.4**	**5.02**	**10.4**	**10.8**	**4.18**	**10.9**	**75.6**	**72.7**	<0.492	<2460	<7.87	<0.492	<7.87	<98.3	**1.58**	<7.87	**0.843**	<7.87	<24.6	<1.97
1,2,4-Trimethylbenzene	ne	ne	**13.3**	**39.1**	**12.9**	**20.6**	**16.6**	**11 .6**	**16.3**	**90.2**	**83.3**	**1.24**	<2460	<7.87	**1.22**	<7.87	<98.3	**3.78**	**13.9**	**2.32**	<7.87	<24.6	<1.97
1,3-Dichlorobenzene	ne	ne	<0.601	<0.601	<0.601	<0.601	<0.601	<4.81	<4.81	<6.01	<6.01	<0.601	<3010	<9.62	<0.601	<9.62	<120	<1.2	<9.62	<0.601	<9.62	<30.1	<2.41
1,4-Dichlorobenzene	8.5	37	<0.601	<0.601	<0.601	<0.601	<0.601	<4.81	<4.81	<6.01	<6.01	<0.601	<3010	<9.62	**0.938**	<9.62	<120	<1.2	<9.62	<0.601	<9.62	<30.1	<2.41
1,2-Dichlorobenzene	ne	ne	<0.601	<0.601	<0.601	<0.601	<0.601	<4.81	<4.81	<6.01	<6.01	<0.601	<3010	<9.62	<0.601	<9.62	<120	<1.2	<9.62	<0.601	<9.62	<30.1	<2.41
1,2,4-Trichlorobenzene	ne	ne	<0.742	<0.742	<0.742	<0.742	<0.742	<5.94	<5.94	<7.42	<7.42	<0.742	<3710	<11.9	<0.742	<11.9	<148	<1.48	<11.9	<0.742	<11.9	<37.1	<2.97
Hexachlorobutadiene	4.3	19	<1.07	<1.07	<1.07	<1.07	<1.07	<8.53	<8.53	<10.7	<10.7	<1.07	<5330	<17.1	<1.07	<17.1	<213	<2.13	<17.1	<1.07	<17.1	<53.3	<4.27
Carbon Tetrachloride	15.6	68.1	<0.629	<0.629	<0.629	<0.629	<0.629	<5.03	<5.03	<6.29	<6.29	<0.629	<3150	<10.1	<0.629	<10.1	<126	<1.26	<10.1	<0.629	<10.1	<31.5	<2.52
1,1-DFA (Leak Check Analyte)	ne	ne	<10	**73.4**	<10	**183**	<10	<10	**316**	<10	**1330**	<10	<10	<10	**23.4**	<10	**24.9**	<10	<10	**12.8**	<10	<10	<10

Notes
(1) - San Francisco Regional Water Quality Control Board (RWQCB) Environmental Screening Levels for Residential (ESL-R) and Commercial (ESL-C) Properties, (RWQCB, July 2019, Rev. 2)
ne - Screening Level is not established
DUP - Duplicate Sample
SV# - Soil Vapor Sample Location (collected from 4.5 to 5.5 feet below ground surface)
SSV# - Sub-Slab Vapor Sample Location (collected beneath the concrete slab)
Green Shading = Result is greater than RWQCB Environmental Screening Level for Commercial Properties
< - Not detected at or above the respective laboratory method reporting limit
Results reported in micrograms per cubic meter (µg/m^3); detections in **bold** font
1,1-Difluoroethane (1,1-DFA) utilized as leak check compound

Table 3. Summary of Laboratory Analytical Results for Indoor Air Samples
West Block (701-705, 747 Bancroft Way; 2200-2220 Fourth Street)
Berkeley, California

	Screening Levels[(1)]		Sample Locations and Concentrations (ug/m^3)							
Analyte	ESL-R	ESL-C	IA1	IA2	IA3	IA4	IA5	IA6	IA7	AA1
Dichlorodifluoromethane	ne	ne	**3.54**	**3.08**	**3.53**	**3.24**	**3.3**	**3.27**	**3.22**	**3.66**
Chloromethane	ne	ne	**1.20**	**1.13**	**1.45**	**1.23**	**1.38**	**1.27**	**1.38**	**1.38**
Dichlorotetrafluoroethane	ne	ne	**0.147**	**0.137**	**0.135**	**0.134**	**0.133**	**0.142**	**0.144**	**0.151**
Vinyl Chloride	0.00945	0.157	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895	<0.00895	**0.0125**
Bromomethane	ne	ne	<0.0388	<0.0388	**0.123**	<0.0388	**0.125**	<0.0388	<0.0388	**0.115**
Chloroethane	ne	ne	**0.048**	<0.0264	**0.0726**	**0.113**	**0.137**	**0.0622**	**0.0776**	**0.0634**
Trichlorofluoromethane	ne	ne	**1.48**	**1.52**	**1.39**	**1.45**	**1.34**	**1.42**	**1.47**	**1.42**
1,1-Dichloroethene	ne	ne	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397
Trichlorotrifluoroethane	ne	ne	**0.459**	**0.444**	**0.428**	**0.479**	**0.475**	**0.464**	**0.478**	**0.474**
Methylene Chloride	1.01	12.3	**1.19**	**2.01**	**1.73**	**1.76**	**1.11**	**10.2**	**1.20**	<1.04
trans-1,2-Dichloroethene	ne	ne	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396	<0.0396
1,1-Dichloroethane	1.75	7.67	<0.0405	**0.134**	**0.125**	**0.128**	<0.0405	<0.0405	**0.118**	<0.0405
cis-1,2-Dichloroethene	ne	ne	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397	<0.0397
Chloroform	0.122	0.533	**0.183**	**0.535**	**0.450**	**0.548**	**0.195**	**0.191**	**0.677**	**0.162**
1,1,1-Trichloroethane	ne	4380	**0.106**	**0.357**	**0.368**	**0.366**	<0.0546	<0.0546	**0.279**	<0.0546
1,2-Dichloroethane	0.108	0.472	**0.0894**	**0.162**	**0.168**	**0.163**	**0.0807**	**0.0897**	**0.111**	**0.0833**
Benzene	0.097	0.423	**0.306**	**1.59**	**2.54**	**1.71**	**0.379**	**2.55**	**0.424**	<0.16
Carbon Tetrachloride	0.468	2.04	**0.449**	**0.43**	**0.438**	**0.345**	**0.165**	**0.454**	**0.283**	**0.445**
1,2-Dichloropropane	0.281	1.23	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462	<0.0462
Trichloroethene	0.478	2.99	<0.0537	**0.179**	**0.0587**	**0.0669**	<0.0537	<0.0537	<0.0537	<0.0537
cis-1,3-Dichloropropene	ne	ne	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454
trans-1,3-Dichloropropene	ne	ne	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454	<0.0454
Toluene	ne	ne	**1.30**	**8.42**	**9.93**	**7.59**	**6.04**	**9.41**	**2.16**	**0.271**
1,1,2-Trichloroethane	0.175	0.767	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546	<0.0546
1,2-Dibromoethane	0.00468	0.0204	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768	<0.0768
Tetrachloroethene	0.460	2.01	<0.0678	<0.0678	<0.0678	<0.0678	<0.0678	**0.274**	<0.0678	<0.0678
Chlorobenzene	ne	ne	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046
Ethylbenzene	1.12	4.91	**0.257**	**1.93**	**1.89**	**1.44**	**0.547**	**2.32**	**0.452**	<0.0434
Xylene (M+P)	ne	ne	**0.88**	**6.86**	**7.05**	**5.34**	**1.51**	**8.82**	**1.58**	**0.141**
Styrene	ne	ne	**0.111**	**0.361**	**0.219**	**0.277**	**0.0862**	**0.191**	**0.137**	<0.0426
Xylene (O)	ne	ne	**0.378**	**2.32**	**2.41**	**1.89**	**0.69**	**3.39**	**0.574**	**0.0558**
1,1,2,2-Tetrachloroethane	0.0484	0.211	<0.0687	<0.0687	<0.0687	<0.0687	<0.0687	<0.0687	<0.0687	<0.0687
1,3,5-Trimethylbenzene	ne	ne	**0.129**	**0.674**	**0.707**	**0.620**	**0.494**	**1.06**	**0.211**	<0.0492
1,2,4-Trimethylbenzene	ne	ne	**0.373**	**2.17**	**2.32**	**2.09**	**1.84**	**4.26**	**0.629**	<0.0492
1,3-Dichlorobenzene	ne	ne	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601
1,4-Dichlorobenzene	0.255	1.11	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601
1,2-Dichlorobenzene	ne	ne	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601
1,2,4-Trichlorobenzene	ne	ne	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742	<0.0742
Hexachlorobutadiene	0.128	0.557	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107
Naphthalene	0.0826	0.361	**0.107**	**0.236**	**0.320**	**0.425**	**0.144**	**0.279**	**0.116**	**0.147**

Notes

(1) - San Francisco Regional Water Quality Control Board Environmental Screening Levels for Residential (ESL-R) and Commercial (ESL-C) Properties, (RWQCB, July 2019, Rev. 2)

ne - Screening Level is not established

Green Shading = Result is greater than Environmental Screening Level for Commercial Properties

< - Not detected at or above the respective laboratory method reporting limit

Results reported in micrograms per cubic meter (µg/m^3); detections in **bold** font

Sample Location "AA" is an ambient air sampling location collected from the roof top (upwind side of building)

Table 4a. Summary of Laboratory Analytical Results for Soil Samples - Volatile Organic Compounds
West Block (701-705, 747 Bancroft Way; 2200-2220 Fourth Street)
Berkeley, California

		Sample Location ID	SB-1	SB-2	SB-3
		Sample Depth (ft bgs)	9.5	9.5	5.0
		Sample Date	7/20/2019	7/20/2019	7/20/2019
Analyte	ESL-Leach[1]	ESL-Tier 1[2]			
Dichlorodifluoromethane	ne	ne	<1.87	<1.81	<1.73
Chloromethane	10656	10656	<1.87	<1.81	<1.73
Vinyl Chloride	1.51	1.51	<1.87	<1.81	<1.73
Bromomethane	360	360	<1.87	<1.81	<1.73
Chloroethane	1151	1151	<1.87	<1.81	<1.73
Trichlorofluoromethane	ne	ne	<1.87	<1.81	<1.73
1,1-Dichloroethene	535	535	<1.87	<1.81	<1.73
Trichlorotrifluoroethane	ne	ne	<1.87	<1.81	<1.73
Methylene Chloride	119	119	<9.33	<9.05	<8.65
Trans-1,2-Dichloroethene	649	649	<1.87	<1.81	<1.73
1,1-Dichloroethane	201	201	<1.87	<1.81	<1.73
cis-1,2-Dichloroethene	192	192	<1.87	<1.81	<1.73
2,2-Dichloropropane	ne	ne	<1.87	<1.81	<1.73
Bromochloromethane	ne	ne	<1.87	<1.81	<1.73
Chloroform	23	23	<1.87	<1.81	<1.73
1,1,1-Trichloroethane	7036	7036	<1.87	<1.81	<1.73
Carbon Tetrachloride	76	76	<1.87	<1.81	<1.73
1,1-Dichloropropene	ne	ne	<1.87	<1.81	<1.73
Benzene	25	25	<1.87	<1.81	<1.73
1,2-Dichloroethane	6.96	6.96	<1.87	<1.81	<1.73
Trichloroethene	85	85	<1.87	<1.81	<1.73
1,2-Dichloropropane	65	65	<1.87	<1.81	<1.73
Dibromomethane	ne	ne	<1.87	<1.81	<1.73
Bromodichloromethane	16	16	<1.87	<1.81	<1.73
trans-1,3-Dichloropropene	ne	ne	<1.87	<1.81	<1.73
Toluene	3165	3165	<1.87	<1.81	<1.73
cis-1,3-Dichloropropene	ne	ne	<1.87	<1.81	<1.73
1,1,2-Trichloroethane	76	76	<1.87	<1.81	<1.73
Tetrachloroethene	80	80	<1.87	<1.81	<1.73
1,3-Dichloropropane	ne	ne	<1.87	<1.81	<1.73
Dibromochloromethane	346	346	<1.87	<1.81	<1.73
1,2-Dibromoethane	0.53	0.53	<1.87	<1.81	<1.73
Chlorobenzene	1437	1437	<1.87	<1.81	<1.73
1,1,1,2-Tetrachloroethane	17	17	<1.87	<1.81	<1.73
Ethylbenzene	434	434	<1.87	<1.81	<1.73
Xylene (M+P)	2081	2081	<1.87	<1.81	<1.73
Xylene(O)	2081	2081	<1.87	<1.81	<1.73
Styrene	918	918	<1.87	<1.81	<1.73
Bromoform	692	692	<1.87	<1.81	<1.73
Isopropylbenzene	ne	ne	<1.87	<1.81	<1.73
1,1,2,2-Tetrachloroethane	18	18	<1.87	<1.81	<1.73
Bromobenzene	ne	ne	<1.87	<1.81	<1.73
1,2,3-Trichloropropane	0.11	0.11	<1.87	<1.81	<1.73
N-Propylbenzene	ne	ne	<1.87	<1.81	<1.73
2-Chlorotoluene	ne	ne	<1.87	<1.81	<1.73
1,3,5-Trimethylbenzene	ne	ne	<1.87	<1.81	<1.73
4-Chlorotoluene	ne	ne	<1.87	<1.81	<1.73
Tert-Butylbenzene	ne	ne	<1.87	<1.81	<1.73
1,2,4-Trimethylbenzene	ne	ne	<1.87	<1.81	<1.73
sec-Butylbenzene	ne	ne	**1.91**	**5.18**	<1.73
1,3-Dichlorobenzene	7401	6000	<1.87	<1.81	<1.73
4-Isopropyl Toluene	ne	ne	<1.87	<1.81	<1.73
1,4-Dichlorobenzene	201	201	<1.87	<1.81	<1.73
N-Butylbenzene	ne	ne	<1.87	<1.81	<1.73
1,2-Dichlorobenzene	1049	1049	<1.87	<1.81	<1.73
1,2-Dibromo-3-Chloropropane	0.59	0.59	<1.87	<1.81	<1.73
1,2,4-Trichlorobenzene	1206	1206	<3.73	<3.62	<3.46
Hexachlorobutadiene	28	28	<3.73	<3.62	<3.46
Naphthalene	42	42	<3.73	**4.00**	<3.46
1,2,3-Trichlorobenzene	ne	ne	<3.73	<3.62	<3.46

Notes

(1) - San Francisco Regional Water Quality Control Board Environmental Screening Levels - Leaching to Groundwater (ESL-Leach) Tier 1, (RWQCB, July 2019, Rev. 2)

ne - Screening Level is not established

Green Shading = Result is greater than Environmental Screening Levels (Tier 1)

< - Not detected at or above the respective laboratory method reporting limit

Ambient Air Sample Locations: AA, AA2, and AA3

Results reported in micrograms per cubic meter ($\mu g/m^3$); detections in **bold** font

Sample Location "AA" is an ambient air sampling location collected from the roof top (upwind side of building)

Table 4b. Summary of Laboratory Analytical Results for Soil Samples - Hydrocarbons and Pesticides
West Block (701-705, 747 Bancroft Way; 2200-2220 Fourth Street)
Berkeley, California

		Sample Location ID	SB-1	SB-2	SB-3
		Sample Depth (ft bgs)	9.5	9.5	5.0
		Sample Date	7/20/2019	7/20/2019	7/20/2019
Analyte	ESL-Leach[(1)]	ESL-Tier 1[(2)]			
Total Petroleum Hydrocarbons (TPH)					
Gasoline Range Organics (C6-C10)	17	17	**2.070**	<1.00	<1.00
Diesel Range Organics (C12-C23)	2081	2081	--	**185**	<10.0
Heavy Range Organics (C24-C34)	434	434	--	<10.0	<10.0
Organochlorine Pesticides (OCPs)					
a-BHC	ne	ne	<2.00	<2.00	<2.00
b-BHC	ne	ne	<2.00	<2.00	<2.00
Lindane	7.44	7.44	<2.00	<2.00	<2.00
Heptachlor	44298	120	<2.00	<2.00	<2.00
d-BHC	ne	ne	<2.00	<2.00	<2.00
Aldrin	8366	2.4	<2.00	<2.00	<2.00
Heptachlor Epoxide	0.18	0.18	<2.00	<2.00	<2.00
Endosulfan I	ne	ne	<2.00	<2.00	<2.00
4,4'-DDE	28804	330	<2.00	<2.00	<2.00
Dieldrin	0.46	0.46	**6.81**	**2.95**	<2.00
Endrin	7.64	1.10	**3.4**	<2.00	<2.00
4,4'-DDD	64809	2671	<2.00	<2.00	<2.00
Endosulfan II	ne	ne	<2.00	<2.00	<2.00
4,4'-DDT	5611	1.1	<2.00	<2.00	<2.00
Endrin Aldehyde	ne	ne	<2.00	<2.00	<2.00
Endosulfan Sulfate	ne	ne	<2.00	<2.00	<2.00
Endrin Ketone	ne	ne	<2.00	<2.00	<2.00
Methoxychlor	13	13	<2.00	<2.00	<2.00
Chlordane	22854	8.5	**44**	**17.1**	<2.00
Toxaphene	254155	508	<12.5	<12.5	<12.5
Pentachlorophenol	0.10	0.013	**369**	**53.2**	<50.0

Notes

(1) - San Francisco Regional Water Quality Control Board Environmental Screening Levels - Leaching to Groundwater (ESL-Leach Tier 1, (RWQCB, July 2019, Rev. 2)

ne - Screening Level is not established

Green Shading = Result is greater than Environmental Screening Levels (Tier 1)

< - Not detected at or above the respective laboratory method reporting limit

Ambient Air Sample Locations: AA, AA2, and AA3

Results reported in micrograms per cubic meter ($\mu g/m^3$); detections in **bold** font

Sample Location "AA" is an ambient air sampling location collected from the roof top (upwind side of building)

Explanation

- Approximate Property Boundary
- Groundwater Monitoring Well
- Groundwater Piezometer
- Grab Groundwater Sample
- Soil Boring
- Soil Sub-Slab Gas Sample
- 5-foot Soil Gas Sample
- Indoor Air Sample
- Ambient Air Sample

N

0 80

SCALE IN FEET

Notes:
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PES Environmental, Inc.
Engineering & Environmental Services

Site Plan
Limited Phase II Investigation
Bancroft Way, Fourth Street
Berkeley, California

PLATE 2

JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE
881.108.01.017	88110801017_WBPHII_1-6	DRAFT	8/19

SSV6	
11DCA	0.536
CHCl3	1.58
111TCA	1.72
BZ	<1.6
TCE	<0.537
PCE	7.55

SSV9	
11DCA	<0.405
CHCl3	0.526
111TCA	1.59
BZ	<1.6
TCE	<0.537
PCE	<0.678

SSV8	
11DCA	<6.48
CHCl3	<7.81
111TCA	647
BZ	<25.6
TCE	<8.6
PCE	<10.9

SSV10	
11DCA	<6.48
CHCl3	<7.81
111TCA	227
BZ	<25.6
TCE	12.9
PCE	16.8

SSV11	
11DCA	3,490
CHCl3	133
111TCA	17,400
BZ	<63.9
TCE	<107
PCE	<136

SSV7	
11DCA	97,500
CHCl3	<2440
111TCA	312,000
BZ	<1600
TCE	<2690
PCE	<3390

SSV13	
11DCA	438
CHCl3	9.61
111TCA	1,160
BZ	<25.6
TCE	<8.6
PCE	20.6

SSV14	
11DCA	<0.405
CHCl3	<0.488
111TCA	1.99
BZ	<1.6
TCE	3.23
PCE	1.57

SSV5	
11DCA	6.96
CHCl3	<4.88
111TCA	869
BZ	<3.19
TCE	10.4
PCE	<6.78

SSV12	
11DCA	3.60
CHCl3	3.12
111TCA	132
BZ	<3.19
TCE	2.25
PCE	3.85

SSV15	
11DCA	<6.48
CHCl3	<7.81
111TCA	647
BZ	<25.6
TCE	<8.6
PCE	<10.9

SSV17	
11DCA	<1.62
CHCl3	<1.95
111TCA	77.3
BZ	<6.39
TCE	200
PCE	85.2

SSV3	
11DCA	<0.405
CHCl3	5.24
111TCA	<0.546
BZ	9.10
TCE	<0.537
PCE	<0.678

SSV2	
11DCA	<0.405
CHCl3	6.10
111TCA	<0.546
BZ	39.6
TCE	2.00
PCE	<0.678

SSV16	
11DCA	<20.2
CHCl3	<24.4
111TCA	2,950
BZ	<16
TCE	<26.9
PCE	<33.9

SSV1	
11DCA	<0.405
CHCl3	6.04
111TCA	<0.546
BZ	17.0
TCE	<0.537
PCE	19.6

SV1	
11DCA	<0.405
CHCl3	<0.488
111TCA	<0.546
BZ	27.3
TCE	<0.537
PCE	<0.678

SV2	
11DCA	<0.405
CHCl3	<0.488
111TCA	<0.546
BZ	81.5
TCE	<0.537
PCE	3.91

SSV4	
11DCA	<3.24
CHCl3	6.21
111TCA	<4.37
BZ	<12.8
TCE	<4.3
PCE	<5.43

Allston Way
Commercial
Residential
Davlin Paint
Fifth Street
Fourth Street
Berkeley Amtrak
Bancroft Way
Commercial
Commercial
Veriflo
GW1
GW2
GW3
GW4
GW5
GW6
GW7
GW8
GW9
GW10
GW11
GW12
GW13
GW14
SSV1
SSV2
SSV3
SSV4
SSV5
SSV6
SSV7
SSV8
SSV9
SSV10
SSV11
SSV12
SSV13
SSV14
SSV15
SSV16
SSV17
SV1
SV2
IA1
IA2
IA3
IA4
IA5
IA6
IA7
AA1
M-1
M-2
M-3
M-4
M-5
M-6
S-7
S-8
S-9
S-10
SB1
SB2
SB3
MW-7
MW-8
MW-10
MW-11

DRAFT

Explanation

- Approximate Property Boundary
- Groundwater Monitoring Well
- Groundwater Piezometer
- Grab Groundwater Sample
- Soil Boring
- Soil Sub-Slab Gas Sample
- 5-foot Soil Gas Sample
- Indoor Air Sample
- Ambient Air Sample

Vapor concentrations reported in micrograms per cubic meter ($\mu g/m^3$)
Detections are shown in bold
Results greater than the Environmental Screening Level for Commericial Properties are shaded
<6.78 = Not detected at or above the laboratory method reporting limit

Analyte	Abrev.	ESL
1,1-Dichloroethane	11DCA	256
Chloroform	CHCl3	18
1,1,1-Trichloroethane	111TCA	146,000
Benzene	BZ	14
Trichloroethene	TCE	100
Tetrachloroethene	PCE	67

N

0 80

SCALE IN FEET

Notes:
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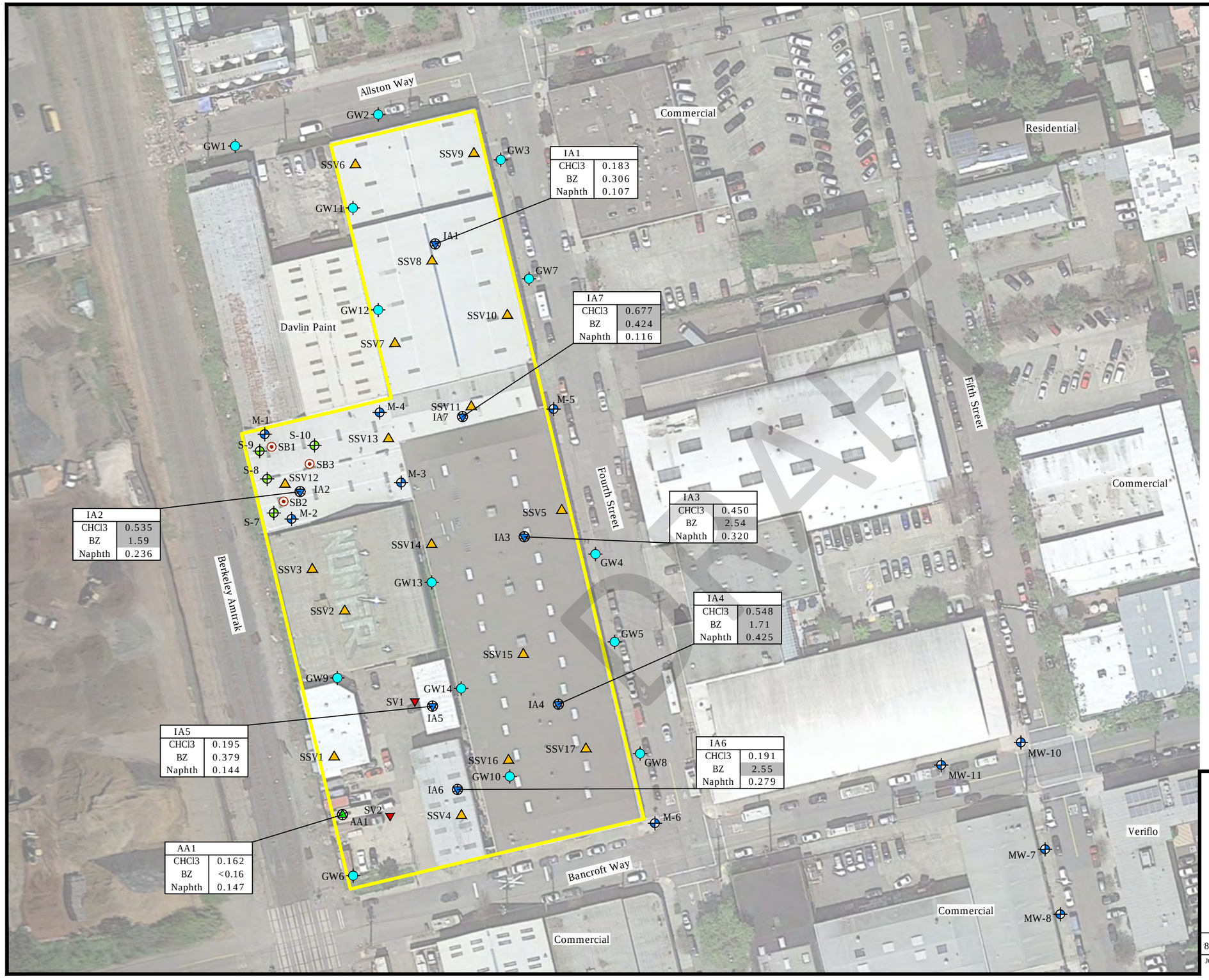
PES Environmental, Inc.
Engineering & Environmental Services

Sub-Slab and Soil Vapor Results
Limited Phase II Investigation
Bancroft Way, Fourth Street
Berkeley, California

PLATE 3

881.108.01.017	88110801017_WBPHII_1-6	DRAFT	8/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

- Approximate Property Boundary
- Groundwater Monitoring Well
- Groundwater Piezometer
- Grab Groundwater Sample
- Soil Boring
- Soil Sub-Slab Gas Sample
- 5-foot Soil Gas Sample
- Indoor Air Sample
- Ambient Air Sample

0.183 — Vapor concentrations reported in micrograms per cubic meter (µg/m^3)

<0.16 — Not detected at or above the laboratory method reporting limit

0.677 — Shaded results are greater than the July 2019 RWQCB Environmental Screening Level (ESL) for Commercial Properties

Analyte	Abrev.	ESL
Chloroform	CHCl3	0.53
Benzene	BZ	0.42
Naphthalene	Naphth	0.36

N

0 80

SCALE IN FEET

Notes:
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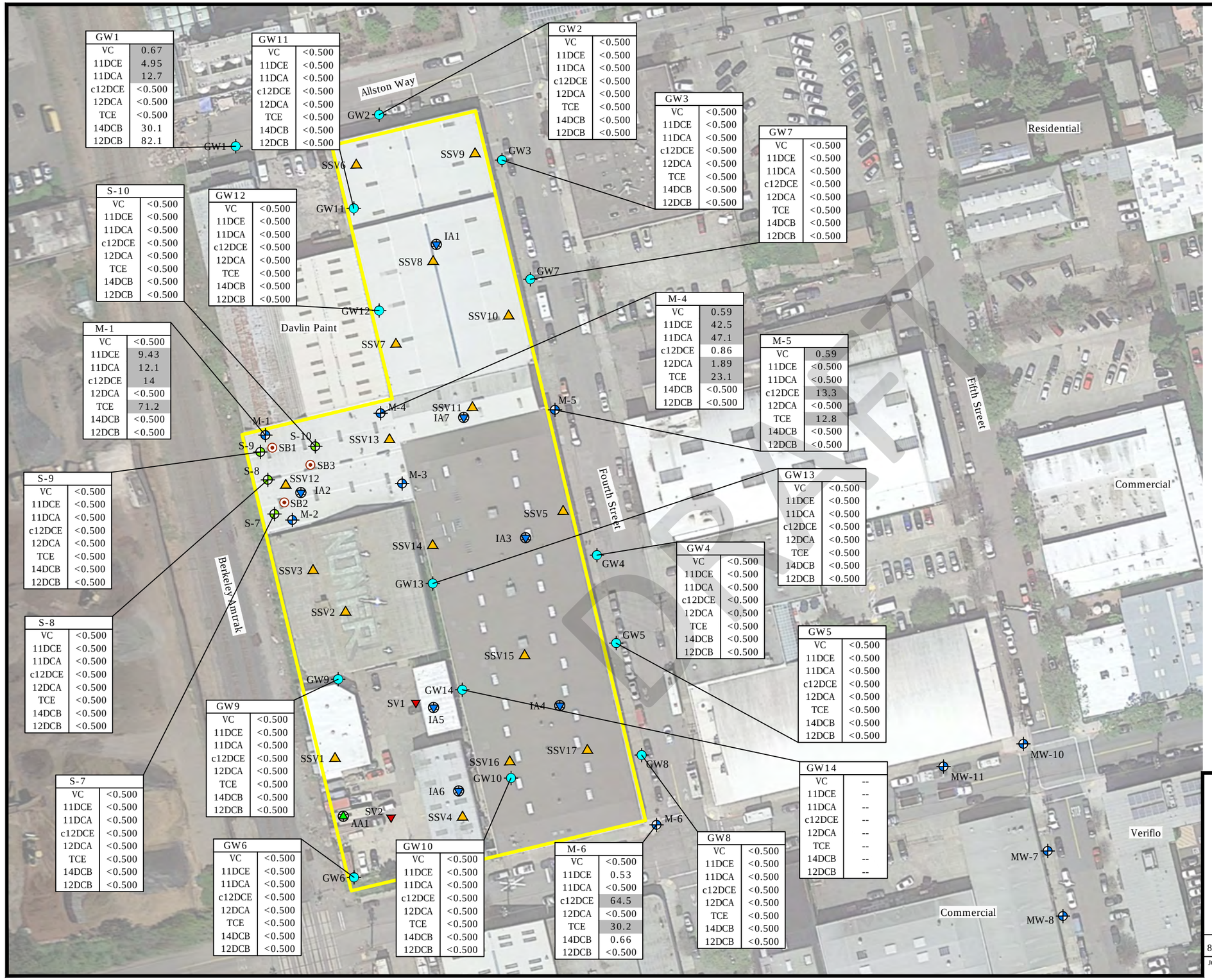
PES Environmental, Inc.
Engineering & Environmental Services

Indoor Air Results
Limited Phase II Investigation
Bancroft Way, Fourth Street
Berkeley, California

PLATE 4

881.108.01.017	88110801017_WBPHII_1-6	DRAFT	8/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



GW1	
VC	0.67
11DCE	4.95
11DCA	12.7
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	30.1
12DCB	82.1

GW11	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

GW2	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

GW3	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

GW7	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

S-10	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

GW12	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

M-4	
VC	0.59
11DCE	42.5
11DCA	47.1
c12DCE	0.86
12DCA	1.89
TCE	23.1
14DCB	<0.500
12DCB	<0.500

M-5	
VC	0.59
11DCE	<0.500
11DCA	<0.500
c12DCE	13.3
12DCA	<0.500
TCE	12.8
14DCB	<0.500
12DCB	<0.500

M-1	
VC	<0.500
11DCE	9.43
11DCA	12.1
c12DCE	14
12DCA	<0.500
TCE	71.2
14DCB	<0.500
12DCB	<0.500

S-9	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

GW13	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

GW4	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

S-8	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

GW5	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

GW9	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

S-7	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

GW14	
VC	--
11DCE	--
11DCA	--
c12DCE	--
12DCA	--
TCE	--
14DCB	--
12DCB	--

GW6	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

GW10	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

M-6	
VC	<0.500
11DCE	0.53
11DCA	<0.500
c12DCE	64.5
12DCA	<0.500
TCE	30.2
14DCB	0.66
12DCB	<0.500

GW8	
VC	<0.500
11DCE	<0.500
11DCA	<0.500
c12DCE	<0.500
12DCA	<0.500
TCE	<0.500
14DCB	<0.500
12DCB	<0.500

Explanation

- Approximate Property Boundary
- Groundwater Monitoring Well
- Groundwater Piezometer
- Grab Groundwater Sample
- Soil Boring
- Soil Sub-Slab Gas Sample
- 5-foot Soil Gas Sample
- Indoor Air Sample
- Ambient Air Sample

Groundwater concentrations reported in micrograms per liter (µg/L)
Detections are shown in bold
Results greater than the Environmental Screening Level for Commericial Properties are shaded
<1.00 = Not detected at or above the laboratory method reporting limit

Analyte	Abrev.	MCL	ESL
Vinyl Chloride	VC	0.5	0.0086
1,1-Dichloroethene	11DCE	6	3.2
1,1-Dichloroethane	11DCA	5	5.0
cis-1,2-Dichloroethene	c12DCE	6	6.0
1,2-Dichloroethane	12DCA	0.5	0.50
Trichloroethene	TCE	5	1.2
1,4-Dichlorobenzene	14DCB	5	2.6
1,2-Dichlorobenzene	12DCB	100	14

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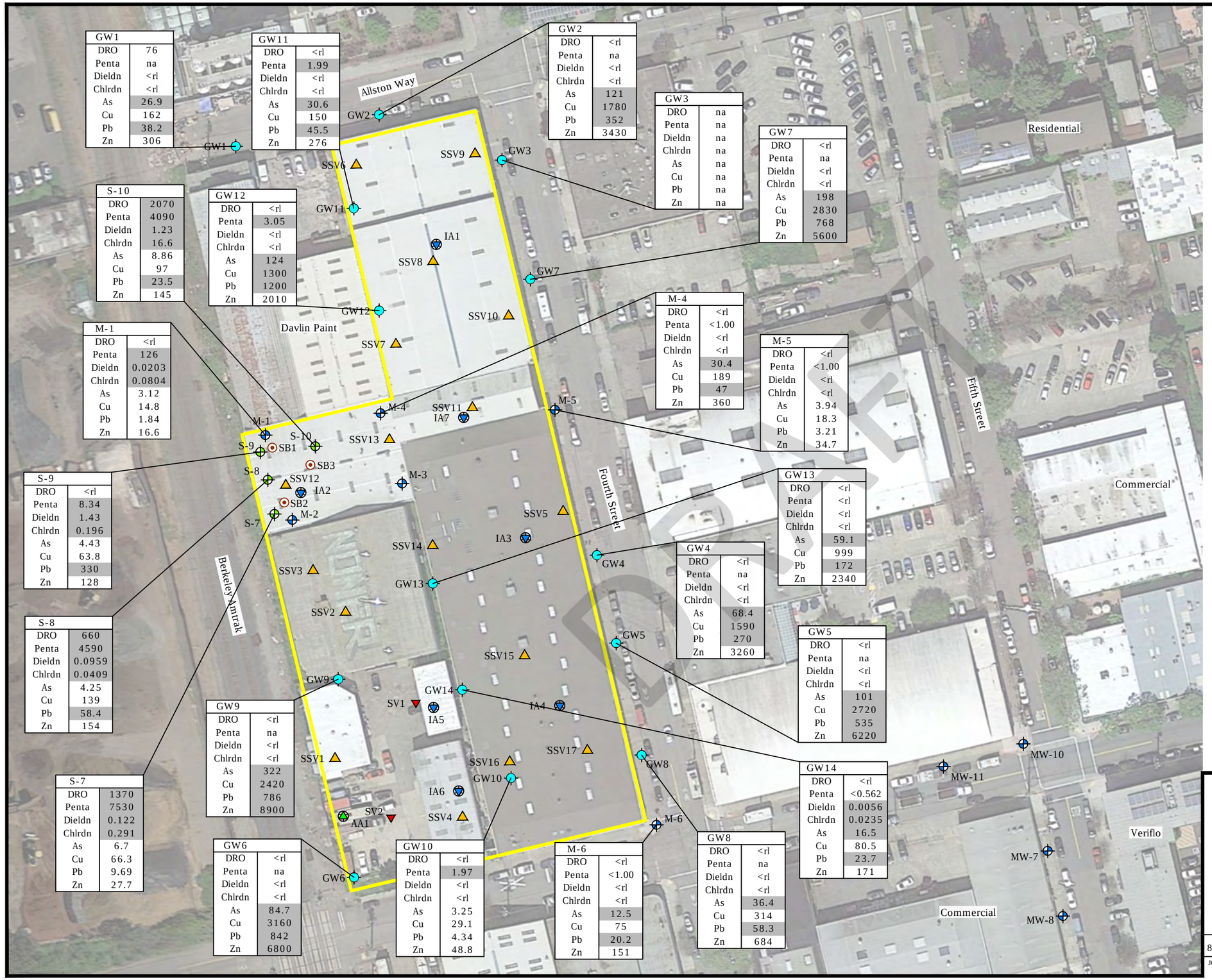
PES Environmental, Inc.
Engineering & Environmental Services

Groundwater Results - VOCs
Limited Phase II Investigation
Bancroft Way, Fourth Street
Berkeley, California

PLATE 5

881.108.01.017	88110801017_WBPHII_1-6	DRAFT	8/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



GW1	
DRO	76
Penta	na
Dieldn	<rl
Chlrdn	<rl
As	26.9
Cu	162
Pb	38.2
Zn	306

GW11	
DRO	<rl
Penta	1.99
Dieldn	<rl
Chlrdn	<rl
As	30.6
Cu	150
Pb	45.5
Zn	276

GW2	
DRO	<rl
Penta	na
Dieldn	<rl
Chlrdn	<rl
As	121
Cu	1780
Pb	352
Zn	3430

GW3	
DRO	na
Penta	na
Dieldn	na
Chlrdn	na
As	na
Cu	na
Pb	na
Zn	na

GW7	
DRO	<rl
Penta	na
Dieldn	<rl
Chlrdn	<rl
As	198
Cu	2830
Pb	768
Zn	5600

S-10	
DRO	2070
Penta	4090
Dieldn	1.23
Chlrdn	16.6
As	8.86
Cu	97
Pb	23.5
Zn	145

GW12	
DRO	<rl
Penta	3.05
Dieldn	<rl
Chlrdn	<rl
As	124
Cu	1300
Pb	1200
Zn	2010

M-4	
DRO	<rl
Penta	<1.00
Dieldn	<rl
Chlrdn	<rl
As	30.4
Cu	189
Pb	47
Zn	360

M-1	
DRO	<rl
Penta	126
Dieldn	0.0203
Chlrdn	0.0804
As	3.12
Cu	14.8
Pb	1.84
Zn	16.6

M-5	
DRO	<rl
Penta	<1.00
Dieldn	<rl
Chlrdn	<rl
As	3.94
Cu	18.3
Pb	3.21
Zn	34.7

S-9	
DRO	<rl
Penta	8.34
Dieldn	1.43
Chlrdn	0.196
As	4.43
Cu	63.8
Pb	330
Zn	128

GW13	
DRO	<rl
Penta	<rl
Dieldn	<rl
Chlrdn	<rl
As	59.1
Cu	999
Pb	172
Zn	2340

GW4	
DRO	<rl
Penta	na
Dieldn	<rl
Chlrdn	<rl
As	68.4
Cu	1590
Pb	270
Zn	3260

S-8	
DRO	660
Penta	4590
Dieldn	0.0959
Chlrdn	0.0409
As	4.25
Cu	139
Pb	58.4
Zn	154

GW5	
DRO	<rl
Penta	na
Dieldn	<rl
Chlrdn	<rl
As	101
Cu	2720
Pb	535
Zn	6220

GW9	
DRO	<rl
Penta	na
Dieldn	<rl
Chlrdn	<rl
As	322
Cu	2420
Pb	786
Zn	8900

S-7	
DRO	1370
Penta	7530
Dieldn	0.122
Chlrdn	0.291
As	6.7
Cu	66.3
Pb	9.69
Zn	27.7

GW14	
DRO	<rl
Penta	<0.562
Dieldn	0.0056
Chlrdn	0.0235
As	16.5
Cu	80.5
Pb	23.7
Zn	171

GW6	
DRO	<rl
Penta	na
Dieldn	<rl
Chlrdn	<rl
As	84.7
Cu	3160
Pb	842
Zn	6800

GW10	
DRO	<rl
Penta	1.97
Dieldn	<rl
Chlrdn	<rl
As	3.25
Cu	29.1
Pb	4.34
Zn	48.8

M-6	
DRO	<rl
Penta	<1.00
Dieldn	<rl
Chlrdn	<rl
As	12.5
Cu	75
Pb	20.2
Zn	151

GW8	
DRO	<rl
Penta	na
Dieldn	<rl
Chlrdn	<rl
As	36.4
Cu	314
Pb	58.3
Zn	684

Explanation

- Approximate Property Boundary
- Groundwater Monitoring Well
- Groundwater Piezometer
- Grab Groundwater Sample
- Soil Boring
- Soil Sub-Slab Gas Sample
- 5-foot Soil Gas Sample
- Indoor Air Sample
- Ambient Air Sample

Groundwater concentrations reported in micrograms per liter (µg/L)
Detections are shown in bold
Results greater than the Environmental Screening Level for Commericial Properties are shaded
<1.00 = Not detected at or above the laboratory method reporting limit

Analyte	Abrev.	MCL	ESL
Diesel Range Organics	DRO	199	100
Pentachlorophenol	Penta	1.0	1.0
Dieldrin	Dieldn	0.00071	0.00014
Chlordane	Chlrdn	0.10	0.013
Arsenic	As	10	10.00
Copper	Cu	1000	1000.00
Lead	Pb	15	15.00
Zinc	Zn	5000	5000.00

N

0 80

SCALE IN FEET

Notes:
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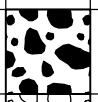
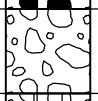
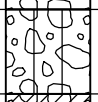
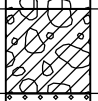
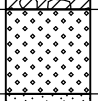
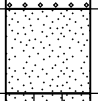
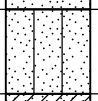
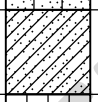
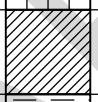
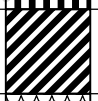
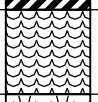
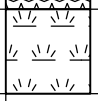
PES Environmental, Inc.
Engineering & Environmental Services

Groundwater Results - TPH, OLPs, and Metals
Limited Phase II Investigation
Bancroft Way, Fourth Street
Berkeley, California

PLATE 6

881.108.01.017	88110801017_WBPHII_1-6	DRAFT	8/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LESS THAN 15% FINES	GW		WELL-GRADED GRAVELS WITH OR WITHOUT SAND
			GP		POORLY-GRADED GRAVELS WITH OR WITHOUT SAND
		GRAVELS WITH 15% OR MORE FINES	GM		SILTY GRAVELS WITH OR WITHOUT SAND
			GC		CLAYEY GRAVELS WITH OR WITHOUT SAND
	SANDS MORE THAN HALF COARSE FRACTION IS FINER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 15% FINES	SW		WELL-GRADED SANDS WITH OR WITHOUT GRAVEL
			SP		POORLY-GRADED SANDS WITH OR WITHOUT GRAVEL
		SANDS WITH 15% OR MORE FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OL		ORGANIC SILTS OR CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CH		INORGANIC CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OH		ORGANIC SILTS OR CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
HIGHLY ORGANIC SOILS			PT		PEAT AND OTHER HIGHLY ORGANIC SOILS

ABBREVIATION KEY

PID (PPM) - Photo Ionization Detector readings in parts per million from field headspace sample screening.

BLOWS/6" - Blows required to drive sampler 6 inches as indicated on the logs using sample drive hammer weight of 140 pounds falling 30 inches.

2.5YR 6/2 - Soil Color according to Munsell Soil Color Charts (1994 Revised Edition)

(5, 10, 85) - (gravel%, sand%, fines%)

feet MSL - feet above Mean Seal Level

feet BGS - feet below ground surface

SYMBOLS KEY

- No Soil Sample Recovered
- Partial Soil Sample Recovered
- Undisturbed Soil Sample Recovered
- Soil Sample Submitted for Laboratory Analysis
- Hydropunch Sample
- First Encountered Groundwater Level
- Piezometric Groundwater level

USCS CHART1 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/8/19

PES Environmental, Inc.
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Unified Soil Classification System Chart
4th and Bancroft (West Block)
Berkeley, CA

PLATE
B-0

881.108.01.012	USCS CHART1	DRAFT	
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW1

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
14.1				VERY DARK GRAY SILTY SAND WITH GRAVEL (SM) (2.5Y 3/1), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.75-inch diameter, (20, 65,15)
0				BROWN CLAY (CL) (10YR 5/3), moist, very stiff, very fine- to fine-grained sand, (0, 10, 90)
0				
		5		LIGHT OLIVE BROWN CLAY WITH SAND (CL) (2.5Y 5/3), moist, very fine- to medium-grained sand, hard, (0, 20, 80)
0				
0				DARK YELLOWISH BROWN CLAYEY SAND (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, trace subangular to subrounded gravel up to 0.25-inch diameter, (trace, 60, 40)
				Increase in sand to (trace, 80, 20) at 8.5 ft bgs
		10		Increse in subangular to subrounded gravel to (5, 75, 20) at 9.5 ft bgs
0.7				Increase in subangular to subrounded gravel up to 0.5-inch diameter, (10, 75,15) at 11 ft bgs
				Increase in fines to (5,70,25) at 12.5 ft bgs
0				Increase in gravel and sand to (10, 75, 15) at 13.5 ft bgs
			▽	Wet at 14.5 ft bgs
0.2		15		
0				
0				LIGHT YELLOWISH BROWN SANDY SILT (ML) (2.5Y 6/4), moist, medium stiff, very fine- to fine-grained sand, (0, 20, 80)
		20		DARK GREENISH GRAY CLAY (CL) (10Y 4/1), moist, stiff, very fine- to fine-grained sand, (0, 10, 90)
				Bottom of boring at 20 feet bgs.
				GW level = 17.93' GW level = 16.85' @ 11:30 Collected GW sample GW1
				Note: Clays are expansive.
		25		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	20 feet
JOB NUMBER	881.108.01.012	DRILL RIG	PowerProbe 9500 PTO
LOGGED BY	CNP	DATE STARTED	6/18/19
REVIEWED BY	DRAFT	DATE COMPLETED	6/18/19

PLATE

B-01

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW2

PID (ppm)	BLOWS/6IN	DEPTH (FT)	MATERIALS DESCRIPTION
			ASPHALT
0			DARK YELLOWISH BROWN CLAYEY SAND (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.75-inch diameter, (5, 70, 25)
0.1			Increase in gravel to (10, 75, 15) at 1.5 ft bgs
0		5	Increase in fines to (5, 75, 20) at 4.5 ft bgs
			Some ash and brick debris at 5.5 ft bgs
0.1			YELLOWISH BROWN SANDY CLAY (CL) (10YR 5/4), moist, hard, very fine- to medium-grained sand, (0, 30, 70)
0.1			BROWN CLAYEY SAND (SC) (10YR 4/3), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.75-inch diameter, (5, 75, 20) Increase in subangular to subrounded gravel to (10, 65, 25)
		10	YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 5/4), moist, very stiff, very fine- to fine-grained sand, (0, 25, 75)
0			YELLOWISH BROWN CLAYEY SAND (CL) (10YR 5/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 1-inch diameter, (10, 70, 20)
0			DARK YELLOWISH BROWN CLAY (CL) (10YR 4/4), moist, very fine- to fine-grained sand, hard, (0, 10, 90)
0		15	
0			
0			DARK YELLOWISH BROWN CLAYEY SAND WITH GRAVEL (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 1-inch diameter, (15, 65, 20)
		20	DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/6), moist, stiff, very fine- to fine-grained sand, (0, 10, 90) Continue with hydropunch to 28 ft bgs.
		25	
			Bottom of boring at 28 ft bgs with hydropunch.
			GW level = 14.09' @ 15:30 Collected GW sample GW2
		30	Note: Clays are expansive.
		35	

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	28 feet
JOB NUMBER	881.108.01.012	DRILL RIG	PowerProbe 9500 PTO
LOGGED BY	CNP	DATE STARTED	6/18/19
REVIEWED BY	DRAFT	DATE COMPLETED	6/18/19

PLATE **B-02**

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW3

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
0				VERY DARK GREENISH GRAY CLAY (CL) (10Y 3/1), moist, very stiff, very fine-grained sand, (0, 5, 95)
0.9				VERY DARK GREENISH GRAY CLAYEY SAND (SC) (10Y 3/1), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.75-inch diameter, (5, 75, 20)
		5		DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/4), moist, hard, very fine- to medium-grained sand, (0, 15, 85)
				Color change to brown (10YR 4/3) at 8 ft bgs
		10		
0				
0		15		Increase in subangular to subrounded gravel up to 0.75-inch diameter to (5, 20, 75)
0.5				BROWN CLAY (CL) (10YR 4/3), moist, hard, very fine- to fine-grained sand, (0, 10, 90)
0			▽	
		20		BROWN CLAY WITH SAND (CL) (10YR 4/3), moist, stiff, very fine- to fine-grained sand, (0, 20, 80) Continue with hydropunch to 28 ft bgs.
		25		
				Bottom of boring at 28 ft bgs with hydropunch.
				GW level = 18.06' @ 07:20 (06/19/2019) GW level = 17.07' @ 07:20 (06/20/2019) Collected GW sample GW3
		30		Note: Clays are expansive.
		35		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	28 feet
JOB NUMBER	881.108.01.012	DRILL RIG	PowerProbe 9500 PTO
LOGGED BY	CNP	DATE STARTED	6/18/19
REVIEWED BY	DRAFT	DATE COMPLETED	6/18/19

PLATE **B-03**

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW4

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
0				VERY DARK GREENISH GRAY CLAY WITH SAND (CL) (10Y 3/1), moist, hard, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5, 20, 75)
0.3				
0.3		5		LIGHT OLIVE BROWN CLAY (CL) (2.5Y 5/3), moist, hard, very fine-grained sand, (0, 5, 95)
0				LIGHT OLIVE BROWN CLAY WITH SAND (CL) (2.5Y 5/3), moist, hard, very fine- to fine-grained sand, (0, 25, 75)
0				DARK YELLOWISH BROWN CLAYEY SAND WITH GRAVEL (SC) (10YR 4/6), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 1.25-inch diameter, (15, 70, 15)
		10		
0				DARK YELLOWISH BROWN CLAY WITH SAND (CL) (2.5Y 4/4), moist, hard, very fine- to fine-grained sand, (0, 15, 85)
				Increase in subangular to subrounded gravel up to 0.25-inch diameter to (5, 20, 75) at 14 ft bgs
0.1		15		
				Decrease in subangular to subrounded gravel to (0, 15, 85) at 16 ft bgs
0				
				Increase in subangular to subrounded gravel to (5, 20, 75) at 17.5 ft bgs
0				
				▽
				YELLOWISH BROWN SANDY CLAY (CL) (10YR 5/4), moist, stiff, very fine- to fine-grained sand, (0, 30, 70) Increase in subangular to subrounded gravel up to 0.25-inch diameter to (5, 35, 60) at 19 ft bgs
		20		Bottom of boring at 20 feet bgs.
				GW level = 18.71' @ 12:50 GW level = 11.82' @ 15:40 Collected GW sample GW4
				Note: Clays are expansive.
		25		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	20 feet
JOB NUMBER	881.108.01.012	DRILL RIG	PowerProbe 9500 PTO
LOGGED BY	CNP	DATE STARTED	6/18/19
REVIEWED BY	DRAFT	DATE COMPLETED	6/18/19

PLATE **B-04**

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW5

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
0				VERY DARK GRAY CLAY (CL) (10YR 3/1), moist, very stiff, very fine- to medium-grained sand, (0, 10, 90)
0				
0.3		5		
				BROWN SILTY SAND (SM) (10YR 4/3), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 1.25-inch diameter, (10, 75, 15)
0				
0		10		
0.8				
0.1				BROWN WELL GRADED SAND (SW) (10YR 4/3), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.75-inch diameter, (5, 85, 10) Wet at 13.75 ft bgs
0		15		DARK YELLOWISH BROWN CLAY (CL) (10YR 4/4), moist, very stiff, very fine- to fine-grained sand, trace subangular to subrounded gravel up to 0.5-inch diameter, (trace, 10, 90)
0.9				
0		20		
0				DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/4), moist, hard, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.25-inch diameter, (5, 20, 75)
1				
0		25		DARK YELLOWISH BROWN CLAY (CL) (10YR 4/4), moist, hard, very fine-grained sand, (0, 10, 90)
0.9				
		30		Bottom of boring at 28 feet bgs. GW level = 27.15' @ 15:06 (6/18) GW level = 12.06' @ 07:15 (6/19) Collected GW sample GW5 on 06/19/2019 Note: Clays are expansive.
		35		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	28 feet
JOB NUMBER	881.108.01.012	DRILL RIG	PowerProbe 9500 PTO
LOGGED BY	CNP	DATE STARTED	6/18/19
REVIEWED BY	DRAFT	DATE COMPLETED	6/18/19

PLATE **B-05**

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW6

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
0.3				VERY DARK GRAY CLAY (CL) (2.5Y 3/1), moist, very stiff, very fine- to medium-grained sand, some rootlets present, (0, 10, 90)
0				Color change to very dark grayish brown (2.5Y 3/2) at 4 ft bgs
		5		DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/4), moist, very stiff, very fine- to medium-grained sand, (0, 15, 85)
0.1				DARK YELLOWISH BROWN SILT WITH SAND (ML) (10YR 4/4), moist, hard, very fine- to medium-grained sand, trace subangular to subrounded gravel up to 0.5-inch diameter, (trace, 15, 85) Color change to light olive brown (2.5Y 5/3) at 6.5 ft bgs
0				
		10		DARK YELLOWISH BROWN SANDY CLAY (CL) (10YR 4/4), moist, hard, very fine- to coarse-grained sand, subangular to subrounded gravel up to 1-inch diameter, (5, 35, 60)
0				
0				LIGHT OLIVE BROWN CLAYEY SAND (SC) (2.5Y 5/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 1-inch diameter, (10, 70, 20)
		15		BROWN CLAY (CL) (10YR 5/3), moist, very stiff, very fine- to fine-grained sand, (0, 5, 95) Increase in very fine to medium grained sand to (0, 10, 90), color change to brown (10YR 4/3) at 14.5 ft bgs
0				
0				
		20		YELLOWISH BROWN SANDY CLAY (CL) (10YR 5/4), moist, stiff, very fine- to medium-grained sand, (0, 35, 65)
0				
0				
0				Increase in subangular to subrounded gravel up to 0.75-inch diameter to (5, 35, 60) at 22.5 ft bgs
		25		YELLOWISH BROWN CLAYEY SAND WITH GRAVEL (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 1.25-inch diameter, (20, 60, 20)
				Bottom of boring at 24 feet bgs - refusal. GW level = 20.10' (06/19/2019) GW level = 12.61' @ 07:05 (06/20/2019) Collected GW sample GW6 on 06/20/2019 Note: Clays are expansive.
		30		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	24 feet
JOB NUMBER	881.108.01.012	DRILL RIG	PowerProbe 9500 PTO
LOGGED BY	CNP	DATE STARTED	6/19/19
REVIEWED BY	DRAFT	DATE COMPLETED	6/19/19

PLATE

B-06

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW7

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
0				VERY DARK GREENISH GRAY CLAY (CL) (10Y 3/1), moist, very stiff, very fine-grained sand, (0, 5, 95)
0				DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/4), moist, hard, very fine- to medium-grained sand, (0, 25, 75)
0		5		DARK YELLOWISH BROWN SANDY CLAY (CL) (10YR 4/4), moist, very fine- to medium-grained sand, subangular to subrounded gravel up to 0.75-inch diameter, (5, 30, 65)
0				GREENISH GRAY CLAYEY SAND (SC) (10Y 5/1), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5, 70, 25)
0				DARK YELLOWISH BROWN CLAYEY SAND (SC) (10YR 4/4), moist, very fine- to fine-grained sand, (0, 80, 20) Increase in subangular to subrounded gravel up to 1.25-inch diameter, very fine to coarse grained sand to (10, 75, 15) at 8 ft bgs
0		10		Increase in fines to (10, 70, 20) at 10 ft bgs
0				▽
0		15		DARK YELLOWISH BROWN CLAYEY SAND WITH GRAVEL (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (15, 65, 20) Decrease in fines to (15, 70, 15) at 16 ft bgs
		20		Refusal at 19 feet bgs. Hydropunch used from 19 to 28 ft bgs. Boring collapsed back to 19 ft, only able to set temporary well screen to 19 ft bgs.
		25		
		30		Bottom of boring at 28 ft bgs with hydropunch. GW level = 18.31' Collected GW sample GW7 @ 10:30 Note: Clays are expansive.
		35		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	28 feet
JOB NUMBER	881.108.01.012	DRILL RIG	PowerProbe 9500 PTO
LOGGED BY	CNP	DATE STARTED	6/19/19
REVIEWED BY	DRAFT	DATE COMPLETED	6/19/19

PLATE

B-07

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW8

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				(No Recovery)
0		5		VERY DARK GRAY CLAY (CL) (10YR 3/1), moist, very stiff, very fine- to fine-grained sand, (0, 10, 90) Color change to dark greenish gray (10Y 4/1) at 4.5 ft bgs
0				DARK GREENISH GRAY CLAYEY SAND (SC) (10Y 4/1), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 1-inch diameter, (10, 75, 15) Some plastic debris present at 6.5 ft bgs
0				DARK GRAYISH BROWN CLAY (CL) (2.5Y 4/2), moist, hard, very fine- to fine-grained sand, (0, 10, 90) Color change to dark greenish gray (10Y 4/1) at 8.5 ft bgs
		10		OLIVE GRAY SANDY CLAY (CL) (5Y 4/2), moist, hard, very fine- to fine-grained sand, (0, 30, 70)
0				BROWN CLAY (CL) (10YR 4/3), moist, hard, very fine- to fine-grained sand, (0, 10, 90)
0				
		15		YELLOWISH BROWN SANDY CLAY (CL) (10YR 5/4), moist, stiff, very fine- to medium-grained sand, (0, 35, 65)
0				
				Increase in subangular to subrounded gravel up to 0.25-inch diameter to (trace, 35, 65) at 18.5 ft bgs
0				
		20		DARK YELLOWISH BROWN CLAY WITH SAND (CL) (10YR 4/4), moist, hard, very fine- to coarse-grained sand, trace subangular to subrounded gravel up to 0.5-inch diameter, (trace, 15, 85)
0				
				Increase in sand to (trace, 25, 75) at 22.5 ft bgs
				Refusal at 23 feet bgs. Hydropunch used from 23-28 ft bgs. Hole collapsed to 24 ft bgs. Attempted to use hydropunch again to 28 ft bgs, refusal encountered at 26 ft bgs.
		25		
				Refusal at 26 ft bgs.
				GW level = 12.51' @ 07:10 (06/20/2019)
		30		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	26 feet
JOB NUMBER	881.108.01.012	DRILL RIG	PowerProbe 9500 PTO
LOGGED BY	CNP	DATE STARTED	6/19/19
REVIEWED BY	DRAFT	DATE COMPLETED	6/19/19

PLATE **B-08**

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING GW9

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				VERY DARK GRAY POORLY GRADED SAND (SP) (2.5Y 3/1), moist, very fine- to fine-grained sand, trace subangular to subrounded gravel up to 1-inch diameter, (trace, 90, 10)
				VERY DARK GRAY CLAY (CL) (2.5Y 3/1), moist, stiff, very fine-grained sand, (0, 5, 95)
				LIGHT OLIVE BROWN CLAY WITH SAND (CL) (2.5Y5/3), moist, hard, very fine- to medium-grained sand, (0, 15, 85)
		5		VERY DARK GRAY CLAY (CL) (2.5Y 3/1), moist, stiff, very fine-grained sand, (0, 5, 95)
				LIGHT OLIVE BROWN CLAY WITH SAND (CL) (2.5Y5/3), moist, hard, very fine- to medium-grained sand, (0, 15, 85)
				VERY DARK GRAY CLAY (CL) (2.5Y 3/1), moist, stiff, very fine-grained sand, (0, 5, 95) Color change to dark yellowish brown (10YR 4/4), very fine to medium grained sand at 9 ft bgs
		10		DARK YELLOWISH BROWN CLAYEY SAND (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5, 75, 20) Increase in subangular to subrounded gravel up to 0.75-inch diameter, (10, 75, 15) at 10.5 ft bgs
		15		BROWN CLAY WITH SAND (CL) (10YR 4/3), moist, hard, very fine- to coarse-grained sand, (0, 15, 85)
				DARK YELLOWISH BROWN CLAYEY SAND (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.75-inch diameter, (10, 50, 40)
		20		DARK YELLOWISH BROWN SANDY CLAY (CL) (10YR 4/4), moist, stiff, very fine- to medium-grained sand, (0, 35, 65)
				Refusal at 23 feet bgs. Hydropunch used from 23-30 ft bgs.
		25		
		30		Bottom of boring at 30 ft bgs with hydropunch. GW level = 12.53' (06/20/2019) Collected GW sample GW9 @ 08:50 on 06/20/2019 Note: Clays are expansive.
		35		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	30 feet
JOB NUMBER	881.108.01.012	DRILL RIG	PowerProbe 9500 PTO
LOGGED BY	CNP	DATE STARTED	6/19/19
REVIEWED BY	DRAFT	DATE COMPLETED	6/19/19

PLATE

B-09

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING SB-1

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				VERY DARK GRAY POORLY GRADED SAND (SP) (2.5Y 3/1), moist, very fine- to fine-grained sand, (0% gravel, 90% sand, 10% fines)
				BLACK CLAY (CL) (2.5Y 2/1), moist, very stiff (~3.25 tsf), very fine- to fine-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5% gravel, 5% sand, 90% fines)
		5		LIGHT OLIVE BROWN CLAY WITH SAND (CL) (2.5Y 3/1), moist, stiff (~2.0 tsf), very fine- to fine-grained sand, (0% gravel, 15% sand, 85% fines)
				DARK YELLOWISH BROWN CLAYEY SAND (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5% gravel, 75% sand, 20% fines)
				LIGHT OLIVE BROWN CLAY WITH SAND (CL) (2.5Y 3/1), moist, stiff (~2.0 tsf), very fine- to fine-grained sand, (0% gravel, 15% sand, 85% fines)
				Hydrocarbon odor at 9.5 feet bgs. *Sample ID: SB-1-9.5*
		10		Bottom of boring at 10 feet bgs. Boring backfilled with neat cement grout.
		15		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	10 feet
JOB NUMBER	881.108.01.012	DRILL RIG	ECA - Geoprobe 54LT
LOGGED BY	AA	DATE STARTED	7/20/19
REVIEWED BY	DRAFT	DATE COMPLETED	7/20/19

PLATE **B-10**

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING SB-2

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				VERY DARK GRAY POORLY GRADED SAND (SP) (2.5Y 3/1), moist, very fine- to fine-grained sand, (0% gravel, 90% sand, 10% fines)
				BLACK CLAY (CL) (2.5Y 2/1), moist, very stiff (~3.25 tsf), very fine- to fine-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5% gravel, 5% sand, 90% fines)
				Concrete debris at 3 feet bgs
		5		LIGHT OLIVE BROWN CLAY WITH SAND (CL) (2.5Y 3/1), moist, stiff (~2.0 tsf), very fine- to fine-grained sand, (0% gravel, 15% sand, 85% fines)
				DARK YELLOWISH BROWN CLAYEY SAND (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5% gravel, 75% sand, 20% fines)
				DARK GREENISH GRAY CLAY (CL) (10Y 4/1), moist, hard (>4.0 tsf), very fine- to fine-grained sand, (0% gravel, 10% sand, 90% fines)
				Hydrocarbon odor at 9.5 feet bgs *Sample ID: SB-2-9.5*
		10		Bottom of boring at 10 feet bgs. Boring backfilled with neat cement grout.
		15		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	10 feet
JOB NUMBER	881.108.01.012	DRILL RIG	ECA - Geoprobe 54LT
LOGGED BY	AA	DATE STARTED	7/20/19
REVIEWED BY	DRAFT	DATE COMPLETED	7/20/19

PLATE **B-11**

LOG OF BORING/WELL 881_SKB-WB_V1.GPJ PES_ENV.GDT 8/9/19

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING SB-3

PID (ppm)	BLOWS/6IN	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				CONCRETE
				VERY DARK GRAY POORLY GRADED SAND (SP) (2.5Y 3/1), moist, very fine- to fine-grained sand, (0% gravel, 90% sand, 10% fines)
				BLACK CLAY (CL) (2.5Y 2/1), moist, very stiff (~3.25 tsf), very fine- to fine-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5% gravel, 5% sand, 90% fines)
		5		LIGHT OLIVE BROWN CLAY WITH SAND (CL) (2.5Y 3/1), moist, stiff (~2.0 tsf), very fine- to fine-grained sand, (0% gravel, 15% sand, 85% fines) *Sample ID: SB-3-5*
				DARK YELLOWISH BROWN CLAYEY SAND (SC) (10YR 4/4), moist, very fine- to coarse-grained sand, subangular to subrounded gravel up to 0.5-inch diameter, (5% gravel, 75% sand, 20% fines)
				LIGHT OLIVE BROWN CLAY WITH SAND (CL) (2.5Y 3/1), moist, stiff (~2.0 tsf), very fine- to fine-grained sand, (0% gravel, 15% sand, 85% fines)
		10		Bottom of boring at 10 feet bgs. Boring backfilled with neat cement grout.
		15		

PROJECT	4th and Bancroft (West Block)	DIAMETER OF HOLE	2.25 inches
LOCATION	Berkeley, CA	TOTAL DEPTH OF HOLE	10 feet
JOB NUMBER	881.108.01.012	DRILL RIG	ECA - Geoprobe 54LT
LOGGED BY	AA	DATE STARTED	7/20/19
REVIEWED BY	DRAFT	DATE COMPLETED	7/20/19

PLATE **B-12**

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Fugro Project No. 04.B0698004
Document No. 04.B0698004-L-001(Rev.00)
July 16, 2018

San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Attention: Mr. John Jang

Re: Supplemental Site Information Report and Soil and Groundwater Management Plan, 2220 Fourth Street, Berkeley, California

Dear Mr. Jang,

Fugro USA Land, Inc. (Fugro) is pleased to provide you with this Supplemental Site Information Report which summarizes background information for the property located at 2220 Fourth Street, in Berkeley, California (Site, Figures 1 and 2). Herst Ventures, Inc. (Herst Ventures), the owner of the Site, has conducted voluntary sampling and analysis, and site inspection efforts since 1981 to evaluate soil and groundwater quality as they contemplate various redevelopment/property repurposing scenarios. The purpose of this document is to present an overview of general site conditions, a summary of environmental investigations and inspections completed to date, and to provide case background information as requested in your email dated March 10, 2016. Additionally, a Soil and Groundwater Management Plan (SGMP) is presented, which has been utilized by the property owner to mitigate risks posed to onsite workers should they encounter soil and groundwater during routine property repair and maintenance until such time that redevelopment of the Site occurs.

As this document will summarize, both the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) and the Department of Toxic Substances Control (DTSC) have been involved in oversight of investigation and cleanup activities related to the Site. The Site has been recorded under the following property/owner names: “Peerless Lighting”, “Peerless Electric”, and “Peerless Electric Company.” Previous DTSC project managers include Mr. Claude Jemison and Mr. Thomas Price.

SITE DESCRIPTION

The Site is situated at an elevation of approximately 20 feet above mean sea level and is located in an area of West Berkeley with a known history of commercial and industrial businesses extending back to the early 1900s. The Site is completely occupied by a high one-story warehouse with a concrete slab covering the entire building footprint. The warehouse-type building is located on the west side of Fourth Street and is bordered to the north and south by other

warehouse space also owned by Herst Ventures. The Site is bordered to the west by the Union Pacific Railroad right-of-way (UPRR ROW) which comprises two main, high traffic rail lines and several old railroad sidings. A change in grade of about 4 to 6 feet exists between the location of the main rail lines and the floor slab of the current warehouse[1]; the floor slab is elevated above the rail lines. The change in grade is accommodated by a narrow slope or embankment which extends from the west side of the building down to the location of a utility raceway located at the same grade as the main rail lines. The embankment is covered with vegetation. There is a 2 to 3-foot wide gap between the south side of the existing building at 2220 Fourth Street and the adjacent structure to the south. Soil is exposed at the ground surface along portions of the gap. Roof and surface drainage has been observed by Fugro and Herst Ventures staff to flow along the ground surface between the two buildings, to a point of discharge at the railroad ROW. At the point of discharge at the top of the embankment, the flow path is surfaced with concrete. The location of the railroad right-of-way and the unpaved gap in relation to the current warehouse building is shown on Figure 2.

Businesses occupying properties in the immediate vicinity of the Site have included metal fabrication, machine shops, foundries, laboratories, and paint manufacturing. These businesses have documented use of heavy metals, hydrocarbon fuels, oils, lubricants, degreasing agents, cutting fluids, solvents, acids, bases, and dye/pigment/paint intermediates. Environmental studies conducted in the Site vicinity have confirmed that releases of solvents, metals, and petroleum hydrocarbon compounds have locally impacted soils at points of release and as a result shallow groundwater has become impacted.

OPERATIONAL HISTORY

Prior to the Site being purchased in 1981 by a predecessor of Herst Ventures (Herst Lighting Corp., d.b.a. Peerless Electric Company), the 2220 Fourth Street parcel was used by a variety of pest control businesses from 1952 to 1981. These companies included Able Termite Control Company, Able Termite Control, Inc., Terminix Norcal, and its successor Terminix International. A warehouse with a reported partially paved floor area surrounded by unpaved areas was located on the west side of the property, and a parking lot was located on the east side of the property. The pest control businesses reportedly stored, mixed, and repackaged termite control chemicals including aqueous pentachlorophenol (PCP) in a hydrocarbon matrix, and aqueous chlordane in a hydrocarbon matrix.

In 1981, Peerless Electric Company (“Peerless”) acquired the 2220 Fourth Street parcel and surrounding property from Terminix. Peerless became aware of contamination after it purchased the Site due to unpleasant odors and stains observed in the unpaved area of the former termite control warehouse where chemicals had been stored. At the request of the DTSC, several phases of soil and groundwater investigation were voluntarily conducted both onsite and within the immediately adjacent railroad right-of-way.

The current warehouse building was constructed following the completion of a removal action at the Site in 1984 which resulted in the removal of the former termite control company warehouse building. As-built drawings for the current warehouse structure dated August 15, 1988 (MBT Associates) show that the new structure was to be founded on a system of concrete piers and grade beams. In addition, import fill materials were to be used to raise site grades to provide a layer of non-expansive soil below the new slab. The drawings suggest that 20-inch diameter, 15 to 20-

[1] Site was redeveloped in 1989 following completion of a removal action in 1984, and included the construction of a new reinforced concrete slab-on-grade floor. Information related to the As-Built construction of the new warehouse building was obtained from *Supplemental Site Data Report, 2220 Fourth Street, Berkeley, California*, by Fugro West, Inc., dated August 3, 2007.

foot deep piers were to be extended at various locations around the perimeter of the new structure to provide foundation support. City building inspection records indicate that pier holes were completed in early 1989 and the warehouse structure was finished and occupied. Foundation details do not show the construction of a formal cut-off between the 2 to 3-foot unpaved gap located to the south and the building foundation, other than the presence of pier caps and the grade beams. The grade beams are shown to extend about 3 feet below the top of the new floor slab and may act to retard shallow seepage which may occur from the open alley areas to the south. The presence of the floor slab constructed in 1989 acts as a cap over the Site and provides modest control of groundwater level changes over time, as it acts to impede groundwater infiltration. Both of these conditions would tend to create a more stable local groundwater regime below the structure.

SUMMARY OF ENVIRONMENTAL INVESTIGATIONS

A brief summary of available environmental reports documenting the various investigations completed at and in the vicinity of the Site is presented below:

Report of Subsurface Soil Investigation, by Brown and Caldwell, dated July 28, 1983 (obtained from Preliminary Assessment, Peerless Electric, by DTSC, dated December 24, 2003[2])

In 1983, Peerless Electric retained Brown and Caldwell to conduct an initial investigation to evaluate concentrations of pesticides in shallow subsurface soil in the area of the former termite control business practices. Soil samples were taken from the ground surface to a maximum depth of 3 feet below ground surface (bgs). Results of the investigation identified concentrations of organochlorine pesticides including Aldrin, Lindane, Chlordane, DDD, and Dieldrin, with concentrations of dieldrin (up to 1.1 milligrams per kilogram [mg/kg]) and chlordane (up to 3.8 mg/kg). Groundwater samples were also collected from the Site which identified concentrations of Chlordane (400 micrograms per liter [µg/L]), Lindane (10 µg/L), and heptachlor (15 µg/L). The approximate soil sampling locations are not known.

Voluntary Removal Action (obtained from Preliminary Assessment, Peerless Electric, by DTSC, dated December 24, 2003[2])

In 1984, voluntary remedial efforts were undertaken under the supervision of the City of Berkeley Department of Health Services to remove pesticide contaminated source area soils within the unpaved area of the former warehouse building. A letter dated December 28, 1984 from the City of Berkeley Department of Health Services was included in the DTSC's 2003 Preliminary Assessment Report. In this letter, the City stated that they had reviewed the test results submitted by Brown and Caldwell on the second set of post clean-up samples taken at the Site, and the City recommended that Peerless proceed with the backfilling process. The letter further stated that the City *"recognizes the one chlordane reading above TTLC but because of the size of the area involved and the planned usage, backfilling can be completed. Peerless Electric should be aware of the ongoing groundwater monitoring being conducted by the Regional Water Quality Control Board. If, at some time in the future, a contamination problem develops indicating chlordane as a contaminant the Board could request removal of the backfill and the remaining hot spot*."

The excavation area was backfilled with imported soil, and the impacted soils were transported offsite as hazardous waste to a permitted landfill. Following the removal action, the Site was redeveloped and the existing Site building was completed in 1989. The remediated area (primary area of mixing of termite control compounds) was completely

[2] Information for activities completed in 1983/1984 was obtained from *Additional Site Study Report, Pentachlorophenol and Chlordane Concentrations, 2220 Fourth Street, Berkeley, California*, by Fugro West, Inc., dated February 27, 2007.

covered by a layer of import fill materials and the new reinforced concrete slab-on-grade floor. The approximate location of the excavation area is shown on Figure 2.

Groundwater Investigation Report – Peerless Electric Company, Berkeley, California, by Brown and Caldwell, dated August 8, 1985

In 1985, under the supervision of the SFRWQCB, four groundwater monitoring wells (W-1 through W-4) were installed within the former termite control business warehouse to investigate the extent of pesticide impacts to groundwater. No soil samples were collected for analysis. Groundwater analysis confirmed the presence of pesticides and identified the presence of chlorinated solvents. Analyses detected trans-1,2-dichloroethene (trans-1,2-DCE, 11 µg/L), 1,2-dichloroethane (1,2-DCE, 7.0 µg/L), trichloroethene (TCE, 1,400 µg/L), PCP (1,500 µg/L), and total petroleum hydrocarbons in the C14-C24 range (TPH, 5,000 µg/L) in the groundwater samples analyzed. The approximate location of wells W-1 through W-4 is shown on Figure 2.

Analytical Results Letter to the City of Berkeley Environmental Health Division – Peerless Lighting, Berkeley, California by Tank Excavators, dated July 1, 1987

In 1987, an approximately 100-gallon, empty (unused) underground storage tank (UST) was removed from the parking lot adjacent to the warehouse. Excavation of soils at the location of the suspected UST was conducted during 1987. Two soil samples were collected from the base of the excavation with 10 mg/kg of TPH identified in one of the two samples tested. No hydrocarbons were detected in the other sample analyzed. Excavated soil was stockpiled onsite and sampled and had an initial TPH concentration of 1,800 mg/kg. The stockpiled soil was allowed to aerate onsite prior to use as backfill of the excavation pit. A confirmation sample was subsequently collected from the aerated soil, with a concentration of 14 mg/kg of TPH.

Analytical Results Letter – Peerless Lighting Corporation, Berkeley, California by Polymatrix Associates, dated 1987[3]

Soil samples were reportedly collected from three areas (PC, PN, and PS) within the railroad embankment immediately west of the former warehouse in areas that were distinguished by a mounding of soil and/or surface staining. The exact locations of these samples are not known. Samples were apparently collected from the soil surface and from a depth of 3.5 feet. A total of five grab soil samples were collected and composited into four composite samples. Concentrations of PCP were reported as high as 460 mg/kg in the surface composite sample and at 21 mg/kg in the composite sample from a depth of 3.5 feet. A more detailed soil investigation was performed in this area in 1994 (see below). The location of area PC is shown on Figure 2. It is believed that areas PN and PS are located in the vicinity of borings SB-1 through SB-3 as shown on Figure 2.

Site Characterization Report for 2220 Fourth Street, Berkeley, California, by The Mark Group, dated October 11, 1988

In 1988, six additional groundwater monitoring wells were installed at and in the vicinity of the Site: four within the current warehouse (M-1 through M-4) and two hydraulically upgradient, east and southeast of the warehouse along Fourth Street (M-5 and M-6, respectively). Soil samples were collected from three of the borings (M-1, M-2, and M-4) and analyzed for PCP and volatile organic compounds (VOCs). Analysis of these soil samples indicated the presence

[3] Additional information pertaining to this study is provided in the "Phase I Soil Investigation Report, Southern Pacific Transportation Company, Right-of-Way West of 2220 Fourth Street, Berkeley, California", by Industrial Compliance, dated January 30, 1995.

of 1,1,1-TCA (up to 2.0 micrograms per kilogram [µg/kg]), trichlorofluromethane (2.0 µg/kg), TCE (up to 14 µg/kg), and PCP (up to 2,200 µg/kg). For groundwater, select VOCs including chloroform (1.3 µg/L), 1,1-dichloroethane (1,1-DCA, 0.8 µg/L), 1,2-dichloroethane (1,2-DCA, up to 5.2 µg/L), 1,1-dichloroethene (1,1-DCE, 68 µg/L), trans-1,2-DCE (0.6 µg/L), 1,1,1-trichloroethane (1,1,1-TCA,115 µg/L), TCE (82 µg/L), and PCP (up to 1,740 µg/L) were detected within the onsite monitoring wells. Concentrations of TCE (up to 102 µg/L), trans-1,2-DCE (up to 10 µg/L), and vinyl chloride (up to 46 µg/L) were detected in the two offsite wells. The approximate locations of wells M-1 through M-6 is shown on Figure 2.

Groundwater Monitoring Report for Peerless Lighting, 2220 Fourth Street, Berkeley, California, by Subsurface Consultants, Inc.[4], dated October 29, 1993

In 1993, the four onsite (M-1 through M-4) and two offsite (M-5 and M-6) groundwater monitoring wells were sampled and water quality analysis conducted by Subsurface Consultants, Inc. Select VOCs were detected in each of the six wells sampled during this event including TCE (300 µg/L), 1,1-DCE (up to 160 µg/L), 1,2-DCA (10 µg/L), trans-1, 2-DCE (up to 13 µg/L), 1,1,1-TCA (up to 300 µg/L), methyl isobutyl ketone (MIBK, 200 µg/L), benzene (011 µg/L), and vinyl chloride (2.4 µg/L). Total volatile petroleum hydrocarbons (TVH) were also detected in all but well M-2 at concentrations ranging from 100 to 320 µg/L. Analyses only detected PCP in wells M-1 (5,000 µg/L) and M-2 (1,900 µg/L).

VOCs were detected in both the upgradient and onsite wells. This coupled with the fact that there was no documented use of these compounds onsite, and the known use and release of VOCs and their cleanup efforts in the Site vicinity, led to the conclusion that their presence was indicative of a regional plume associated with an offsite source.

Results of Soil Sampling Adjacent to 2220 Fourth Street, Berkeley, California, by Levine Fricke, dated April 27, 1994

In March 1994, the SFRWQCB requested that Southern Pacific Transportation Company (SPTCo, now UPRR) determine the vertical and lateral extent of contamination resulting from releases onto the SPTCo property. Levin Fricke completed three soil borings (SB-1 through SB-3) and collected soil samples from the railroad right-of-way on the west side of Site. Soil samples were collected from the ground surface to a maximum depth of 7.0 feet bgs. Low concentrations of TPH as diesel and motor oil (TPHd, TPHmo), ethylbenzene, and xylenes were detected within some of the soil samples analyzed. Analyses also detected PCP (up to 110 mg/kg) in six out of nine samples, and ranging to depths of 6.5 feet bgs. The approximate location of borings SB-1 through SB-3 is shown on Figure 2.

Soil and Groundwater Investigation, Borings 7, 8, 9, and 10 and October 1994 Groundwater Monitoring Event, 2220 Fourth Street, Berkeley, California, by Subsurface Consultants, Inc., dated November 23, 1994

In October 1994, the SFRWQCB and the City of Berkeley requested additional subsurface investigation at the Site. Three borings were drilled along the west side of the warehouse, and the fourth boring was completed within the approximate location of the previously unpaved portion of the former termite control business warehouse. Following the completion of drilling, these borings were converted to piezometers (S-7 through S-10) to facilitate the monitoring of water depth and collection of grab groundwater samples. In addition, groundwater samples were also collected from wells M-1 through M-5, at and in the vicinity of the Site. The approximate location of piezometers S-7 through S-10 is shown on Figure 2.

[4] Subsurface Consultants, Inc. is a wholly owned subsidiary of Fugro USA Land, Inc.

For soil, analyses detected total extractable hydrocarbons up to 6,100 mg/kg, with elevated concentrations detected within and adjacent to the former termite control business warehouse. PCP was detected up to 130,000 µg/kg, with the highest concentrations detected adjacent to the former termite control business warehouse at a depth of 6.0 feet bgs. Dieldrin (up to 2,800 µg/kg) and chlordane (up to 28,000 µg/kg were also detected in select samples analyzed. Various VOCs were also detected including BTEX, MIBK, and 1,1,1-TCA within one of the borings completed west of the warehouse.

For groundwater, analyses detected elevated concentrations of PCP (up to 52,000 µg/L) and total extractable petroleum hydrocarbons (up to 1,700,000 µg/L). Concentrations of select pesticides including dieldrin heptachlor epoxide, and chlordane were also detected in groundwater from borings completed west of the warehouse. Further, a variety of VOCs including 1,1-DCE, cis- and trans-1,2-DCE, BTEX, TCE, 1,1,1-TCA, MIBK, and 1,2-DCA were also detected in some of the groundwater samples analyzed.

Phase I Soil Investigation Report, Right-of-Way West of 2220 Fourth Street, Berkeley, California, by Industrial Compliance (Work Completed for Union Pacific), dated January 30, 1995

In December 1994, a soil investigation was completed on behalf of SPTCo, and included the completion of 13 soil borings (B-1 through B-13) to verify sample results from previous investigations and to assess the lateral and vertical extent of impacted soil on the SPTCo right of way. Soil samples were collected from the ground surface to maximum depth of 6 feet bgs. Analyses detected chlordane (up to 570 mg/kg) and PCP (up to 190 mg/kg). TPH concentrations were also detected in the shallow soil with concentrations ranging up to 2,006 mg/kg (C6 to C10 range), up to 9,548 mg/kg (C11 to C14 range), up to 1,923 mg/kg (C11 to C20 range), and up to 648 mg/kg (C21 to C30 range). No groundwater samples were collected or analyzed during this investigation. The approximate location of borings B-1 through B-13 is shown on Figure 2.

Scope of Work to Determine Current Pentachlorophenol and Chlordane Impacts to Soil and Groundwater, 2220 Fourth Street, Berkeley, California, by Fugro West, Inc.[5], dated November 4, 2005

In 2005, Fugro and Herst Ventures presented to the DTSC a summary of investigation results from studies conducted through March 1995. These studies show that levels of PCP and chlordane in soil at concentrations exceeding California Human Health Screening Levels (CHHSLs) existed beneath the concrete floor slab within the warehouse on the west side of the Site (former unpaved portion of the Site), and were present within the embankment area immediately adjacent to the west side of the existing warehouse building. Similarly, levels of PCP and chlordane at concentrations in excess of Maximum Contaminant Levels (MCL) were located below the west side of the existing warehouse structure.

Levels of various VOCs including the solvents 1,1,1-TCA, 1,1-DCA, and other cleaning, cutting, and painting solvents have been shown to exist throughout this commercial and industrial area. These solvents have not been detected in Site soils at concentrations that would suggest the presence of a source area at the Site.

Based on discussions with the DTSC in September 2005, the DTSC requested soil and groundwater samples be collected from borings located adjacent to and exterior to the existing structure, from borings located between the

[5] Fugro West Inc. is a wholly owned subsidiary of Fugro USA Land, Inc.

building and the main rail line, and from borings located on the west side of the railroad right-of-way. Fugro prepared a workplan for DTSC review and approval, which proposed the completion of 8 borings for soil and groundwater sample collection, and the collection of groundwater samples from existing onsite and offsite wells and piezometers. Fugro also began negotiations with UPRR to gain right-of-entry agreements to the ROW area west of the warehouse. Due to UPRR permitting issues and site constraints, this work was not completed until late 2006.

Additional Site Study Report, Pentachlorophenol and Chlordane Concentrations, 2220 Fourth Street, Berkeley, California, by Fugro West, Inc., dated February 27, 2007

In 2006, Fugro completed the Additional Site Study in accordance with Fugro's 2005 Workplan. A total of 8 borings (HA-1 through HA-8) were completed at the Site, with seven of the borings completed to a maximum depth of 7.5 feet bgs, as most borings met refusal at depths between 2.5 and 5.5 feet bgs. Fugro was able to complete boring HA-1 to a depth of 14.5 feet bgs to facilitate collection of a grab groundwater sample. A groundwater monitoring event was also conducted during this study. The event comprised measuring the depth to groundwater, and purging and sampling upon sufficient recharge, two existing groundwater monitoring wells (M-1 and M-2) and three existing piezometers (S-7, S-8 and S-10), all located within the footprint of the existing warehouse structure. The approximate location of borings HA-1 through HA-8 is shown on Figure 2.

A total of 25 soil samples were submitted for analysis. No PCP was detected above the laboratory reporting limits in any of the samples tested during this study for the railroad right-of-way. Detected concentrations of chlordane ranged from 2.4 µg/kg to 4,300 µg/kg within the railroad right-of-way. Most of the detected chlordane concentrations were below respective commercial/industrial screening criteria. Nineteen of the 25 samples analyzed possessed TPHd concentrations ranging from 1.6 mg/kg to 170 mg/kg. The detected concentrations are below the respective ESLs established by the RWQCB. No definitive correlation could be determined between the presence of the PCP and chlordane and these detected TPHd concentrations in soil. Chemical concentrations detected in soil during this investigation are shown on Figure 3.

For groundwater, PCP was not detected in the one groundwater sample collected and analyzed from the railroad right-of-way. PCP was detected in each groundwater sample tested from the selected wells and piezometers located within the existing Site building footprint. Detected concentrations of PCP ranged from 3,100 µg/L (M-1) to 11,000 µg/L (S-8). The concentrations of PCP have been detected at the well and piezometer locations in a mixture comprised of PCP, chlordane and petroleum hydrocarbons. The range of concentrations is similar to past studies. Chlordane was not detected within the grab groundwater sample location located on the west side of the railroad right-of-way. Chlordane was also not detected in groundwater samples from wells M-1 and M-2, and piezometer S-8. Chlordane was detected in the groundwater samples from piezometer S-7 (9.4 µg/L) and piezometer S-10 (1.9 µg/L). Detected TPHd concentrations in the groundwater ranged from 56 µg/L to 39,000 µg/L. Review of the laboratory chromatographs and discussions with the laboratory manager indicated that the relatively low TPHd concentration detected in the downgradient sampling location possessed a heavier petroleum fraction and did not have the same indicators (peaks) as the samples obtained from the wells and the piezometers. This strongly suggested that the source of the impacts at the downgradient sample location and the source of the impacts observed at the wells and piezometers were different. Historic chemical concentrations detected in groundwater for select analytes including, 1,1,1-TCA, 1,1-DCA, PCP, and Chlordane are shown on Figure 4.

Based on the results of the investigation, Fugro recommended the exposed soil in the embankment area on the west side of the existing structure be covered by a thin layer of concrete as a further measure of protection.

Supplemental Data Report, 2220 Fourth Street, Berkeley, California, by Fugro West, Inc., dated August 3, 2007
On May 7, 2007 representatives of Herst Ventures and Fugro met with the DTSC to discuss the findings of the 2006 study. Fugro indicated at the meeting that, in their opinion, the data and findings from the August 2006 study coupled with the data from various previous site studies strongly suggest that site conditions are stable. At the conclusion of the meeting, the DTSC requested that the supplemental data Fugro presented at the meeting be submitted in a formal report to the DTSC for their further consideration. Accordingly, Fugro submitted to the DTSC the Supplemental Data Report which presented site-specific data including information related to topography, foundation and concrete slab construction, and the observed presence of the UPRR ROW acting as a groundwater recharge zone, as rationale in support of the conclusion that existing improvements are controlling the contaminant plume associated with releases from the former termite control business.

Activities between 2008-2018
In January 2008, Ms. Karen Toth with the DTSC notified Fugro that the DTSC had reviewed Fugro's Additional Site Study Report and the Supplemental Data Report and agreed with Fugro's recommendation that the exposed soil along the embankment be capped as an interim remedial measure, until such time that the Site could be remediated along with Site redevelopment plans. The DTSC placed no time limit on the completion of the work. The DTSC also indicated that they would be developing a Land Use Covenant (LUC) for the Site which would likely cite the need for a site-specific Soil and Groundwater Management Plan when future redevelopment occurs.

In July 2008, Mr. Thomas Price with the DTSC prepared a draft Voluntary Cleanup Agreement (VCA) for signature such that once the VCA was recorded, a LUC to restrict future usage of the Site would be prepared. The VCA was not formalized as the Site owner had begun new plans to redevelop the Site which were under review by the City of Berkeley. Redevelopment plans included installing a Fire Access Way west of the Site at the request of the City of Berkeley, which would have completely encapsulated or removed the exposed embankment area. However, the redevelopment project was disbanded after several years of negotiating, and no additional activities regarding the embankment area have been undertaken.

Since 2008, Fugro has completed annual inspections at the Site to confirm that Site uses and surficial conditions have remained unchanged. During Fugro's October 2017 inspection, Site conditions were observed to remain substantially unchanged; no redevelopment has occurred, the areas overlying the former termite control business warehouse area are still in warehousing use, and access to the embankment areas are restricted. Fugro has also provided consultation to Site ownership regarding restricting any contact with Site soils and groundwater by untrained personnel. Photographs obtained during the last inspection are presented in Appendix A. Fugro's next Site inspection is scheduled for October 2018.

SUMMARY OF POTENTIAL HUMAN HEALTH RISKS

Several phases of soil and groundwater investigations have been voluntarily conducted both onsite and in the immediately adjacent railroad right-of-way. Investigations conducted at the Site by Herst Ventures and UPRR support the finding that impacts to soil and groundwater due to releases of termite control compounds occurring from past

operations at the Site are localized to subsurface materials covered with structurally reinforced concrete slabs and thickened foundation systems, or are located within and below the immediately adjacent embankment, which resides in a land/public use restricted area owned by the UPRR.

The existing physical barriers and institutional controls effectively limit routine human contact with the impacted soils and groundwater. Concentrations of PCP and chlordane in the embankment soil have been observed to decrease since testing was first conducted by UPRR in the mid-1990s. Therefore, in their present state, residual impacted soils do not appear to be posing a significant risk to human health and the environment. The concentrations of PCP, TPHd, and chlordane mixture in groundwater have not significantly changed over the past 20 years. While the concentrations detected do exceed MCL's, the local groundwater is brackish and not considered a useable drinking water source. It is Fugro's opinion that existing Site and subsurface conditions are effectively limiting the mobility of the groundwater plume below the Site. Additionally, the concrete floor slab and foundation system, which were constructed in 1989, are acting to limit infiltration of surface water, which in turn serves to normalize or stabilize groundwater fluctuations below the structure. These circumstances, when viewed in conjunction with the chemical data, strongly supports the finding that the plume is stable. The closest potential receptor at potential risk would be an aquatic receptor located more than 500 feet to the west. However, since the plume has not shown any significant migration over the past 20 years, the risk of exposure to an aquatic receptor is low.

RECOMMENDATIONS

Although redevelopment of the Site is not currently planned, Fugro prepared the SGMP presented in Appendix B to document the mitigation processes already in place to manage potential exposures during any onsite activities, including but not limited to landscaping, utility maintenance, tenant improvements, etc. until such time that redevelopment is slated to occur.

CLOSING

The information presented herein was meant to provide a brief overview of general site conditions, including environmental investigations completed to date, to provide case background information. Fugro will continue to conduct annual inspections at the Site to confirm that conditions continue to remain unchanged. As previously requested, all available historic environmental reports were uploaded to Geotracker. A copy of this letter report will also be uploaded to Geotracker. If you should have any questions regarding the information presented in this report, please call the undersigned at (925) 949-7100.

Sincerely,
Fugro USA Land, Inc.

Karen A. Emery-Tonkovich, P.G.
Associate Geologist

Jeriann Alexander, P.E. REA
Principal Engineer

Copies Submitted: One electronic copy

FIGURES

SOURCE: This Vicinity Map was based on 2006 Street Guide, Bay Area Counties, The Thomas Guide.

NORTH

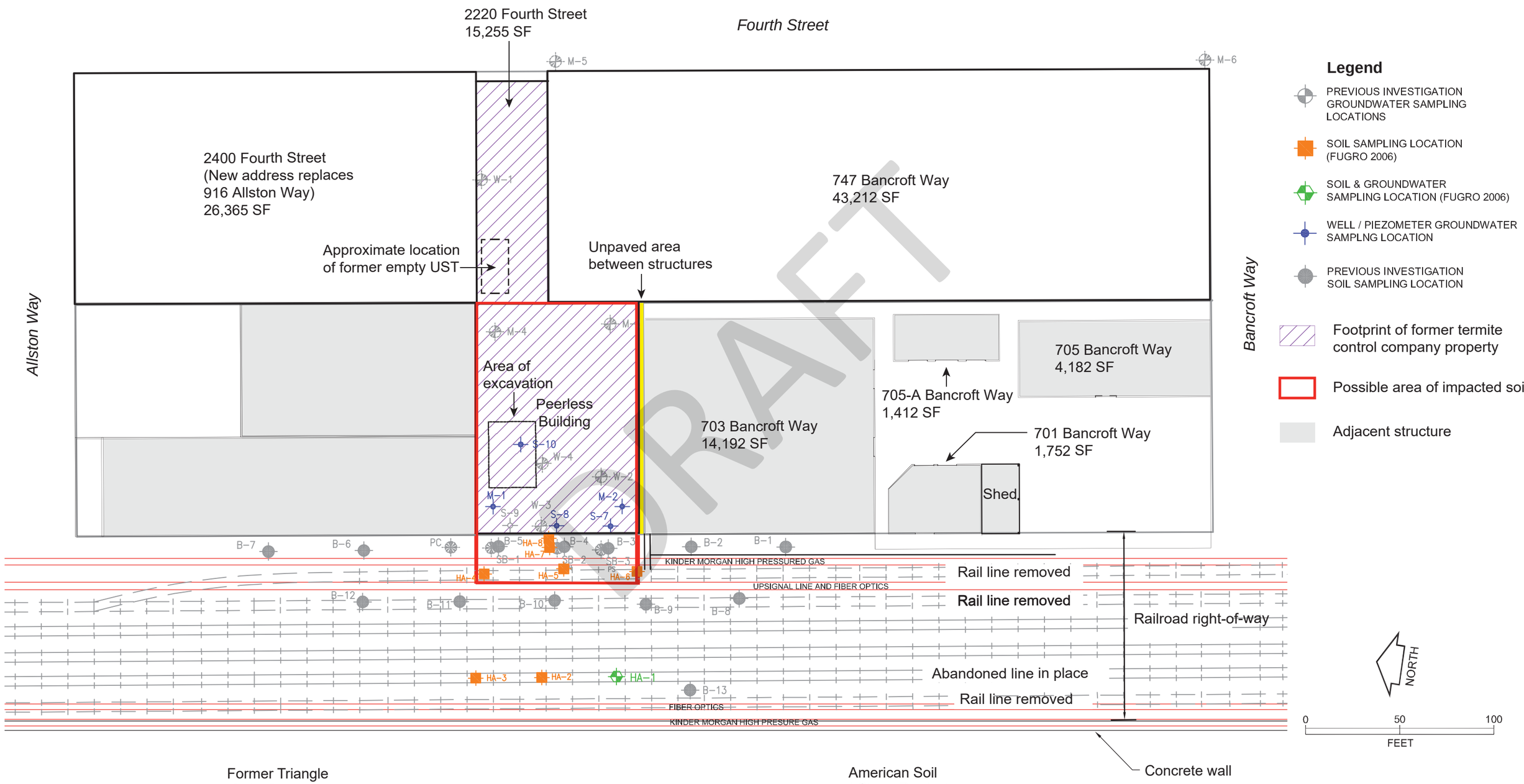
0 2000 4000

FEET

VICINITY MAP
2220 4th Street
Berkeley, California

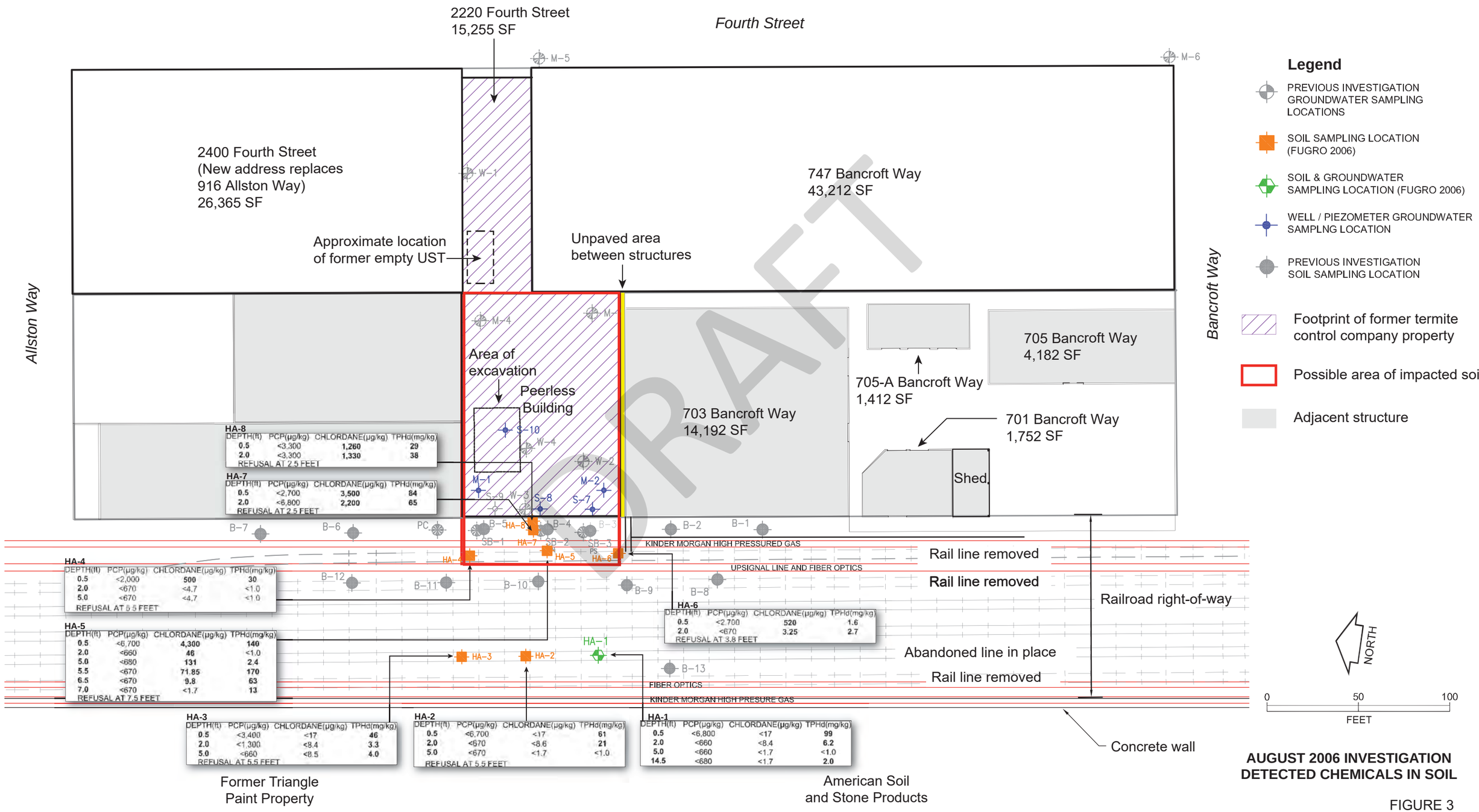
FIGURE 1

G: \jobdocs\698\698.004\Drawing\A698_004_001.dwg 2-28-07 09:29:22 AM rwong



SITE PLAN

FIGURE 2



AUGUST 2006 INVESTIGATION DETECTED CHEMICALS IN SOIL

FIGURE 3

2400 Fourth Street
(New address replaces
916 Allston Way)
26,365 SF

2220 Fourth Street
15,255 SF

Fourth Street

Allston Way

Bancroft Way

747 Bancroft Way
43,212 SF

705 Bancroft Way
4,182 SF

705-A Bancroft Way
1,412 SF

703 Bancroft Way
14,192 SF

701 Bancroft Way
1,752 SF

Approximate location
of former empty UST

Unpaved area
between structures

Area of
excavation

Peerless
Building

M-1 M-2 M-3 M-4 M-5 M-6
W-1 W-2 W-3 W-4
S-7 S-8 S-9 S-10
HA-1 HA-2 HA-3 HA-4 HA-5 HA-6 HA-7 HA-8
SB-1 SB-2 SB-3
B-1 B-2 B-3 B-4 B-5 B-6 B-8 B-9 B-10 B-11 B-12 B-13
PC PS

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
May-88	1.2	<0.5	102	<3	NA
Aug-93	NA	NA	NA	<30	NA
Oct-93	16	<5	170	NA	NA
Nov-94	<5	<5	130	<50	<0.5

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
May-88	<0.5	<0.5	67	<3	NA
Aug-93	NA	NA	NA	<30	NA
Oct-93	13	<10	140	NA	NA
Nov-94	NA	NA	NA	NA	NA

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
Jun-85	<0.5	<0.5	34	<10	<0.3
Feb-86	<0.5	<0.5	18	<10	NA
May-87	30,000	<100	<100	<1	NA
Jul-87	17,000	<100	<100	NA	NA

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
May-88	115	0.8	82	<3	NA
Aug-93	NA	NA	NA	<30	NA
Oct-93	110	12	130	NA	NA
Nov-94	110	18	100	<50	<0.5

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
Nov-94	24	<5	<5	5,000	56
Sep-06	NA	NA	NA	9,400	1.9

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
Jun-85	<25	<25	950	120	<0.3
Feb-86	<5	<5	440	860	NA
May-87	<0.5	<0.5	<0.5	1700	NA
Jul-87	<10	<10	1,300	NA	NA

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
May-88	<0.5	<0.5	184	216	NA
Aug-93	NA	NA	NA	5,000	NA
Oct-93	30	<5	300	NA	NA
Nov-94	44	<5	310	800	<5
Aug-06	NA	NA	NA	3,100	<4.8

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
Nov-94	<5	<5	3	130	<0.5

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
Jun-85	<25	<25	420	200	<0.3
Feb-86	<2	<2	280	11,000	NA
May-87	65	<2.5	260	8,000	NA
Jul-87	65	<2.5	340	NA	NA

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
Nov-94	<5	<5	<5	2,300	<49
Sep-06	NA	NA	NA	11,000	<2.4

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
May-88	<0.5	<0.5	2.6	<3	NA
Aug-93	NA	NA	NA	<30	NA
Oct-93	<5	<5	4	NA	NA
Nov-94	<5	<5	4	<50	<0.5

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
Jun-85	<0.5	<0.5	28	26,000	NA
Feb-86	<0.5	<0.5	<0.5	3,400	NA
May-87	91	<10	1,200	1,500	NA
Jul-87	<0.5	<0.5	12	NA	NA

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
May-88	<0.5	<0.5	<0.5	1,740	NA
Aug-93	NA	NA	NA	1,900	NA
Oct-93	10	<5	<5	NA	NA
Nov-94	6	<5	<5	9,000	<50
Aug-06	NA	NA	NA	4,300	<5.0

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
Nov-94	20	<25	<25	7,000	620
Sep-06	NA	NA	NA	9,300	9.4

Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	TCE (µg/L)	PCP (µg/L)	Chlordane (µg/L)
Sep-06	NA	NA	NA	<0.71	<0.3

KINDER MORGAN HIGH PRESSURED GAS
UPSIGNAL LINE AND FIBER OPTICS
FIBER OPTICS
KINDER MORGAN HIGH PRESURE GAS

Rail line removed
Rail line removed
Railroad right-of-way
Abandoned line in place
Rail line removed
Concrete wall

Former Triangle
Paint Property

American Soil
and Stone Products

Legend

- PREVIOUS INVESTIGATION GROUNDWATER SAMPLING LOCATIONS
- SOIL SAMPLING LOCATION (FUGRO 2006)
- SOIL & GROUNDWATER SAMPLING LOCATION (FUGRO 2006)
- WELL / PIEZOMETER GROUNDWATER SAMPLNG LOCATION
- PREVIOUS INVESTIGATION SOIL SAMPLING LOCATION
- Footprint of former termite control company property
- Possible area of impacted soil
- Adjacent structure

NORTH

0 50 100
FEET

HISTORIC DETECTED CHEMICALS IN GROUNDWATER

FIGURE 4

APPENDIX A
OCTOBER 2017 SITE VISIT PHOTOGRAPHS

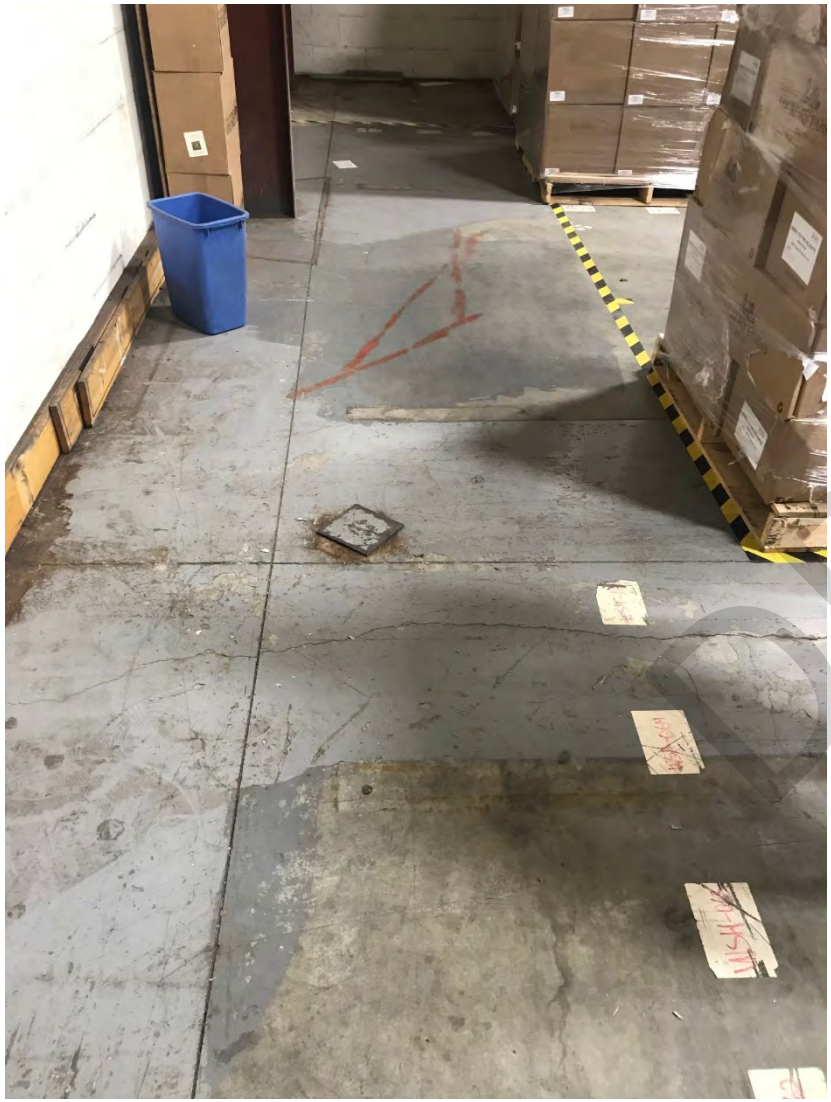
SITE RECONNAISANCE – OCTOBER 31, 2017

View looking northeast at the soil embankment along the rear west wall of the 2220 Fourth Street building.

View taken from the top of the soil embankment looking south along the west wall of the 2220 Fourth Street building.

SITE RECONNAISANCE – OCTOBER 31, 2017

View of interior monitoring well/piezometer location (small rectangular cap in center of photo) located within western part of the 2220 Fourth Street building.



View of interior monitoring well/piezometer location within western part of the 2220 Fourth Street building.

SITE RECONNAISANCE – OCTOBER 31, 2017

View of typical interior floor detail, showing concrete floors covering the entirety of the 2220 Fourth Street building footprint.

View of typical interior floor detail, showing concrete floors covering the entirety of the 2220 Fourth Street building footprint.

APPENDIX B
SOIL AND GROUNDWATER MANAGEMENT PLAN

SOIL AND GROUNDWATER MANAGEMENT PLAN

This SGMP is intended for use in conjunction for any potential onsite activities where subsurface soil and/or groundwater may be disturbed within the area outlined in red on the attached Plate (herein referred to as Area of Possible Impact). This SGMP is intended to supplement, not supersede, any required construction permits, including a Storm Water Pollution Protection Plan (SWPPP), a site-specific Health and Safety Plan (HASP), Fugitive Dust Control Plan (DCP), or others that may be required to complete any subsurface work.

Based on the previous investigations conducted at the Site, soil and groundwater within the Area of Possible Impact are known or likely to be contaminated. Work within this area requires that any Contractor or maintenance/repair workers have awareness training regarding the potential contaminants of concern and routes of potential exposure. Contractors are required to have a CLSB Class A & Hazardous Waste Licenses.

The following describes the soil and groundwater management practices that Contractors or onsite workers will be required to incorporate into their planning and project implementation.

Work Plans

All subsurface disturbance activities within the Area of Possible Impact are to be described in a work plan submitted to an environmental professional (Fugro) for review prior to any work. The environmental professional will review the work plan to ensure that steps are in place to mitigate construction and maintenance worker exposure and for appropriate management of potentially impacted materials. The work plans are to include at a minimum a task list and a Health and Safety Plan.

Specific Training for Soil or Groundwater Removal Activities

Any Contractor working within the Area of Possible Impact must have current Hazardous Waste Operations and Emergency Response (HAZWOPER; 29 CFR 1910.120) training.

Permits and Notifications

If required and/or appropriate for the scope of planned work, Contractors will obtain all permits and make all notifications to perform all aspects of work. This may include obtaining permits from the City of Berkeley and other agencies as required. Notifications should also be made to various agencies as required, including but not limited to the City of Berkeley and possibly the designated regulatory authority.

Contractors will also be required to notify Underground Service Alert (USA) a minimum of 48-hours prior to the start of any intrusive activities.

Proposition 65 requires that any person in the course of doing business provide clear and reasonable warning to individuals before knowingly and intentionally exposing them to any chemicals listed as subject to Proposition 65. PCP and chlordane are listed under Proposition 65. In its current state, impacted soils below the building footprint within the Area of Possible Impact shown on the attached Plate are capped by the current slab and foundation system. However, should work at the Site include any work within the Area of Possible Impact (below the existing slab or foundation system or any disturbance of the soil embankment west of the building), subsurface work would likely

encounter PCP and/or chlordane impacted soils and groundwater. As a result, any Contractor working in this area is required to provide posted signage providing a warning under Proposition 65.

Work notifications and permits will require a commitment by any Contractor to implement standard dust control methods, to minimize tracking soil offsite, to contain disturbed soil and groundwater, and to mitigate storm water and waste discharges to storm drains and drainages, during any subsurface activities.

Storm Water Pollution Prevention

Best Management Practices (BMPs) should be used during all intrusive activities to prevent sediment and contaminants from leaving the Site and entering City streets or storm drains. Sediment and erosion protection controls should be the primary methods for minimizing discharges of sediments from the Site. Sediment and erosion protection controls include the following:

- Placing straw bale barriers around entrances to storm drains and catch basins within work areas.
- Protecting or closing storm drains located within work areas
- Constructing berms or erecting silt fences at entrances to the Site, perimeters of work areas, soil stockpiles, or as needed to divert runoff from contacting exposed soil.
- All storm water runoff in the immediate vicinity will be diverted around or contained within the work area.
- Covering soil stockpiles, as described further below.

Soil Excavation and Handling

Any Contractor performing soil excavation, trenching, handling of soils within the Area of Possible Impact including trenching, work extending below the existing building foundations, or work within the soil embankment located west of the existing building, stockpiling, and/or loading and offsite disposal of materials, is subject to the provisions specified in this SGMP and all applicable local, state, and federal statutes, regulations, and guidelines.

As previously discussed, known contaminated soil is present within the Area of Possible Impact shown on the attached Plate. As a result, any soil excavated during Site/tenant improvement activities within this area should be stockpiled and tested in accordance with this SGMP to determine the appropriate management of the materials Please note that under no circumstances will soil or import fill containing contaminants of concern be allowed to be used at the Site.

In the event that excavation activities encounter unanticipated conditions including but not limited to underground storage tanks (USTs), visibly impacted soils, and/or other contaminated materials, work must stop and the Site owner and the environmental professional (Fugro) must be contacted to evaluate any risks posed.

Soil Reuse

Excess soil from outside the Area of Possible Impact shown on the attached Plate may be reused if capped below concrete slabs or foundation materials and following review and approval of the laboratory test results suggesting that the materials do not contain contaminants of concern above regulatory thresholds.

Dust Control

Control of dust shall be necessary during any intrusive construction/maintenance activities which disturb soils at this Site. Activities that have a potential to generate particulates and require mitigative measures to control fugitive dust include grading, soil excavation/re-working, soil management control, utility trenching activities, stockpiling, site vehicular traffic, and wind erosion. Dust control measures during earthwork activities shall include the following:

- Vehicle speeds will be limited to 5 miles per hour at the site.
- Excavation activities will be controlled to minimize generation of dust.
- Areas to be excavated will be thoroughly wetted before starting soil excavation and loading activities.
- Drop heights will be kept to a minimum while loading transport vehicles.
- All stockpiles that are not being actively handled will be covered with weighted plastic sheeting or tarps.
- Trucks and transport vehicles will be covered when hauling soil or other loose material.
- Daily sweeping with brooms will be conducted if visible soil is observed on paved onsite access routes or parking areas.
- Daily, or more frequent if needed, sweeping with a street sweeper will be conducted if visible soil material is carried onto public streets.
- Water will be misted or lightly sprayed, as needed, using a watering truck and/or hoses to prevent formation of dust while excavating soil, transferring soil on-site, and loading or decontaminating transportation vehicles.
- In the event that wind speeds result in visible dust emissions or exceedances of dust action levels that cannot be controlled by the methods describe above, soil moving activities will be halted until wind speeds decrease and no visible emissions are observed.
- Cover soil stockpiles, as described below
- Tarpaulins or other effective covers shall be used for trucks carrying soils that travel on public streets.

Soil Stockpile Handling and Management

Temporary stockpiling of excavated soils may be required prior to offsite disposal. Contractors will be required to create a separate stockpile if visibly contaminated and/or odorous soil are encountered, such soils shall be segregated and stockpiled separately from non-visibly impacted soil. Please note that the Contractor is required to segregate and stockpile soils excavated from within the Area of Possible Impact from those soils excavated from areas outside of the Area of Possible Impact.

Plastic sheeting (minimum thickness of 10 mils) shall be placed under each stockpile to prevent migration. Each stockpile will be completely covered with plastic sheeting (minimum thickness of 10 mils) when not in use or at any time required to prevent migration of dust offsite. The cover must overlap a minimum of 2 feet and be sufficiently weighted/secured using stakes, hay bales, or other methods to prevent the cover from blowing away or billowing, and such that no portion of the soil is exposed to the atmosphere.

Prior to sheeting, stockpiled soils shall be adequately wetted with water once daily at a minimum or sufficiently to keep piles visibly wet and control fugitive emissions.

Stockpiles will be covered at the end of each work shift regardless of precipitation. If construction work is to be performed during the rainy season, then all stockpiles are to be surrounded by hay bales and/or silt traps to minimize sediment runoff.

Waste Characterization Sampling and Testing

The Contractor will coordinate with the environmental professional (Fugro) to evaluate excess or surplus soil for offsite disposal and reuse. Fugro will collect a minimum of one four-point composite sample from each stockpile (up to 500 cubic yards) requiring disposal. Each four-point composite will be comprised of four individual (discrete) samples that will be collected at random locations within four equal areas of the stockpile to provide equal representation of soil volume.

The discrete soil samples will be collected using hand sampling equipment and transferred to laboratory-provided sterile containers with Teflon lids. All samples will be labelled with a unique sample identification, date/time of sample collection, sampler's initials, and project number.

Samples will be placed on ice and transported under proper chain-of-custody protocols to a California-certified laboratory for compositing and analysis. Samples will be analyzed for the following:

- Total petroleum hydrocarbons as gasoline, diesel, and motor oil (TPHg, TPHd, and TPHmo) using EPA Method 8015M with silica gel clean-up
- Volatile Organic Compounds (VOCs) using EPA Method 8260B
- Semi-volatile Organic Compounds (SVOCs) using EPA Method 8270C SIM
- Organochlorine pesticides using EPA Method 8081
- 17 Title 22 Metals using EPA Method 6010/7471

If the results of the 17 Title 22 metals analyses performed indicate that additional sample analyses are required to determine if the soils would be classified as hazardous for disposal, the following additional leachate tests will be performed.

- If the concentration of any metal (in mg/kg) is greater than 10 times the respective California Soluble Threshold Limit Concentration (STLC) value (in mg/L), the sample will be analyzed for soluble metals using the Waste Extraction Test (WET) method to determine if the soil is considered a California Hazardous, non-RCRA Hazardous Waste.
- If the concentration of any metal (in mg/kg) is at or greater than 20 times the respective USEPA's Toxicity Characteristic Leaching Procedure (TCLP) threshold (in mg/L), the sample will be analyzed for soluble metals using TCLP test methods to determine if the soil is considered a RCRA Hazardous Waste.

Wash water collected and drummed as part of any equipment decontamination activities (see below) will also be disposed of offsite. Samples will be collected by Fugro and analyzed for the following:

- TPHg, TPHd, and TPHmo using EPA Method 8015M with silica gel clean-up
- VOCs using EPA Method 8260B

- SVOCs using EPA Method 8270C SIM
- Organochlorine pesticides using EPA Method 8081
- 17 Title 22 Metals using EPA Method 6010/7471

Fugro will forward the analytical laboratory reports to the Contractor as soon as they are received. The Contractor will then utilize the analytical testing results to complete a waste profile for submission to the selected receiving facility for approval. The Contractor working at the Site will be required to contact the selected receiving facility and determine if additional sampling and/or analytical test methods beyond what is stated herein will be required. The Contractor will be required to forward this information to Fugro prior to sample collection.

Transportation and Disposal

Offhaul of surplus soil and/or waste water will be completed in compliance with California Department of Transportation (DOT), and other applicable federal, state, and local regulations. The Contractor will perform all load-out activities to minimize fugitive dust and soil erosion. A state-approved manifest system shall be used so that wastes can be tracked from generation to ultimate disposal. The manifests shall comply with all provisions of the appropriate transportation and disposal regulations.

Appropriate vehicles and operating practices shall be used to prevent spillage or leakage of materials from occurring onsite or in route to/from construction zone. Trucks shall be properly lined and shall be securely covered prior to exiting. All transport vehicles shall be thoroughly decontaminated and inspected before leaving the Site. Decontamination methods will include vacuuming and brushing to remove loose soils on vehicle tires and exteriors. Decontamination procedures including collection of wash waters, if any, will be performed in accordance with the requirements of this SGMP.

All vehicles leaving the work area(s) shall be inspected to check that no soil adheres to its wheels or undercarriage. Any such material must be removed at the work area before the truck is allowed to exit. Designated roadways that the vehicles take to and from the Site shall be regularly inspected to ensure that no leakage or tracking of mud has occurred. Any soil or mud visible from leaking or tracking along the designated roadways shall be cleaned immediately by the Contractor and the Contractor will implement additional procedures as necessary to prevent a recurrence.

Imported Fill

Any fill material/soil that may be imported to the Site will be subject to the requirements below for the project and require the approval of Owner and Fugro prior to import use. The Contractor must identify to Herst Ventures and Fugro the fill source and provide copies of analytical testing a minimum of two weeks prior to import use. Samples will be collected in accordance with the following frequencies (DTSC, 2001)[1]:

Volume of Import	Samples per Soil Volume
Up to 1000 CY	One (1) sample per 250 Cubic Yard (CY)
1000 to 5000 CY	Four (4) samples for first 1000 CY and One (1) sample per each additional 500 CY
>5000 CY	Twelve (12) samples for first 5000 CY and One (1) sample per each additional 1000 CY

[1] Information Advisory Clean Imported Fill Material, Department of Toxic Substances Control. October 2001 (DTSC, 2001).

The analyses shall include the following:

- TPHg, TPHd, and TPHmo by EPA Method 8015M with silica gel clean-up
- VOCs by EPA Method 8260
- SVOCs by EPA Method 8270C, with detection limits less than ESLs
- 17 Title 22 Metals by Method 6010
- PCBs by EPA Method 8082
- Organochlorine Pesticides by EPA Method 8081

The analytical results will be compared to the SFRWQCB's Tier 1 ESLs. To compare metals results with those typical of naturally-occurring values, the Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California, Kearney Foundation Special Report - Background Concentrations of Trace and Major Elements in California Soils, dated March 1996, will also be reviewed.

Dewatering

Given the shallow depth to water at the Site, Contractors may be required to periodically dewater deep excavations. If required, the Contractor shall periodically pump groundwater from the open excavations into a Baker tank or other water storage container, as needed. The Contractor will be required to profile the water for offsite disposal or for discharge to the sanitary sewer. If discharged to the sanitary sewer, the Contractor will be required to obtain a Discharge Permit from the City of Berkeley. The Contractor will be required to comply with all terms and conditions of the Discharge Permit, including but not limited to sampling and testing of the groundwater prior to discharge. It should be noted that the groundwater may need to be treated through filters, including but not limited to, granular activated carbon (GAC) filters prior to discharge.

Decontamination Measures

All contractor equipment including, but not limited to earthwork equipment and transportation vehicles, that come into contact with soils and groundwater within the Area of Possible Impact will be decontaminated prior to leaving the Site. Decontamination methods shall consist of scraping, brushing, and/or vacuuming to remove dirt on vehicle exteriors and wheels. If dry methods are not adequate, steam cleaning, high pressure washing, and cleaning solutions should be used. Wash waters should be collected, sampled, and disposed in accordance with provisions set forth in this SGMP under Waste Characterization Sampling and Testing.

CONTINGENCY PLANNING

In the event of an unforeseen situation during subsurface intrusive activities, the Contractor working at the Site will notify Herst Ventures immediately. In addition, the following contingency measures shall be implemented at the Site in the event that an unforeseen environmental condition occurs during Site excavation or maintenance activities.

Notifications of Unforeseen Environmental Conditions

In the event of an unforeseen environmental situation (e.g., visual or olfactory identification of unknown contamination, and/or identification of buried objects including underground storage tank, drums, etc.) at the site during contractor activities, the Contractor will immediately suspend all work activities in the immediate area and notify Herst Ventures

and Fugro. The Contractor will also implement access control measures adequate to provide necessary Site protection to onsite workers and the public during the evaluation phase.

Visual and olfactory identification of an unknown condition include, but is not limited to the following:

- Observance of oily, shiny, and/or opalescent soil, or soil that is saturated with free-phase petroleum product,
- Significantly stained or discolored soil that may indicate a potential source of contamination,
- Observance of groundwater sheen, or droplets of free-phase product on the groundwater surface,
- Soil and/or groundwater that has a significant chemical or hydrocarbon-type odor,
- Any other indicators that contamination may be present.

Fugro will evaluate the situation and direct the Contractor on the appropriate response actions required to address the situation. If necessary, Fugro will notify the SFRWQCB of the situation and proposed response actions proposed and or taken.

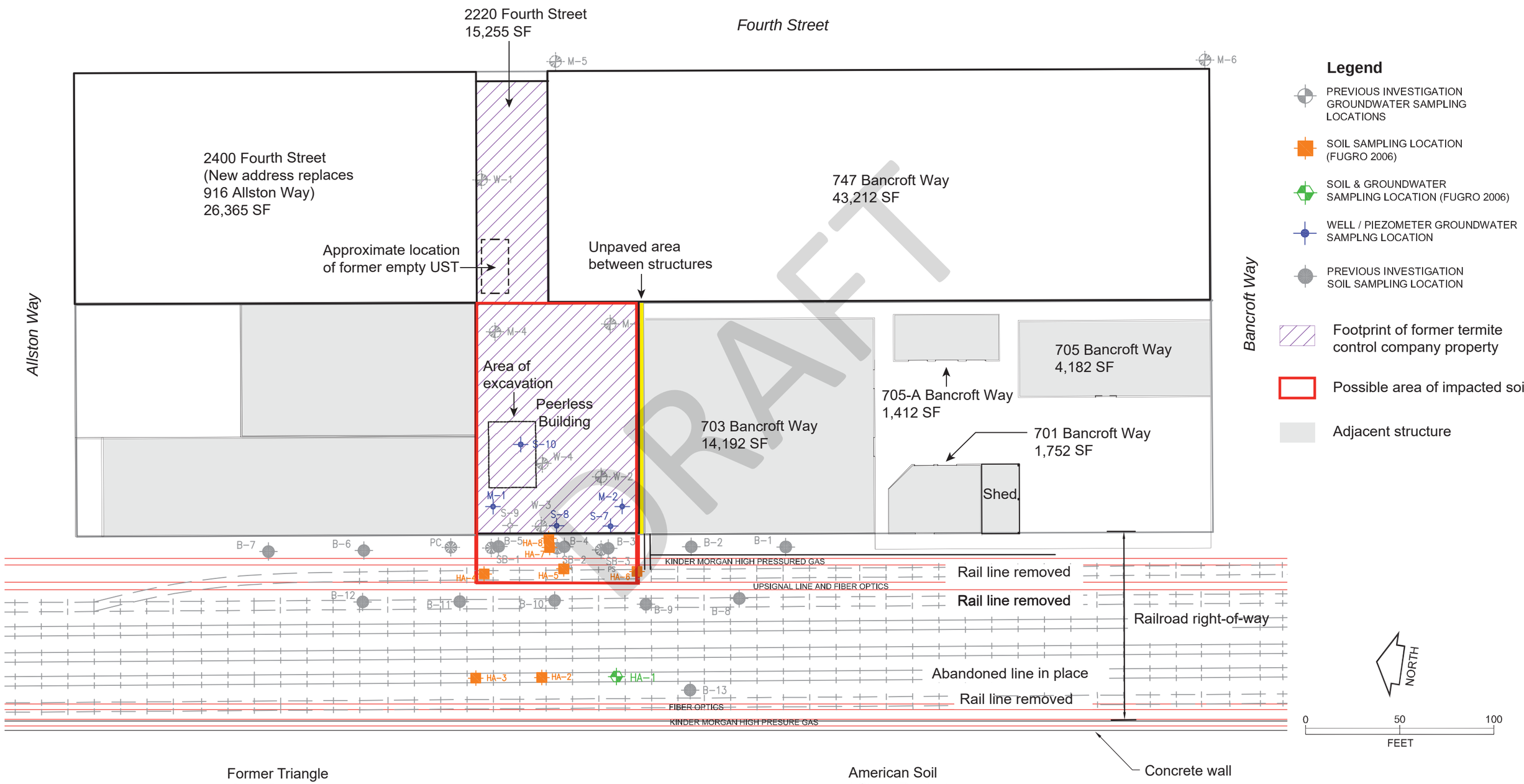
Assessment of Suspect Soil or Groundwater

Fugro will conduct a preliminary assessment to determine if the suspect soil or water are a risk to human health and/or the environment as well as delineate the extent, if any, of contamination identified. Fugro will conduct air sampling around the perimeter of the secured area using a photoionization detector (PID) to measure VOCs in the breathing zone and a lower explosive limit (LEL)/O2 meter to measure concentrations of combustible gasses and available oxygen. If the air sampling suggests a risk to workers at the Site, the site access control barriers will be relocated to provide adequate protection to Site personnel. If field observations and/or sampling indicate that the conditions represent a significant risk, Fugro will notify the SFRWQCB of the conditions and proposed remedial steps to remediate the area for the continuation of construction activities. If the conditions are considered de minimis and do not pose a threat to human health or the environment and would not be subject to an enforcement action by the SFRWQCB or other lead agency, Fugro will release the area to the Contractor for continued work activities.

Waste Profiling and Disposal

Soils or groundwater slated for off-haul as part of the contingency work process will be evaluated using data collected during the sampling phase. A waste profile will be submitted to the proposed receiving facility for acceptance of the waste. If the materials are classified as hazardous, an EPA identification number will be obtained prior to off-haul and disposal. Transportation of the waste will be conducted by a licensed waste hauler in compliance with California DOT, and other applicable federal, state, and local regulations, and in accordance with provisions included in this SGMP.

FIGURE



SITE PLAN

FIGURE 1

APPENDIX C

Historical Research Documentation

Herst Properties

2229 4th Street

Berkeley, CA 94710

Inquiry Number: 5833407.3

October 17, 2019

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/17/19

Site Name:

Herst Properties
2229 4th Street
Berkeley, CA 94710
EDR Inquiry # 5833407.3

Client Name:

Haley & Aldrich, Inc.
2033 N. Main Street
Walnut Creek, CA 94596
Contact: Marie Rose Javier

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Haley & Aldrich, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 54CF-4D05-A7C2

PO # NA

Project 134361-002

Maps Provided:

1980
1950
1929
1911
1903

Sanborn® Library search results

Certification #: 54CF-4D05-A7C2

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

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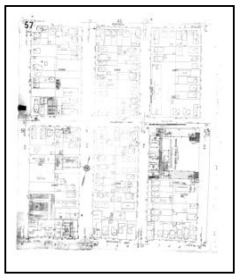
Sanborn Sheet Key

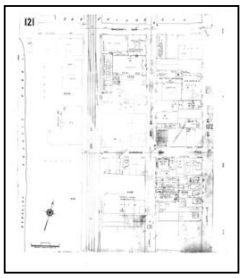
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1980 Source Sheets

Volume 1, Sheet 56
1980

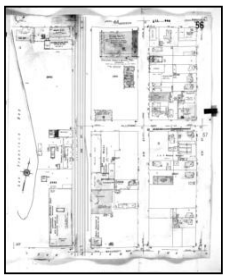


Volume 1, Sheet 57
1980

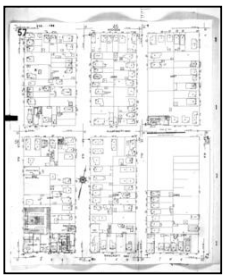


Volume 2, Sheet 121
1980

1950 Source Sheets



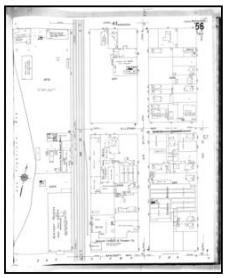
Volume 1, Sheet 56
1950



Volume 1, Sheet 57
1950

Volume 2, Sheet 121
1950

1929 Source Sheets



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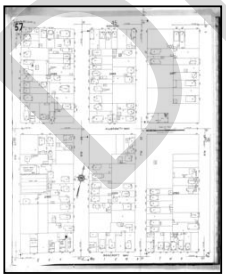
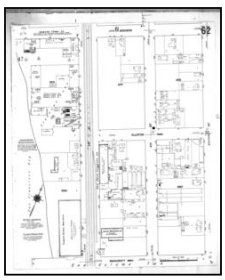
1929

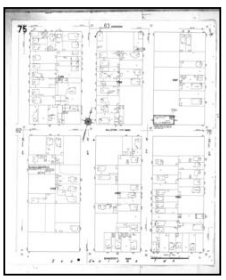


Volume 1, Sheet 57
1929

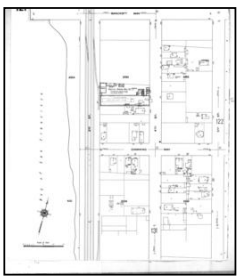
1911 Source Sheets



Volume 1, Sheet 62
1911



Volume 1, Sheet 75
1911



Volume 2, Sheet 121
1911

Sanborn Sheet Key

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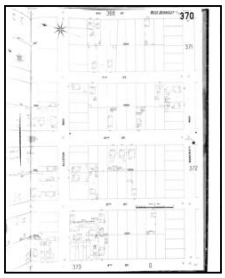
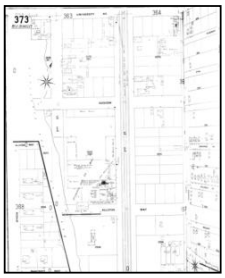
1903 Source Sheets

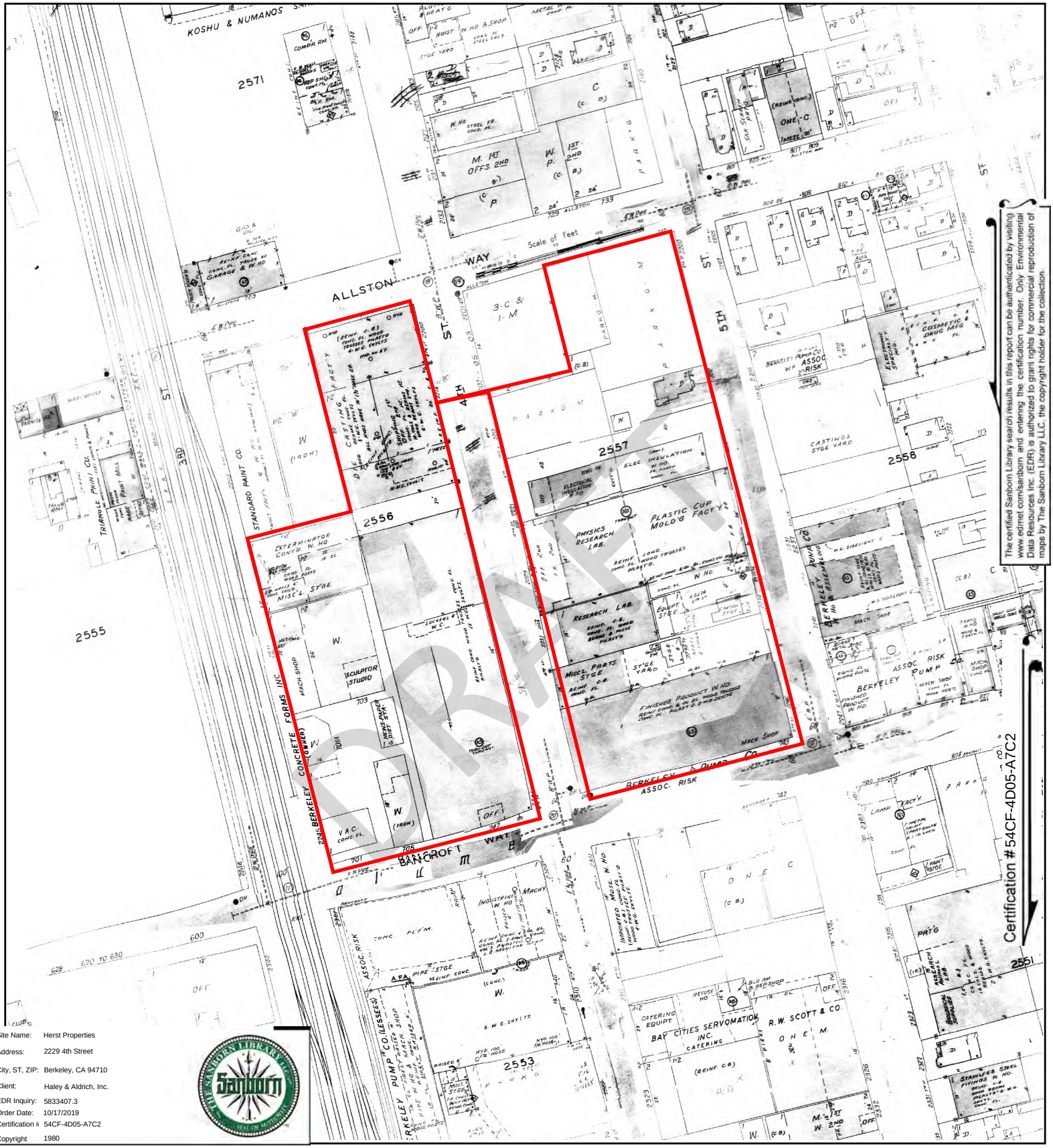


Volume 3, Sheet 370
1903

Volume 3, Sheet 372
1903



Volume 3, Sheet 373
1903



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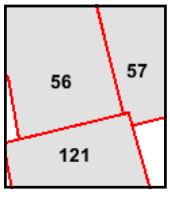
Site Name:	Herst Properties
Address:	2229 4th Street
City, ST, ZIP:	Berkeley, CA 94710
Client:	Haley & Aldrich, Inc.
EDR Inquiry:	5833407.3
Order Date:	10/17/2019
Certification #:	54CF-4D05-A7C2
Copyright	1980

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



Volume 2, Sheet 121
Volume 1, Sheet 57
Volume 1, Sheet 56

0 Feet 150 300 600

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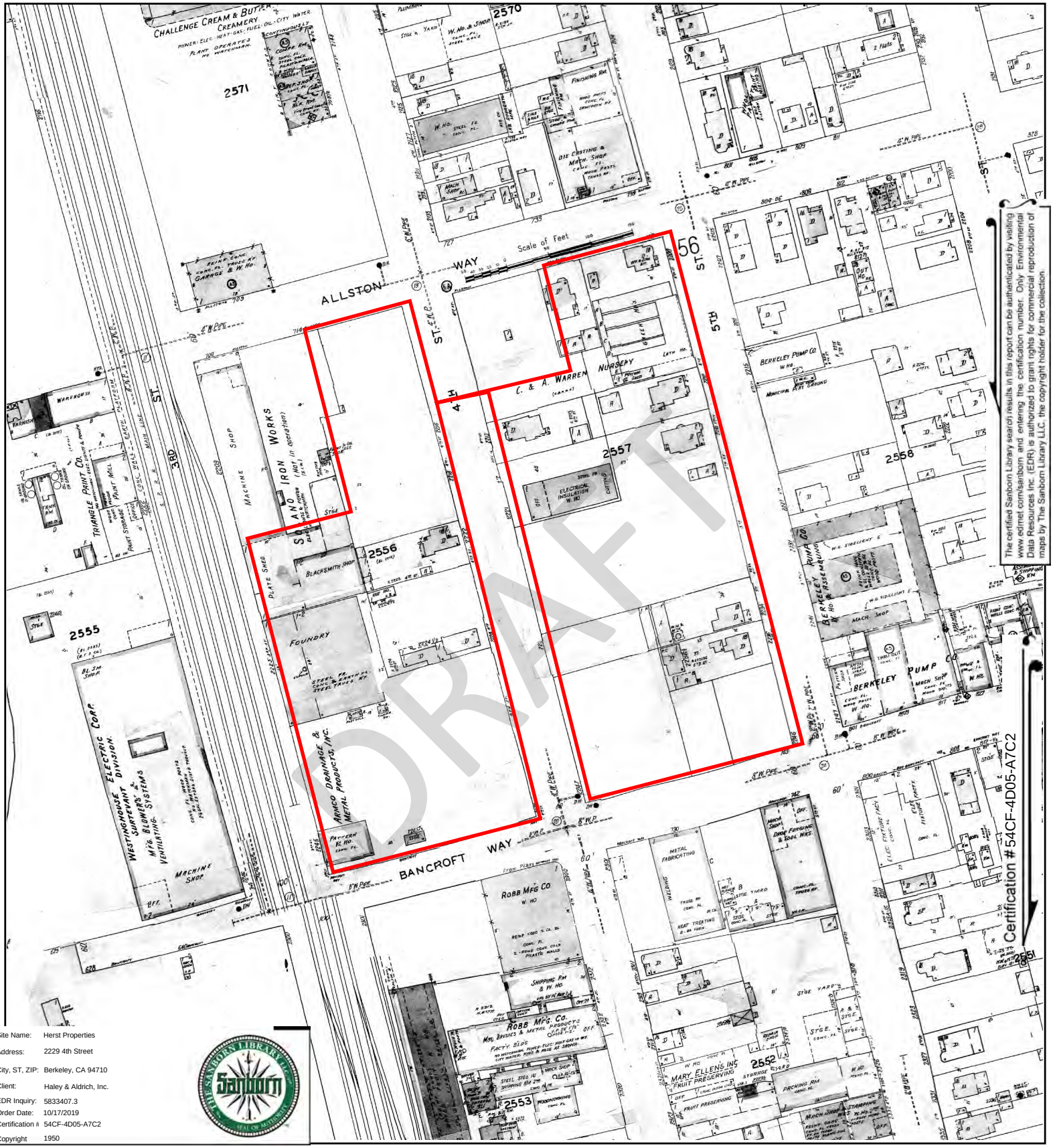

Site Name:	Herst Properties
Address:	2229 4th Street
City, ST, ZIP:	Berkeley, CA 94710
Client:	Haley & Aldrich, Inc.
EDR Inquiry:	5833407.3
Order Date:	10/17/2019
Certification #:	54CF-4D05-A7C2
Copyright	1950

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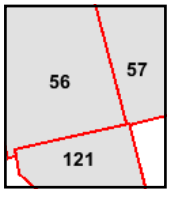

Volume 2, Sheet 121
Volume 1, Sheet 57
Volume 1, Sheet 56

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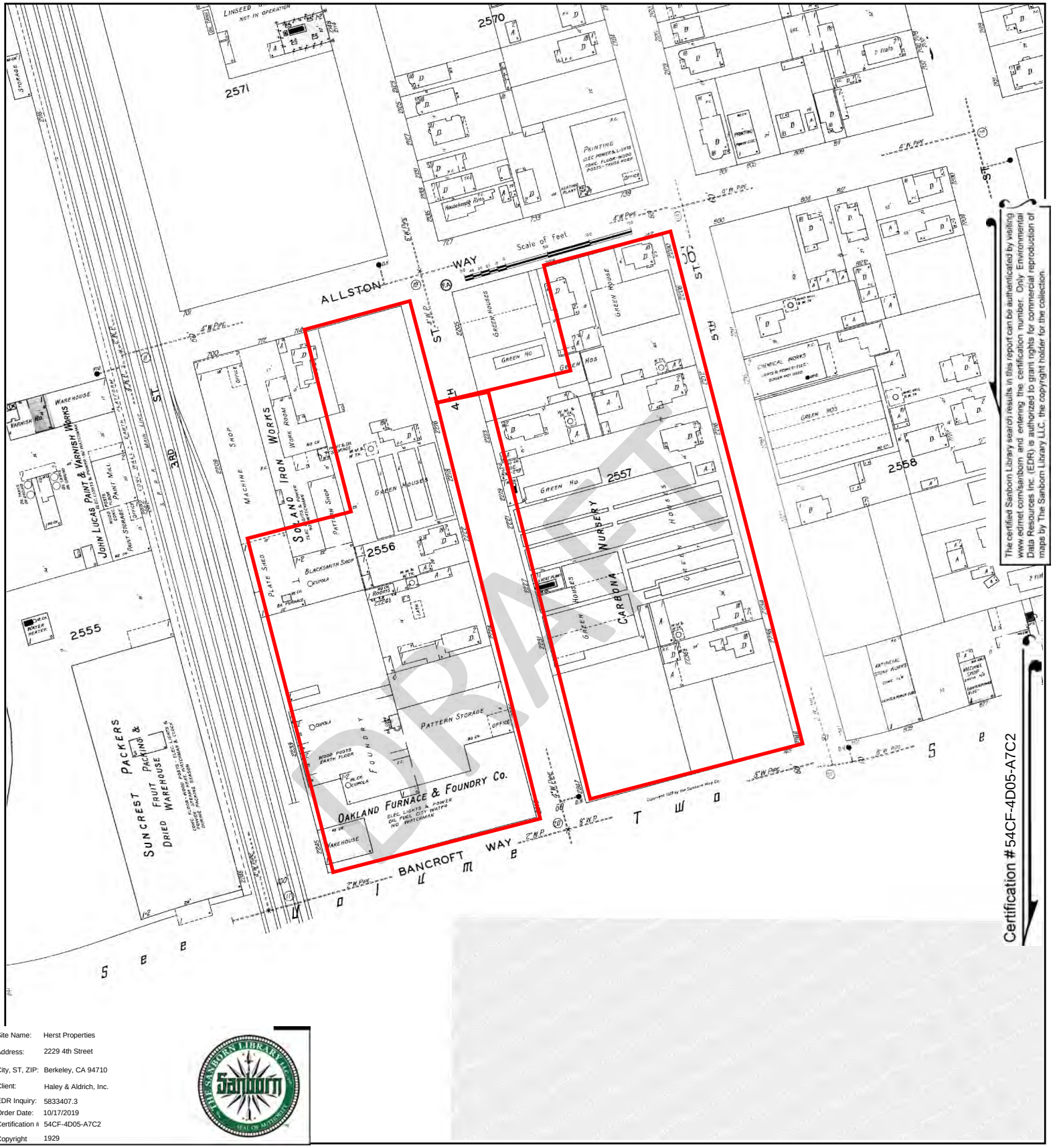
Certification #54CF-4D05-A7C2



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Address:	2229 4th Street
City, ST, ZIP:	Berkeley, CA 94710
Client:	Haley & Aldrich, Inc.
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Certification #:	54CF-4D05-A7C2
Copyright	1929

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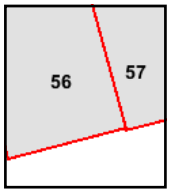

Volume 1, Sheet 57
Volume 1, Sheet 56

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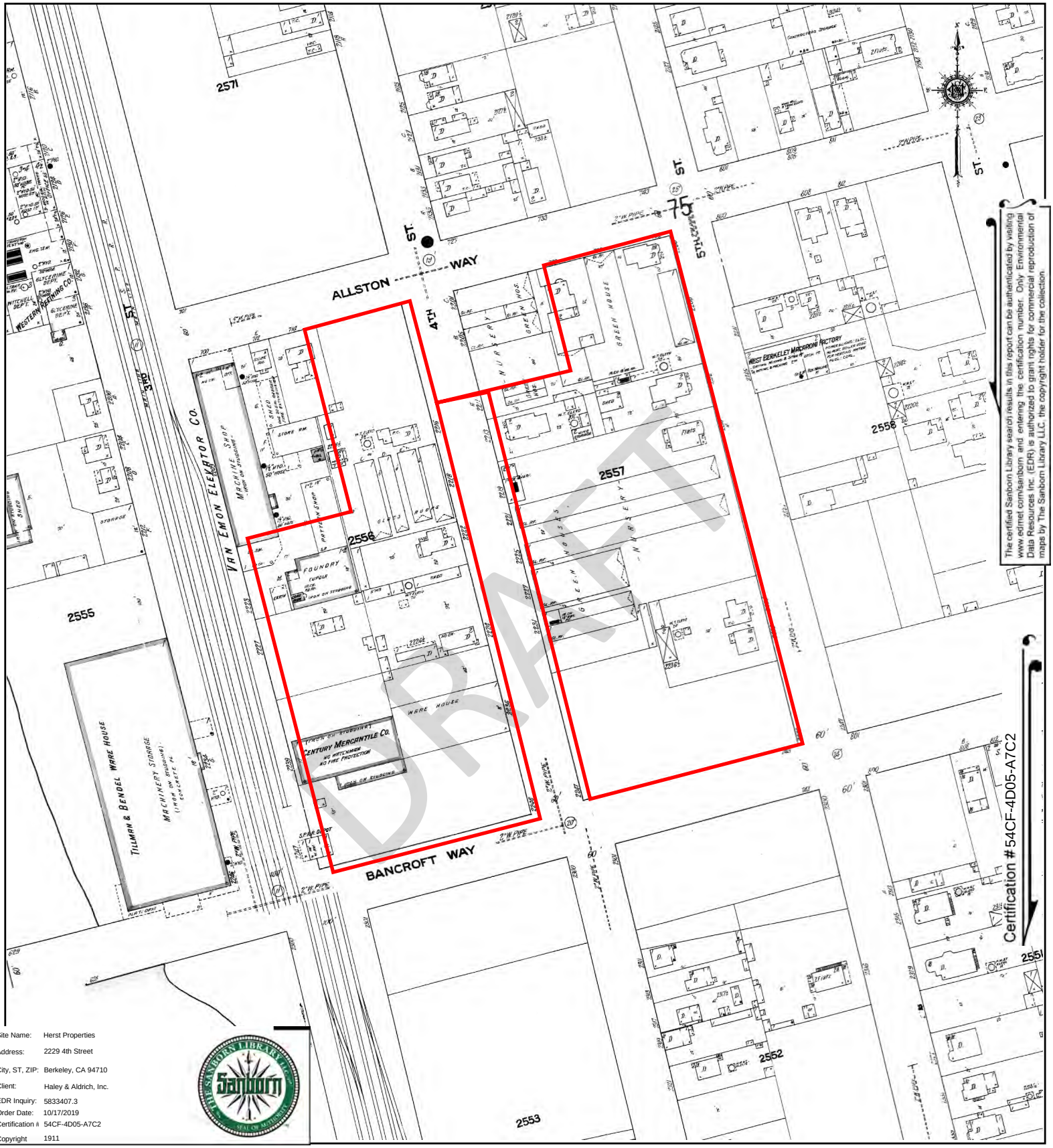

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Site Name:	Herst Properties
Address:	2229 4th Street
City, ST, ZIP:	Berkeley, CA 94710
Client:	Haley & Aldrich, Inc.
EDR Inquiry:	5833407.3
Order Date:	10/17/2019
Certification #:	54CF-4D05-A7C2
Copyright	1911

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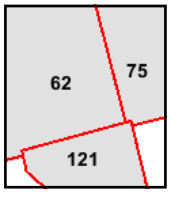
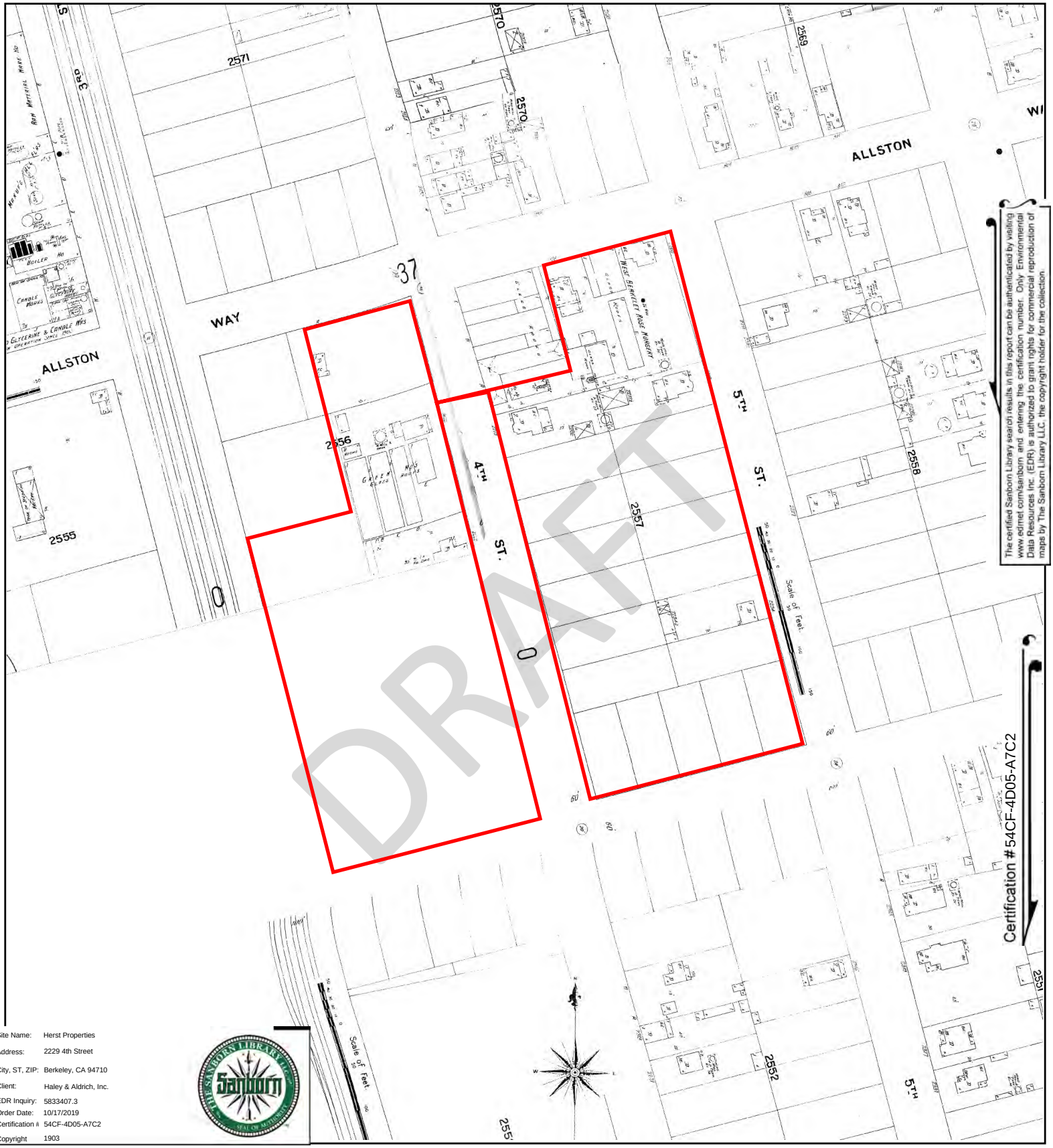


Volume 2, Sheet 121
Volume 1, Sheet 75
Volume 1, Sheet 62

0 Feet 150 300 600

N



Site Name:	Herst Properties
Address:	2229 4th Street
City, ST, ZIP:	Berkeley, CA 94710
Client:	Haley & Aldrich, Inc.
EDR Inquiry:	5833407.3
Order Date:	10/17/2019
Certification #:	54CF-4D05-A7C2
Copyright	1903

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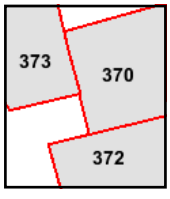
Outlined areas indicate map sheets within the collection.



Volume 3, Sheet 373
Volume 3, Sheet 372
Volume 3, Sheet 370

Herst Properties

2229 4th Street

Berkeley, CA 94710

Inquiry Number: 5833407.4

October 17, 2019

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

10/17/19

Site Name:	Client Name:
Herst Properties	Haley & Aldrich, Inc.
2229 4th Street	2033 N. Main Street
Berkeley, CA 94710	Walnut Creek, CA 94596
EDR Inquiry # 5833407.4	Contact: Marie Rose Javier

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Haley & Aldrich, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA

Project: 134361-002

Coordinates:

Latitude:	37.863995 37° 51' 50" North
Longitude:	-122.29854 -122° 17' 55" West
UTM Zone:	Zone 10 North
UTM X Meters:	561700.26
UTM Y Meters:	4190956.99
Elevation:	25.77' above sea level

Maps Provided:

2012	1915
1996	1899
1980	1895
1973	
1968	
1959	
1949	
1948	

Topo Sheet Key

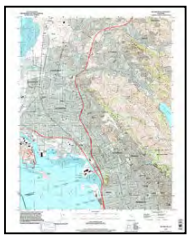
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

Richmond
2012
7.5-minute, 24000

Oakland West
2012
7.5-minute, 24000

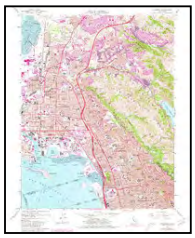
1996 Source Sheets



Richmond
1996
7.5-minute, 24000
Aerial Photo Revised 1993

Oakland West
1996
7.5-minute, 24000
Aerial Photo Revised 1993

1980 Source Sheets

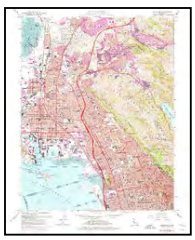


Richmond
1980
7.5-minute, 24000
Aerial Photo Revised 1979

Oakland West
1980
7.5-minute, 24000
Aerial Photo Revised 1979

1973 Source Sheets

Oakland West
1973
7.5-minute, 24000
Aerial Photo Revised 1973



Richmond
1973
7.5-minute, 24000
Aerial Photo Revised 1973

Topo Sheet Key

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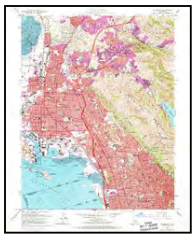
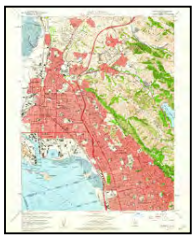
1968 Source Sheets

Oakland West
1968
7.5-minute, 24000
Aerial Photo Revised 1947



Richmond
1968
7.5-minute, 24000
Aerial Photo Revised 1968

1959 Source Sheets



Richmond
1959
7.5-minute, 24000
Aerial Photo Revised 1958

Oakland West
1959
7.5-minute, 24000
Aerial Photo Revised 1958

1949 Source Sheets

Richmond
1949
7.5-minute, 24000
Aerial Photo Revised 1946

Oakland West
1949
7.5-minute, 24000
Aerial Photo Revised 1946

1948 Source Sheets

SAN FRANCISCO
1948
15-minute, 50000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1915 Source Sheets

San Francisco
1915
15-minute, 62500

1899 Source Sheets

San Francisco
1899
15-minute, 62500

1895 Source Sheets

San Francisco
1895
15-minute, 62500

Historical Topo Map

2012

This report includes information from the following map sheet(s).

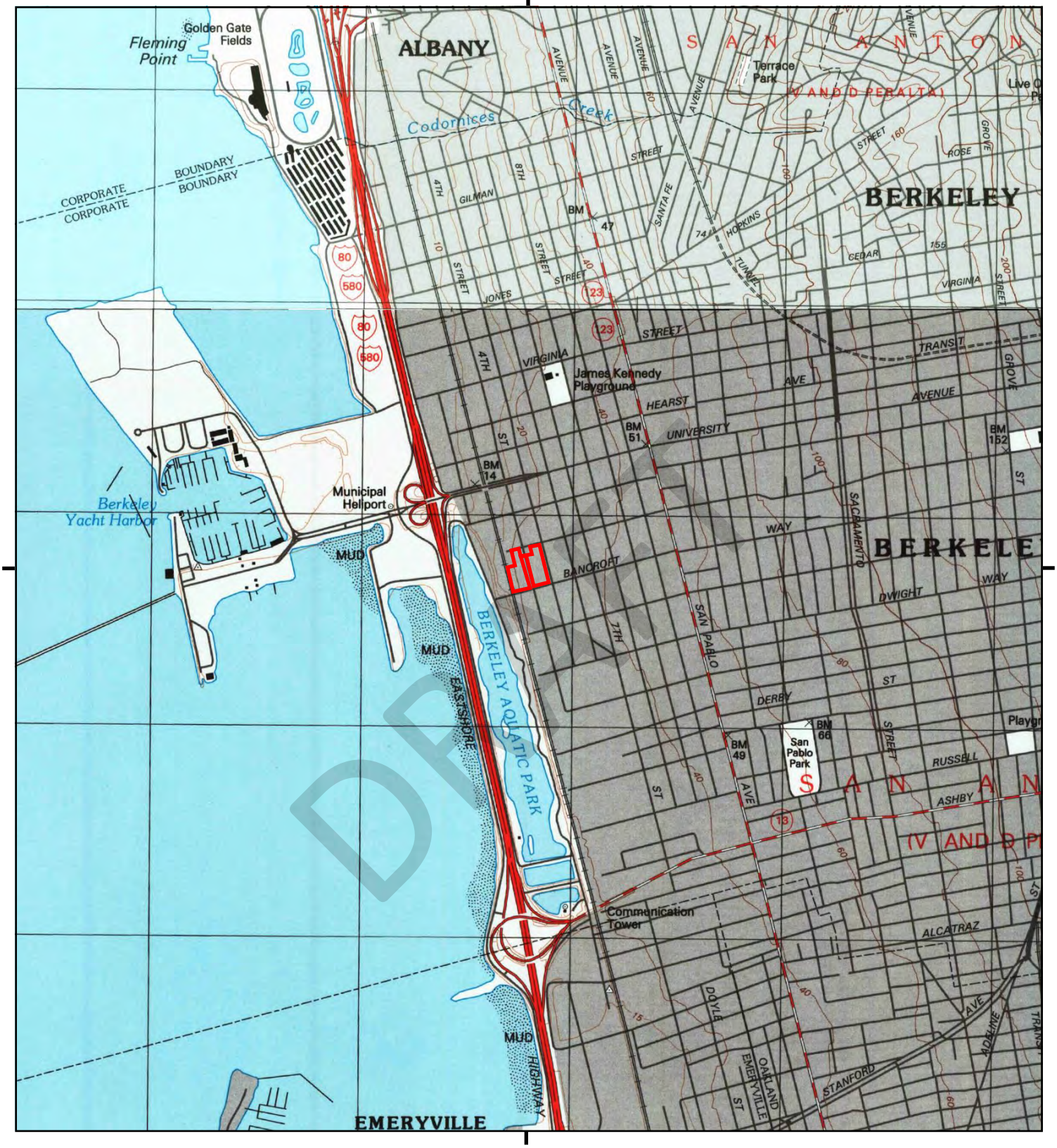
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Oakland West, 2012, 7.5-minute
N, Richmond, 2012, 7.5-minute

SITE NAME: Herst Properties
ADDRESS: 2229 4th Street
Berkeley, CA 94710
CLIENT: Haley & Aldrich, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

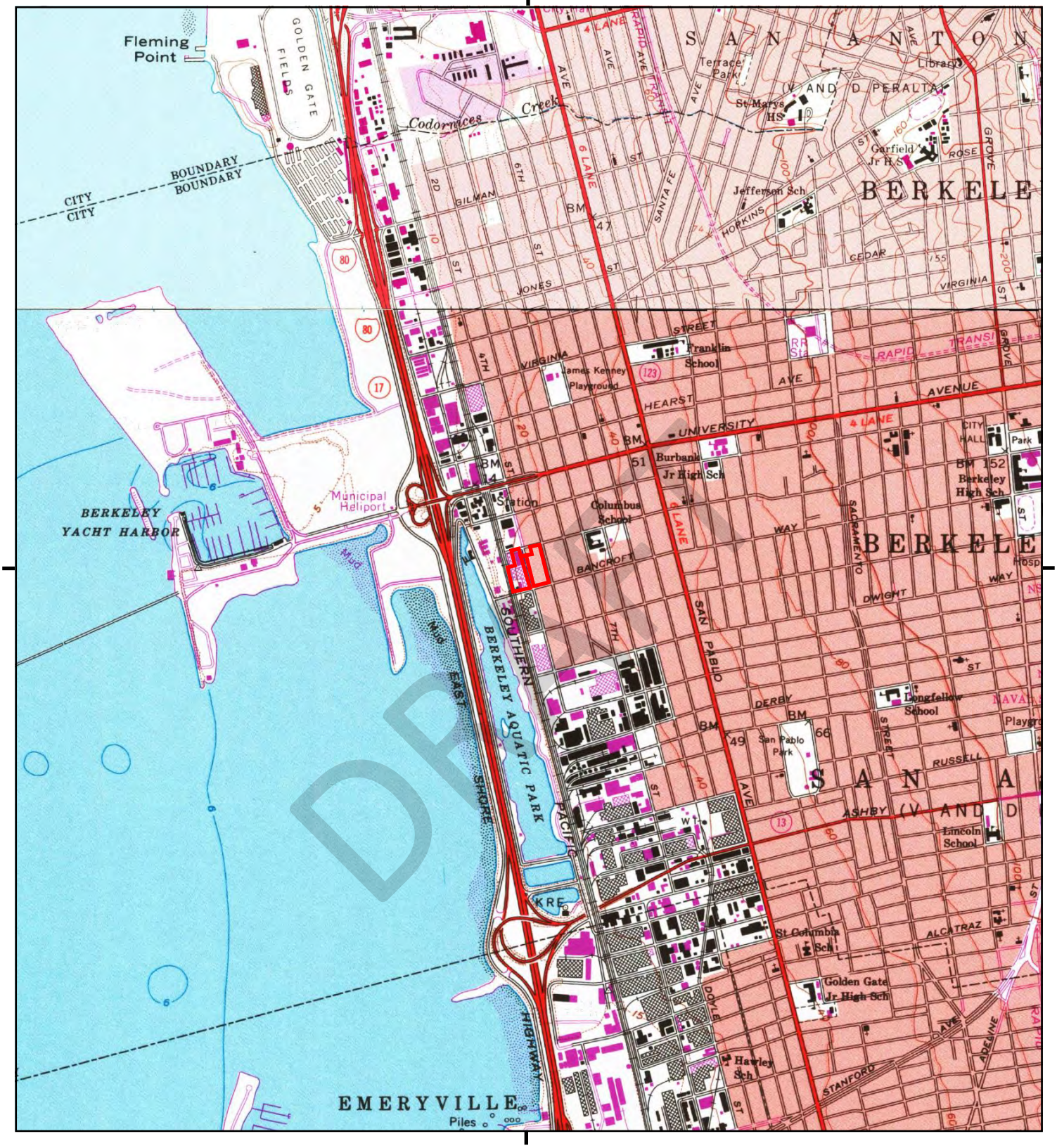
TP, Oakland West, 1996, 7.5-minute
N, Richmond, 1996, 7.5-minute

SITE NAME: Herst Properties
ADDRESS: 2229 4th Street
Berkeley, CA 94710
CLIENT: Haley & Aldrich, Inc.

N

Historical Topo Map

1980



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

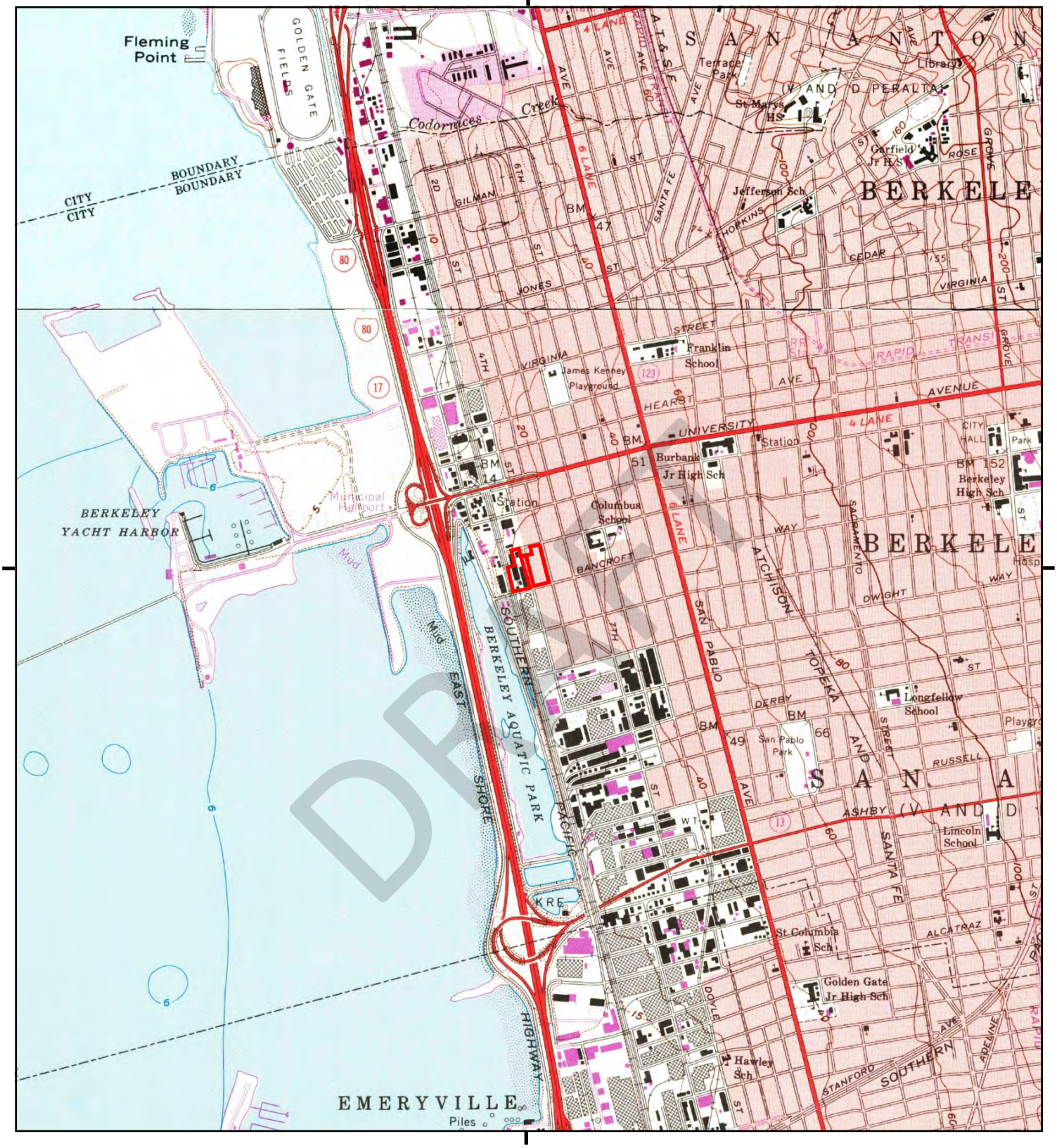
TP, Oakland West, 1980, 7.5-minute
N, Richmond, 1980, 7.5-minute

SITE NAME: Herst Properties
ADDRESS: 2229 4th Street
Berkeley, CA 94710
CLIENT: Haley & Aldrich, Inc.

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

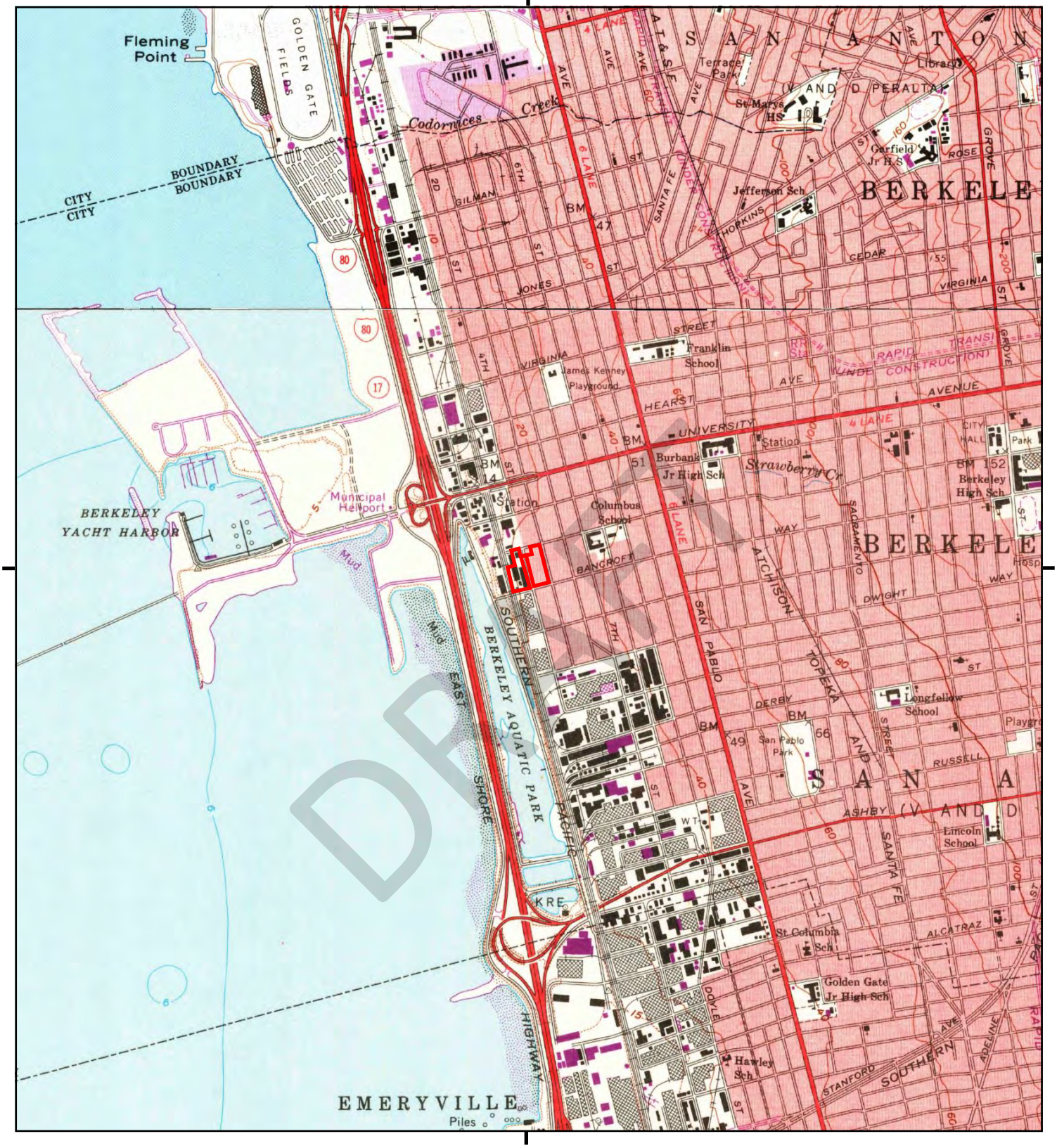
TP, Oakland West, 1973, 7.5-minute
N, Richmond, 1973, 7.5-minute

SITE NAME: Herst Properties
ADDRESS: 2229 4th Street
Berkeley, CA 94710
CLIENT: Haley & Aldrich, Inc.

N

Historical Topo Map

1968



This report includes information from the following map sheet(s).

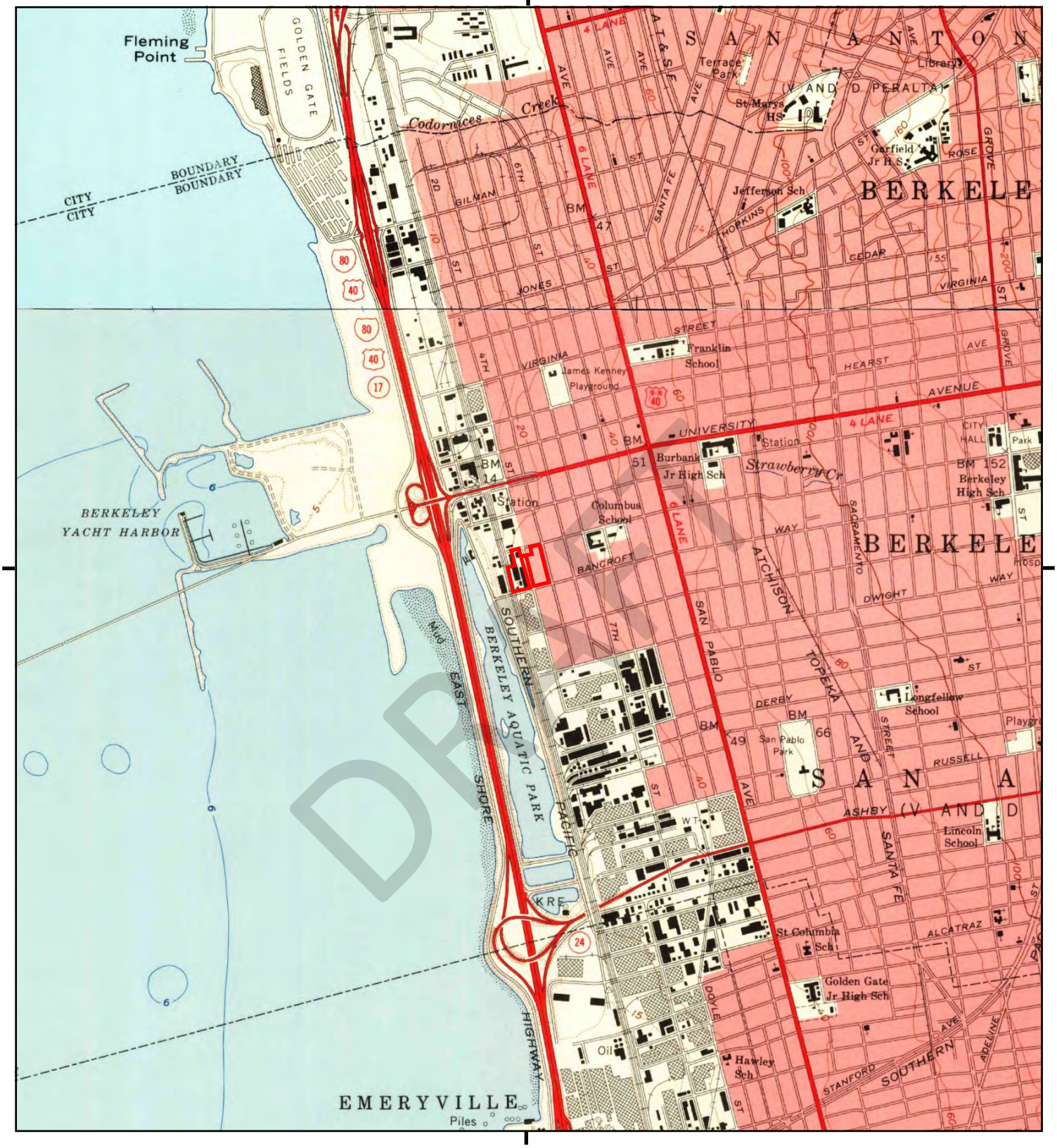
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Oakland West, 1968, 7.5-minute
N, Richmond, 1968, 7.5-minute

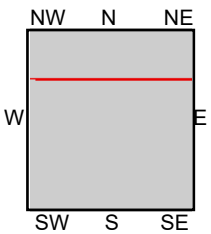
SITE NAME: Herst Properties
ADDRESS: 2229 4th Street
Berkeley, CA 94710
CLIENT: Haley & Aldrich, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



TP, Oakland West, 1959, 7.5-minute
N, Richmond, 1959, 7.5-minute

SITE NAME: Herst Properties
ADDRESS: 2229 4th Street
Berkeley, CA 94710
CLIENT: Haley & Aldrich, Inc.

N