

RECEIVED

By Alameda County Environmental Health 9:26 am, Apr 06, 2016

Site: 6039 College Avenue, Oakland, CA

Report: Workplan for Removal of Petroleum Impacted Soil, dated
January 18, 2016.

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

 VP, EHS & S & Facilities

Responsible Party Signature

Delen B. Hilbrook

Responsible Party Name



11244 Pyrites Way
Gold River, CA 95670

www.apexenvirotech.com

January 18, 2016

Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: **Workplan For Removal of Petroleum Impacted Soil**
Former Shell Service Station
6039 College Avenue,
Oakland, California
Apex Project No. SCF02.005

Dear Mr. Jerry Wickham:

Apex Envirotech, Inc. (Apex) has been authorized by Southern Counties Oil Co. d.b.a. SC Fuels, a California Limited Partnership (SC Fuels) to provide this workplan for the removal of petroleum impacted soil from the subject site. This workplan was prepared in response to the Alameda County Environmental Health (ACEH) letter dated November 17, 2015 (Appendix A). The purpose of this workplan is to remove any petroleum impacted soil during the construction of the underground parking structures at the site.

This workplan is based, in part, on information obtained by Apex from SC Fuels, and is subject to modification as newly acquired information may warrant.

SITE DESCRIPTION

The site is a former Shell service station located on the southern corner of College Avenue and Claremont Avenue in Oakland, California. Currently, the site is a vacant lot. The former site layout consisted of a station building, three underground storage tanks, and two dispenser islands (Figure 1 and Appendix B). The area surrounding the site is of mixed commercial and residential use.

BACKGROUND

Background information from 1957 to 2013 was obtained from CRA's *Subsurface Investigation Report*, dated May 19, 2015.

1957 – According to Shell's records, one 550-gallon and three 1,000-gallon underground storage tanks (USTs) containing gasoline and one 110-gallon single-walled steel waste oil tank that were originally installed when the station first opened in 1940 were removed. The USTs were replaced by single-wall steel construction tanks, consisting of three 5,000-gallon leaded gasoline tanks and one 1,000-gallon waste oil tank.

1978 – According to Shell's records, one 8,000-gallon and three 5,000-gallon steel USTs and one 1,000-gallon waste oil tank were removed in 1978; however, it should be noted, that the date of installation for the 8,000-gallon tank is unknown. The tanks were replaced by three 10,000-gallon fiberglass USTs for gasoline storage.

September 1989 – Alameda County Environmental Health (ACEH) received a notification of an unauthorized release from a UST. The source of the release was reported as a slight weep at the piping connection to the submersible pump for gasoline tank.

January 1990 – Six soil borings (B-1 through B6) were drilled to approximately 25 feet below grade surface (bgs) by Harding Lawson Associates (HLA). Concentrations of TPHg, TPHd, and TPHmo were detected in soil samples collected from soil borings B-3 and B-6. Petroleum hydrocarbons were either non-detect or near the laboratory detection limits for soil borings B-1, B-2, B-4, and B-5. A complete report of the investigation is presented in HLA's *Quarterly Technical Report, First Quarter 1990*, dated April 13, 1990.

February 1990 – Groundwater monitoring wells MW-1 through MW-4 were installed to depths of 25 feet bgs by HLA. Concentrations of TPHg and benzene were detected in the soil samples collected from well borings MW-3 and MW-4. Petroleum hydrocarbons were either non-detect or near the laboratory detection limits from well boring MW-2. A complete report of the soil boring and well installations is presented in HLA's *Quarterly Technical Report, Second Quarter 1990*, dated July 10, 1990.

August 1991 – Groundwater monitoring well MW-5 was installed to a depth of 28 feet bgs by HLA. A low concentration of a petroleum mixture other than gasoline was detected from the soil sample collected at 16 feet bgs; however, no benzene was detected in any soil samples collected. A complete report of the soil boring and well installation is presented in HLA's *Quarterly Technical Report, Third Quarter 1991*, dated October 10, 1991.

March 1993 – Soil borings BH-A through BH-E were drilled and installed by Weiss Associates (WA). Soil boring BH-E was converted into monitoring well MW-6. Concentrations of TPHg, benzene, petroleum oil, and grease were detected in soil samples collected from borings BH-A, BH-C, BH-D. Additionally, TPHd was detected at a low concentration from the soil sample collected from boring BH-E (MW-6).

February 1998 – Soil samples were collected for analysis during an upgrade of the site's four gasoline dispensers by Cambria Environmental Technology, Inc. (Cambria). Maximum hydrocarbon concentrations of TPHg, TPHd, and benzene were detected from the soil samples collected at Dispenser C. Soil samples collected from other dispenser locations were significantly lower. A complete soil sampling report is presented in Cambria's *Dispenser Soil Sampling Report*, dated April 30, 1998.

March 1998 – A potential receptor survey was conducted by Cambria to identify sensitive groundwater receptors within a 1/2-mile radius of the site. Three surface water bodies and one potential receptor were identified; however, due to their distance and location (up gradient and cross gradient of the site), Cambria concluded that none of the identified receptors would be impacted by the hydrocarbons detected at the site. A complete report of potential receptor survey is presented in Cambria's *Potential Receptor Survey Report*, dated March 5, 1998.

1999 to 2005 – Weekly extraction of the floating liquid hydrocarbons (FLHs) and dissolved-phase hydrocarbons from wells MW-3 and MW-4 were performed at the site by Advanced Cleanup Technologies, Inc. of Benicia, California on September 22 and November 10, 1999, with a vacuum truck. Due to an insufficient volume of groundwater and FLHs, the vacuum truck removal method was no longer efficient. Blaine Tech Services, Inc. (Blaine) of San Jose, California assumed the weekly purging events, beginning on November 10, 1999. Blaine discontinued the weekly purging events on June 8, 2000, due to the absence of FLHs in well MW-4. No FLHs were detected during the first quarter 2001; however, FLHs reappeared in the second and third quarters of 2001 and monthly extractions were resumed in December 2001 by Onyx Industrial Services. Due to low hydrocarbon concentrations, the monthly extraction was suspended after the first quarter 2005 event. Mobile groundwater extraction removed approximately 26,506 gallons of groundwater containing an estimated 2.6 pounds of hydrocarbons, 0.15 pounds of benzene, and 2.5 pounds of MTBE.

March 2001 – A short-term dual phase extraction (DPE) pilot test was conducted at wells MW-3 and MW-4 at the site by Cambria. No vacuum influence was observed from the adjacent wells. Approximately 0.2 pounds of TPHg, 0.004 pounds of benzene, and 0.02 pounds of MTBE were removed during the pilot test. A complete report of the short-term DPE pilot test is presented in Cambria's *First Quarter 2001 Monitoring Report and Remediation Pilot Testing*, dated June 14, 2001.

August 2001 – Cambria submitted a site conceptual model (SCM) and well receptor survey for the site. The well receptor survey identified three surface water bodies and five potential receptor wells within a 1/2-mile radius of the site. Due to either their distance from the site or their location being up gradient and cross gradient, it is unlikely that any of the identified wells would be impacted by the hydrocarbons originated from the site. The conduit investigation indicated that there is potential for preferential pathway migration of petroleum hydrocarbons in existing horizontal utility trenches. A complete report of the investigations is presented in Cambria's *Site Conceptual Model and Well Receptor Survey*, dated August 9, 2001.

May 2004 – Soil samples were collected for analysis during an upgrade of the site's fueling system by Cambria. A concentration of TPHg was detected from only one soil sample (P-3-4'). Concentrations of MTBE and benzene were not detected from any other soil samples collected during the upgrade activities. A complete report of the soil sampling is presented in Cambria's *Dispenser and Piping Upgrade Sampling Report*, dated July 7, 2015.

September 2005 – Six soil borings (SB-1 through SB-3 and SB-6 through SB-8) were advanced to assess subsurface conditions offsite (down gradient) and onsite in the vicinity of the fuel dispensers and USTs. TPHg was detected from nine soil samples collected during the investigation activities. The hydrocarbon impact to soil in the area investigated was minimal and likely indicative of impacted groundwater. Grab samples of the first-encountered groundwater were collected from each boring. Groundwater samples were reported to contain concentrations of fuel range petroleum hydrocarbons. Complete investigation details are presented in Cambria's *Subsurface Investigation Report*, dated December 14, 2005.

May 2006 – One groundwater monitoring well (MW-7) was installed immediately down gradient of the westernmost dispenser island by Cambria. The specific location of MW-7 was a suspected source of hydrocarbon impact to groundwater. Soil samples contained concentrations of TPHg, benzene, toluene, ethylbenzene, total xylenes, and MTBE. A complete report of the well installation activities is presented in Cambria's *Subsurface Investigation Report and Second Quarter 2006 Groundwater Monitoring Report*, dated August 11, 2006.

February 2010 – Six soil vapor probes (SVP-1 through SVP-6) were installed by Conestoga-Rovers & Associates (CRA) and sampled in March 2010. No constituents of concern were detected in any soil vapor samples. Soil vapor investigation activities are presented in CRA's *Soil Vapor Probe Installation and Sampling Report*, dated April 13, 2010.

February 1990 to February 2010 – Periodic groundwater monitoring was conducted from up to five onsite wells (MW-1 through MW-4 and MW-7) and two offsite wells (MW-5 and MW-6).

March 2011 – Seven groundwater monitoring wells (MW-1 through MW-7) and six soil vapor wells (SVP-1 through SVP-6) were destroyed by CRA. A letter from ACEH, dated May 4, 2011, confirmed closure of the environmental case.

January 2013 – Three 10,000-gallon USTs, dispensers, piping, the station building, and all other fixtures were removed by MVP Petroleum Engineering, Inc. (MVP). During the UST removal, the Oakland Fire Department noted cracks in the USTs that did not appear to be from or caused by the removal. Sparger Technology, Inc. (Sparger) collected soil samples from beneath the USTs which contained concentrations of oil and grease, TPHg, toluene, ethylbenzene, total xylenes, naphthalene, and lead; however, no concentrations of benzene or fuel oxygenates were detected in the soil samples collected beneath the USTs. Sparger also collected soil samples from beneath the dispensers and piping which contained concentrations of toluene, ethylbenzene, total xylenes, naphthalene, and lead; however, no concentrations of TPHg, benzene, or fuel oxygenates were detected from underneath the dispensers and piping. The removal of the USTs

and station demolition is presented in Sparger's Underground Storage Tank Removal Report, dated May 17, 2013.

February and March 2015 – Six soil borings (SB-9 through SB-14) and five soil vapor probes (SVP-7 through SVP-11) were drilled by CRA. Soil detections exceeding the ESLs are located in source areas at depths that were historically saturated and are consistent with soil data from prior investigations. Grab groundwater samples from borings SB-9 (TPHg) and SB-11 (benzene) exceeded their ESLs and the concentrations indicate that current conditions are similar to the groundwater contaminant plume observed during the previous environmental case, which was localized (less than 100 feet), not migrating, and stable to decreasing. No constituents of concern were detected above their commercial ESLs from any of the soil vapor samples and benzene, ethylbenzene, and naphthalene results meet the Policy residential media-specific soil vapor criteria. A detailed report of the soil borings and vapor probe installations is presented in CRA's *Subsurface Investigation Report*, dated May 19, 2015. Additionally, CRA recommended reviewing the case for closure.

July 14, 2015 – In a letter, the ACEH notified CRA that the Russell J. Bruzzone, Inc. and Montrose Investment Company (property owners) disagreed with the conclusion presented in CRA's *Subsurface Investigation Report*, dated May 19, 2015. Additionally, the property owners stated that the planned construction (underground parking structure) at the subject property would lead to changed exposure assumptions that may affect consideration of case closure under the State Water Resources Control Board Low-threat Closure Policy. In response to the comments made by the property owners, ACEH requested that the property owners submit construction plans and a construction schedule in order to evaluate how the proposed conditions may affect human health risk and to determine whether site development would occur within a time frame that should be considered prior to case closure evaluation.

September 24, 2015 – SOMA Environmental Engineering, Inc. (SOMA) on behalf of the current property owners submitted an underground parking garage construction plan. Construction details demonstrated that the site will be developed and used for residential and commercial purposes and in order to accommodate the future residents and business owners. The plans include an underground parking structure approximately 10 to 12 feet bgs and two additional parking locations north of the underground parking structure at depths of 8 feet bgs. A complete report of the planned construction at the site is presented in SOMA's *Underground Parking Garage Construction Plan and Current Soil Chemical Plume* report dated, September 24, 2015.

November 17, 2015 – In a letter, the ACEH requested that a Corrective Action Plan be prepared that evaluates human health risks for the proposed development and identifies how the residual contamination will be addressed prior to or during site development (Appendix A).

STATUS OF THE SITE

According to SOMA, the property owners are planning to build an underground vehicle parking facility with depths of approximately 10 to 12 feet below grade surface (bgs). Additionally, two separate parking locations utilizing parking lifts are planned to be installed north of the underground vehicle parking facility. The depth of excavation to install the parking lifts are approximately 8 feet bgs.

Based on the most recent soil data collected during February 2015 by CRA, there are three soil borings (SB-9, SB-12, and SB-14) that were reported to contain petroleum concentrations over their ESLs. Soil samples collected from boring SB-9 at 14.5 and 19.5 feet bgs were reported to contain concentrations of TPHg and TPHd at 440 and 1,200 mg/kg, respectively. Soil samples collected from boring SB-12 at 15 and 20 feet bgs reported to contain concentrations of TPHd at 320 and 130 mg/kg, respectively. Soil samples collected from boring SB-14 at 15 feet bgs reported to contain concentrations of TPHg, TPHd, benzene, ethylbenzene, total xylenes, and naphthalene at 2,700, 1,400, 3.9, 6.5, 47, and 9.5 mg/kg, respectively.

Based on the soil data collected during February 2015 by CRA, it appears that there is a possibility that the constituents detected from soil borings SB-9, SB-12, and SB-14 will be encountered during the proposed excavation activities. It also appears that the shallow soil (<10 feet bgs) will consist of mainly soil that is not impacted by petroleum hydrocarbons (detections below their ESLs), while the depths ranging from 10 to 12 feet bgs appear to contain concentrations of the petroleum impacted soil.

REMOVAL OF PETROLEUM IMPACTED SOIL WORKPLAN

Apex proposes to be onsite during the proposed underground parking excavation activities. While onsite, Apex will utilize a photoionization (PID) meter to identify and segregate non petroleum impacted soil from petroleum impacted soil. Apex plans to start segregating soils at depths of approximately 10 to 12 feet bgs. If petroleum impacted soils are detected, those soils will be segregated and stockpiled separately on and covered with plastic, away from the clean (non-petroleum impacted) soil. Upon completion of underground parking facility excavations, soil from both stockpiles will be sampled and submitted to a laboratory for analysis according to the criteria of the nearest accepting landfill. Upon completion of the landfill profiling, the transportation of the petroleum impacted soil will be scheduled for proper offsite disposal.

Disposal of the non-petroleum impacted soil will be the responsibility of the current property owner and developer.

It should be noted, that if the laboratory analytical data results are reported as non-detect for all petroleum constituents, then disposal of the originally assumed petroleum impacted soil stockpile will be the responsibility of the current property owner and developer.

ATTACHMENT

Figure

Figure 1: Site Vicinity Map

Appendix

Appendix A: Regulatory Correspondence

Appendix B: CRA, SOMA, and BPA+D Figures

Appendix C: CRA Soil Data Tables

WORKPLAN DISTRIBUTION

Apex submitted a copy of this workplan, in final form, to:

Regulatory Oversight: Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Responsible Party: SC Fuels

Interested Parties: Shell Oil Products US
20945 S. Wilmington Avenue
Carson, CA 90810

SOMA Environmental Engineering, Inc.
6620 Owens Drive, Suite A
Pleasanton, CA 94588

Montrose Investment
242 Rivera Circle Greenbriar Marina
Larkspur, CA 94939

Russell J. Bruzzone, Inc.
899 Hope Lane
Lafayette, CA 94549

Petromart Retail Group, Inc.
587 Ygnacio Valley Road
Walnut Creek, CA 94596

REMARKS AND SIGNATURES

The information contained within this workplan reflects our professional opinions and was developed in accordance with currently available information, and accepted hydrogeologic and engineering practices.

The work described herein will be performed under the direct review and supervision of the professional geologist, registered with the State of California, whose signature appears below.

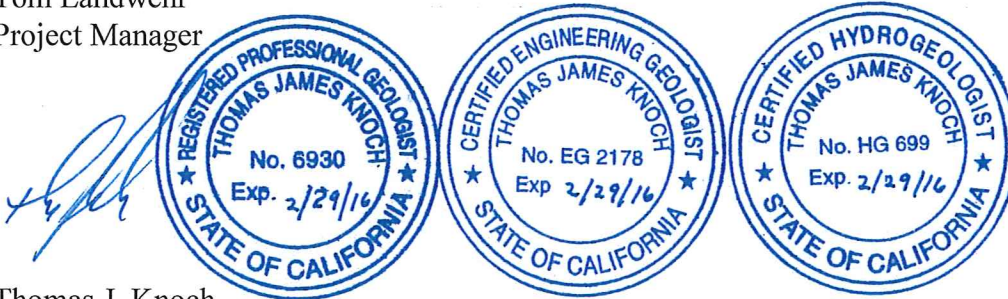
We appreciate the opportunity to provide SC Fuels with geologic, engineering, and environmental consulting services and trust this report meets your needs. If you have any questions or comments, please call us at 916-851-0174.

Sincerely,

APEX ENVIROTECH, INC.



Tom Landwehr
Project Manager

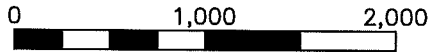


Thomas J. Knoch
P.G. (6930), C.E.G. (2178), C.H.G. (699)
Senior Geologist

FIGURE



NORTH



Approximate Scale
1 inch = 1,000 feet



DRAWN BY: N. Rouillard
DATE: 12/17/15
REVISIONS

SITE VICINITY MAP

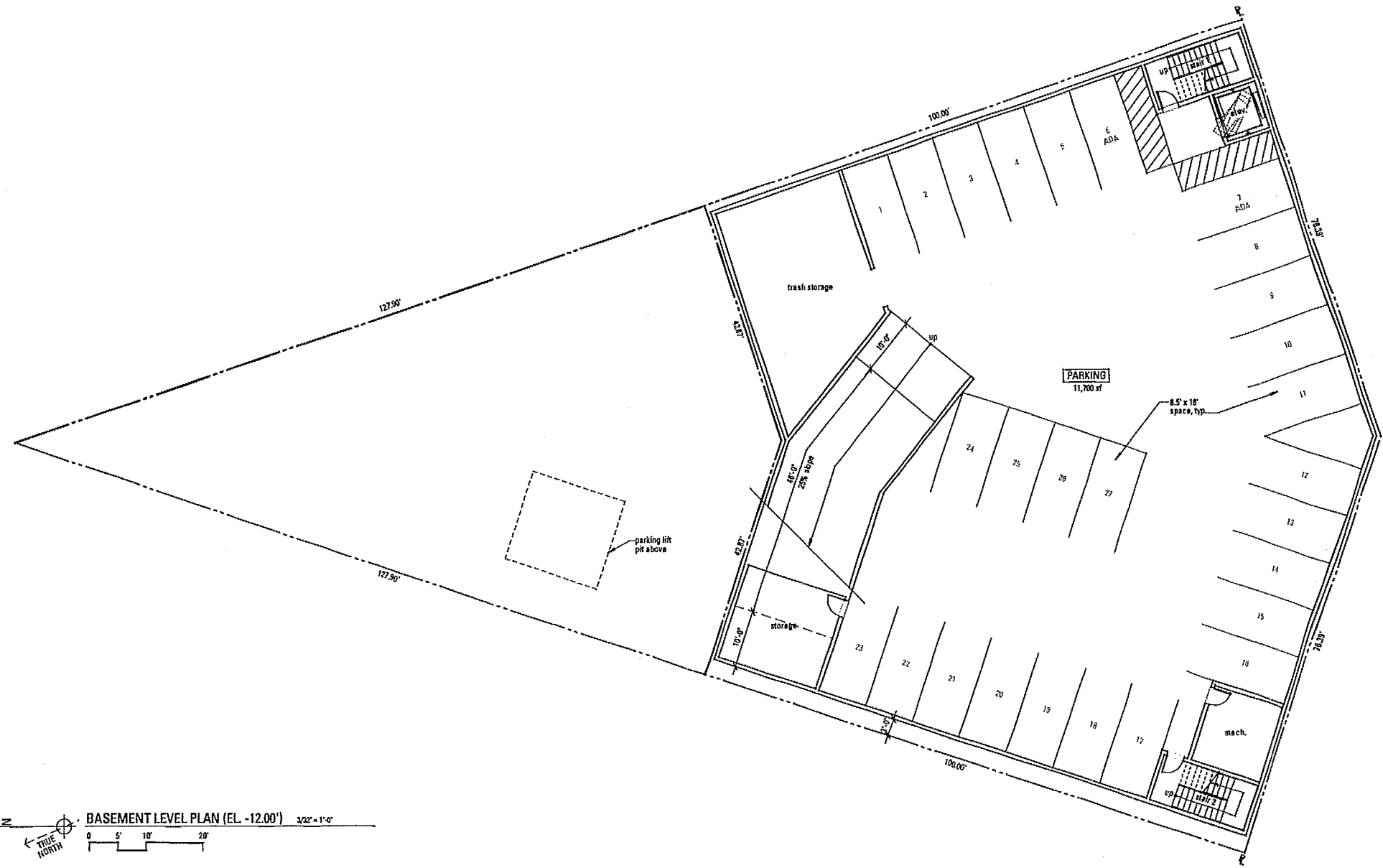
Former Shell Service Station
6039 College Avenue
Oakland, California

FIGURE

1

PROJECT NUMBER:

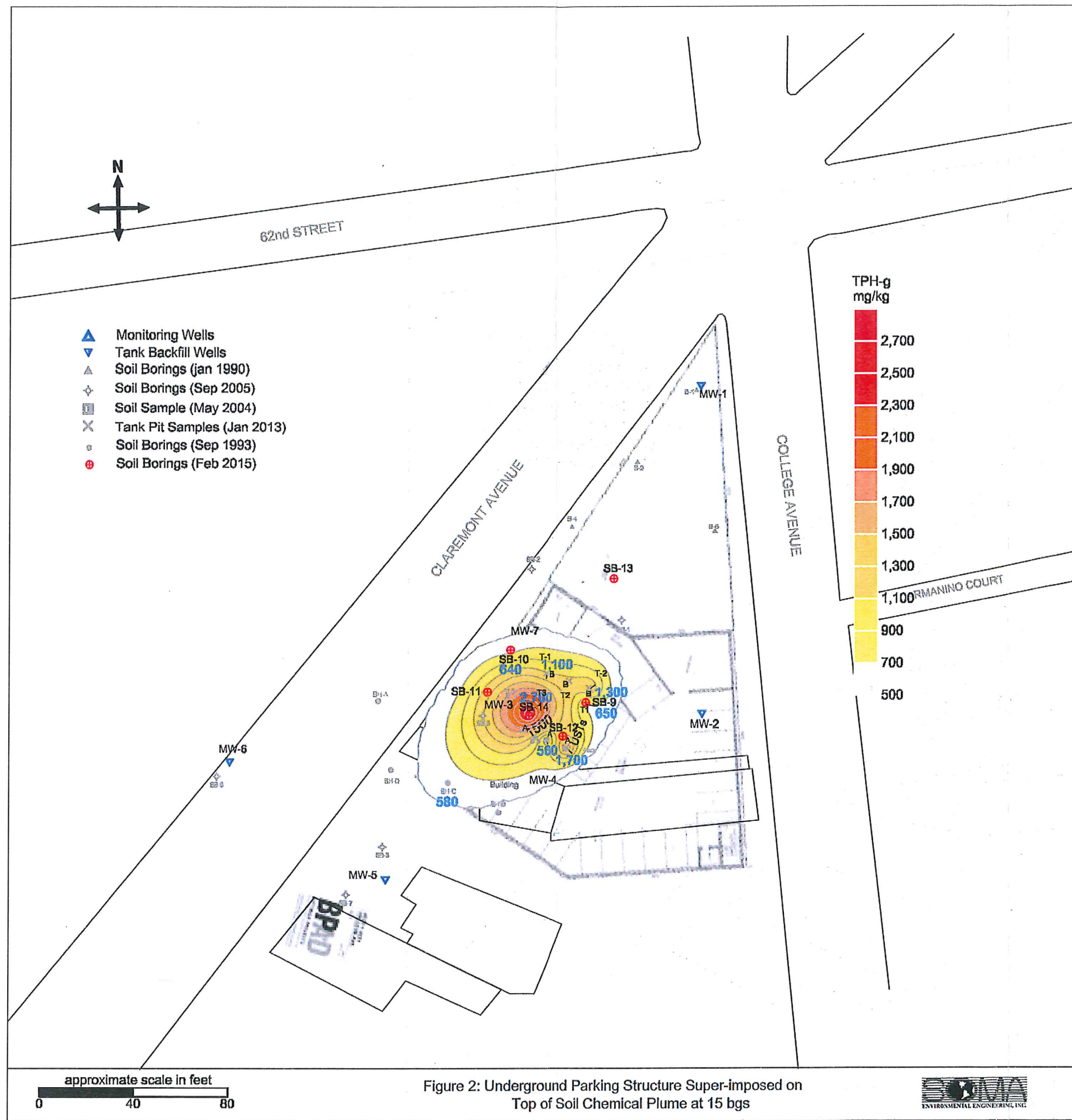
SCF02.005



BASEMENT LEVEL PLAN (EL. -12.00') 3/32" = 1'-0"
 0 5' 10' 20'

Figure 1: Underground Parking Structure - 12' bgs

6029 + 6039
 COLLEGE AVE.
 A2.1 date
09.17.15
BPAD
 BUTTRICK PROJECTS
 ARCHITECTURE + DESIGN
 1164 65th Street, #E, Oakland, CA 94609
 510.592.8703 www.buttrickprojects.com



APPENDIX A
REGULATORY CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

ALEX BRISCOE, Director



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

November 17, 2015

Andrea Wing
Shell Oil Products US
20945 S. Wilmington Ave.
Carson, CA 90810-1039
(Sent via E-mail to: andrea.wing@shell.com)

Jim Graham
Montrose Investment
242 Rivera Circle Greenbriar Marina
Larkspur, CA 94939

Russel J. Bruzzone, Inc.
899 Hope Lane
Lafayette, CA 94549
Attn: Joan E. Bruzzone, President

Mike Ahmadi
Petromart Retail Group Inc.
587 Ygnacio Valley Road
Walnut Creek, CA 94596

Subject: Case File Review for Fuel Leak Case No. RO0003123 and GeoTracker Global ID T10000005056,
College Avenue Shell, 6039 College Avenue, Oakland, CA 94618

Dear Responsible Parties:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the recently submitted document entitled, "*Underground Parking Garage Construction Plan and Current Soil Chemical Plume for 6039 College Avenue, Oakland, CA,*" dated September 28, 2015 (Plan). The Plan, which was prepared on behalf of property owners Russell J. Bruzzone, Inc. and Montrose Investments by SOMA Environmental Engineering, Inc., indicates that the current property owners are planning to construct a mixed residential and commercial building that will include an underground parking garage extending to a depth of approximately 10 to 12 feet below grade. The Plan concludes that construction workers will likely be exposed to contamination during construction of the parking garage. Based on the fact that petroleum hydrocarbons detected at approximately 15 feet bgs will be closer to the parking garage floor, the Plan also concludes that the residual contamination will likely pose a risk to commercial workers in the parking garage. No estimates of potential risk to the construction workers, site workers, or residents is presented in the Plan.

We request that you submit a Corrective Action Plan that evaluates human health risks for the proposed development and identifies how the residual contamination will be addressed prior to or during site development. Please submit the Corrective Action Plan no later than January 17, 2016.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Jerry Wickham), and to the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

- **January 19, 2016** – Corrective Action Plan
File to be named: CAP_R_yyyy-mm-dd RO3123

Responsible Parties
RO0003123
November 17, 2015
Page 2

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized

If you have any questions, please call me at (510) 567-6721 or send me an electronic mail message at jerry.wickham@acgov.org. Case files can be reviewed online at the following website: <http://www.acgov.org/aceh/index.htm>. If your email address does not appear on the cover page of this notification ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

Sincerely,

Jerry Wickham

Digitally signed by Jerry Wickham
DN: cn=Jerry Wickham, o=Alameda County Environmental
Health, ou, email=jerry.wickham@acgov.org, c=US
Date: 2015.11.17 09:27:09 -08'00'

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Attachments: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Rick Bruzzone, (*Sent via E-mail to: rick.bruzzone@doblawyers.com*)

Linda Steidle, (*Sent via E-mail to: montroseinc@comcast.net*)

Aubrey Cool, AECOM, 1333 Broadway, Suite 800, Oakland, CA 94612 (*Sent via E-mail to: Aubrey.Cool@aecom.com*)

Mansour Sepehr, SOMA Environmental Engineering, Inc., (*Sent via E-mail to: msepehr@somaenv.com*)

Perry Pineda, Shell Oil Products US, (*Sent via E-mail to: pschaefer@croworld.com*)

Peter Schaefer, Conestoga-Rovers & Associates, 5900 Hollis Street, Suite A, Emeryville, CA 94608
(*Sent via E-mail to: pschaefer@croworld.com*)

Jerry Wickham, ACEH (*Sent via E-mail to: jerry.wickham@acgov.org*)

GeoTracker, File

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

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

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	REVISION DATE: May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Please **do not** submit reports as attachments to electronic mail.
- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

- 1) Obtain User Name and Password
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to deh.loptoxic@acgov.org
 - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
 - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

APPENDIX B

CRA, SOMA, AND BPA+D FIGURES

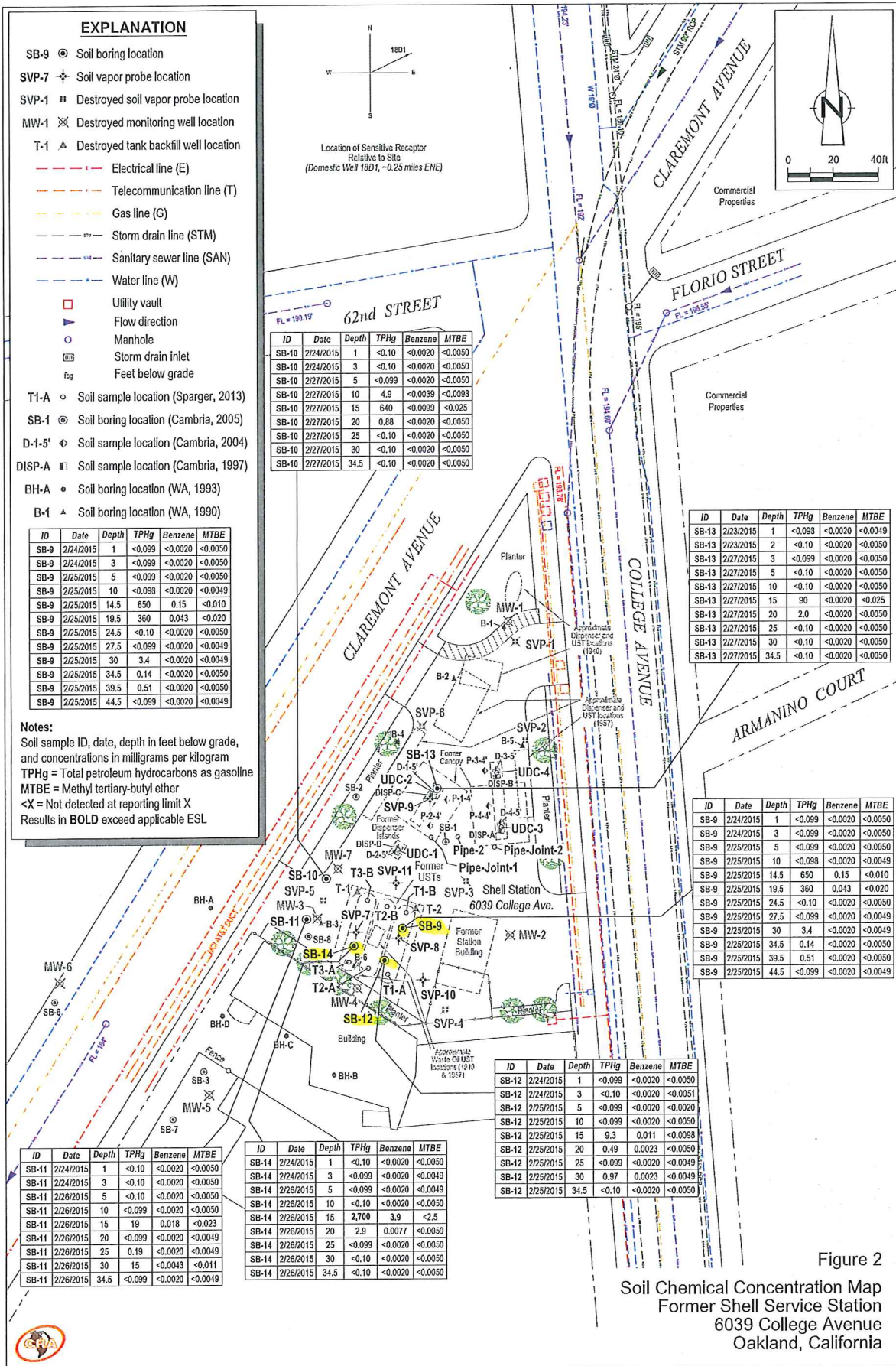


Figure 2

Soil Chemical Concentration Map
 Former Shell Service Station
 6039 College Avenue
 Oakland, California

APPENDIX C
CRA SOIL DATA TABLES

TABLE 1
 HISTORICAL SOIL ANALYTICAL DATA
 FORMER SHELL SERVICE STATION
 6039 COLLEGE AVENUE, OAKLAND, CALIFORNIA

Sample ID	Date	Depth (ft)	OGG (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	MIBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	Ethanol (mg/kg)	HVOCs (mg/kg)	Diethyl phthalate (mg/kg)	Dimethyl phthalate (mg/kg)	PCBs (mg/kg)	Lead (mg/kg)
B-1	01/04/1990	22.5	---	---	---	8.1	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-2	01/05/1990	18	---	---	---	130	0.62	<0.1	0.48	1.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-2	01/05/1990	24	---	---	---	1.8	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-3	01/05/1990	19	810	110,000	5,900	610	0.24	0.18	4.1	9.8	---	---	---	---	---	---	---	---	---	---	---	---	---	13
B-3	01/05/1990	21	380	14,000	750	71	0.19	<0.1	0.53	0.68	---	---	---	---	---	---	---	---	---	---	---	---	---	7.6
B-4	01/04/1990	18.5	---	---	---	170	0.57	0.11	0.65	1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-4	01/04/1990	25	---	---	---	<1	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-5	01/04/1990	22	---	---	---	<1	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-5	01/04/1990	23	---	---	---	4.4	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B-6	01/05/1990	19.5	1,100	12,000	600	260	0.28	<0.1	1.3	2.1	---	---	---	---	---	---	---	---	---	---	---	---	---	8.1
B-6	01/05/1990	22.5	91	320	16	<1	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	9.2
MW-2	02/08/1990	11	---	<10	<1	<1	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/08/1990	15.5	---	<1	<1	<1	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/08/1990	20.5	---	<10	1.1	<1	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/07/1990	10	---	<10	4.4	12	<0.0050	<0.1	<0.1	0.11	---	---	---	---	---	---	---	---	---	---	---	---	---	ND
MW-3	02/07/1990	15.5	---	1,800	200	230	1.1	0.7	3.1	1.9	---	---	---	---	---	---	---	---	---	---	---	---	---	ND
MW-3	02/07/1990	20.5	---	<10	9.9	28	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	ND
MW-4	02/07/1990	10.5	---	<1	1.2	<1	<0.0050	<0.1	<0.1	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	ND
MW-4	02/07/1990	15.5	---	6,400	61	140	0.31	0.34	0.92	2.60	---	---	---	---	---	---	---	---	---	---	---	---	---	ND
MW-4	02/07/1990	20.5	---	46,000	2,200	72	0.06	<0.1	0.46	0.57	---	---	---	---	---	---	---	---	---	---	---	---	---	ND
MW-5	08/24/1991	6	<50	<12	<1.2	<1	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	08/24/1991	16	<50	13	7.0 ^b	23 ^a	<0.025	<0.025	0.028	0.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-5	08/24/1991	21	<50	<12	<1.2	<1	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BH-A	09/09/1993	6	---	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BH-A	09/09/1993	11	<50	---	---	11 ^a	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BH-A	09/09/1993	16	<50	---	---	27 ^b	<0.025	<0.0025	1.4	0.51	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BH-B	09/09/1993	11	---	---	---	<1	<0.0025	<0.002	<0.00	<0.0025	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BH-B	09/09/1993	15.7	<50	---	<1	<1	<0.0025	<0.002	<0.00	<0.0025	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BH-C	09/10/1993	10.7	---	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BH-C	09/10/1993	15.7	1,200 ^c /930 ^d	---	---	4,900 ^e	580 ^f	<0.125	<0.125	<0.125	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
6039 COLLEGE AVENUE, OAKLAND, CALIFORNIA

Sample ID	Date	Depth (ft)	O&G (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	Ethanol (mg/kg)	HVOCs (mg/kg)	Diethyl phthalate (mg/kg)	Dimethyl phthalate (mg/kg)	PCBs (mg/kg)	Lead (mg/kg)
BH-C	09/10/1993	20.7	---	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BH-D	09/10/1993	10.7	<50 ^f / ^g <50 ^d	---	8.9 ^b	6.8 ^a	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---	---	---	<0.33	<0.33	---	---
BH-D	09/10/1993	15.7	97 ^f /69 ^g	---	55 ^b	150	0.42	<0.0025	<0.0025	<0.025	---	---	---	---	---	---	---	---	---	---	<0.33	<0.33	---	---
BH-D	09/10/1993	20.7	<50 ^f / ^g <50 ^d	---	29 ^b	5.6	<0.0025	0.0073	0.011	<0.0025	---	---	---	---	---	---	---	---	---	---	<0.33	<0.33	---	---
BH-E (MW-6)	09/10/1993	10.7	---	---	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BH-E (MW-6)	09/10/1993	15.7	<50 ^f / ^g <50 ^d	---	3.5 ^b	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---	---	---	---	<0.33	<0.33	---	---
Disp-A-2.0'	02/11/1998	2	---	---	---	3.2	0.016	0.045	<0.0050	0.0072	---	0.51 ^f / ^g <0.10	---	---	---	---	---	---	---	---	---	---	---	---
Disp-A-4.0'	02/11/1998	4	---	---	---	53	<0.025	<0.025	<0.025	<0.025	---	<0.012 ^g	---	---	---	---	---	---	---	---	---	---	---	---
Disp-B-2.0'	02/11/1998	2	---	---	---	1.2	<0.0050	0.011	<0.0050	<0.0050	---	0.025 ^f / ^g <0.10	---	---	---	---	---	---	---	---	---	---	---	---
Disp-B-4.0'	02/12/1998	4	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025 ^g	---	---	---	---	---	---	---	---	---	---	---	---
Disp-C-2.0'	02/11/1998	2	---	---	---	1,900	10	190	42	260	---	420 ^f /240	---	---	---	---	---	---	---	---	---	---	---	---
Disp-C-4.0'	02/12/1998	4	---	---	---	5,300	<2.5	5.0	26	250	---	<12 ^g	---	---	---	---	---	---	---	---	---	---	---	---
Disp-D-2.0'	02/11/1998	2	---	---	---	31	<0.025	0.035	<0.025	0.17	---	0.65 ^f / ^g 0.69	---	---	---	---	---	---	---	---	---	---	---	---
Disp-D-4.0'	02/12/1998	4	---	---	---	6.3	0.011	0.013	<0.010	<0.010	---	0.10 ^f / ^g 0.13	---	---	---	---	---	---	---	---	---	---	---	---
D-1-5'	05/07/2004	5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---	---	---	---	---	---	---	---
D-2-5'	05/07/2004	5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---	---	---	---	---	---	---	---
D-3-5'	05/07/2004	5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---	---	---	---	---	---	---	---
D-4-5'	05/07/2004	5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---	---	---	---	---	---	---	---
P-1-4'	05/07/2004	4	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---	---	---	---	---	---	---	---
P-2-4'	05/07/2004	4	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---	---	---	---	---	---	---	---
P-3-4'	05/07/2004	4	---	---	---	17 ^a	<0.022	<0.022	<0.022	<0.022	---	<0.022	---	---	---	---	---	---	---	---	---	---	---	---
P-4-4'	05/07/2004	4	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---	---	---	---	---	---	---	---
SB-1-5.0	09/29/2005	5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	0.015	---	<0.0050	0.090	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	0.53	---	---	---	---	---
SB-1-9.5	09/29/2005	9.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	0.28	0.53	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.50	---	---	---	---	---
SB-1-14.5	09/29/2005	14.5	---	---	---	7.3 ^a	<0.0050	<0.0050	<0.0050	<0.0050	---	0.035	0.053	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.50	---	---	---	---	---
SB-1-19.5	09/29/2005	19.5	---	---	---	96 ^a	<0.50	<0.50	<0.50	<0.50	---	<0.50	<2.5	<1.0	<0.50	<0.50	<0.50	<0.50	<25	---	---	---	---	---
SB-1-23.5	09/29/2005	23.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	---	---	---	---	---
SB-1-29.5	09/29/2005	29.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1 ^f	---	---	---	---	---
SB-2-9.5	09/29/2005	9.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.50	---	---	---	---	---
SB-2-14.5	09/29/2005	14.5	---	---	---	8.4 ^a	<0.025	<0.025	<0.025	<0.025	---	<0.025	<0.050	<0.050	<0.025	<0.025	<0.025	<0.025	<0.50	---	---	---	---	---
SB-2-19.5	09/29/2005	19.5	---	---	---	14 ^a	<0.024	<0.024	<0.024	<0.024	---	<0.024	<0.049	<0.049	<0.024	<0.024	<0.024	<0.024	<0.49	---	---	---	---	---
SB-2-23.5	09/29/2005	23.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	0.0087	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.50	---	---	---	---	---

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
6039 COLLEGE AVENUE, OAKLAND, CALIFORNIA

Sample ID	Date	Depth (ft)	O&G (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	Ethanol (mg/kg)	HVOCs (mg/kg)	Diethyl phthalate (mg/kg)	Dimethyl phthalate (mg/kg)	PCBs (mg/kg)	Lead (mg/kg)
SB-2-29.5	09/29/2005	29.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.50	---	---	---	---	---
SB-3-9.5	09/28/2005	9.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	---	---	---	---	---
SB-3-14.5	09/28/2005	14.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	0.32	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	---	---	---	---	---
SB-3-17.0	09/28/2005	17.0	---	---	---	370 ^a	<0.50	<0.50	<0.50	<0.50	---	<0.50	<2.5	<1.0	<0.50	<0.50	<0.50	<0.50	<25	---	---	---	---	---
SB-3-20.5	09/28/2005	20.5	---	---	---	9.7 ^a	<0.023	<0.023	<0.023	<0.023	---	<0.023	0.30	<0.045	<0.023	<0.023	<0.023	<0.023	<0.45	---	---	---	---	---
SB-6-9.5	09/28/2005	9.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	---	---	---	---	---
SB-6-17.5	09/28/2005	17.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	0.013	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	---	---	---	---	---
SB-7-9.5	09/28/2005	9.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	---	---	---	---	---
SB-7-14.5	09/28/2005	14.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	0.041	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	---	---	---	---	---
SB-7-17.0	09/28/2005	17	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	---	---	---	---	---
SB-8-9.5	09/29/2005	9.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	---	---	---	---	---
SB-8-14.5	09/29/2005	14.5	---	---	---	460 ^a	<0.50	<0.50	<0.50	<0.50	---	<0.50	<2.5	<1.0	<0.50	<0.50	<0.50	<0.50	<25	---	---	---	---	---
SB-8-19.5	09/29/2005	19.5	---	---	---	740 ^a	<0.50	<0.50	<0.50	<0.50	---	<0.50	<2.5	<1.0	<0.50	<0.50	<0.50	<0.50	<25	---	---	---	---	---
SB-8-22.0	09/29/2005	22	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	---	<0.50	<2.5	<1.0	<0.50	<0.50	<0.50	<0.50	<25	---	---	---	---	---
MW-7-5	05/16/2006	5	---	---	---	<0.121	<0.00242	<0.00242	<0.00242	<0.00605	---	<0.00242	<0.0605	<0.00242	<0.00605	<0.00242	---	---	---	---	---	---	---	---
MW-7-10	05/16/2006	10	---	---	---	4.30	<0.00239	<0.00239	<0.00239	<0.00597	---	0.00375	<0.0597	<0.00239	<0.00597	<0.00239	---	---	---	---	---	---	---	---
MW-7-15	05/16/2006	15	---	---	---	2.12	<0.00263	<0.00263	0.105	0.0134	---	0.0234	<0.0657	<0.00263	<0.00657	<0.00263	---	---	---	---	---	---	---	---
MW-7-20	05/16/2006	20	---	---	---	613	<0.00248	<0.00248	0.0328	0.00852	---	0.0206	<0.0621	<0.00248	<0.00621	<0.00248	---	---	---	---	---	---	---	---
MW-7-22	05/16/2006	22	---	---	---	689	0.00333	0.0107	0.615	0.142	---	0.0476	<0.0608	<0.00243	<0.00608	<0.00243	---	---	---	---	---	---	---	---
T1-A	01/29/2013	15	8,740	---	---	1,700	<0.10	0.59	0.79	5.0	<0.20	<0.050	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	---	---	---	---	7.53
T1-B	01/29/2013	15	2,040	---	---	1,300	<0.10	1.1	15	79	17	<0.50	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	---	---	---	---	6.77
T2-A	01/29/2013	15	640	---	---	560	<0.10	0.43	1.1	11	1.5	<0.050	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	---	---	---	---	4.82
T2-B	01/29/2013	15	160	---	---	130	<0.10	4.7	9.0	64	7.2	<0.50	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	---	---	---	---	7.05
T3-A	01/29/2013	15	140	---	---	480	<0.10	0.42	0.85	5.8	8.4	<0.050	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	---	---	---	---	6.24
T3-B	01/29/2013	15	1,160	---	---	1,100	<0.10	3.7	5.7	39	7.9	<0.050	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	---	---	---	---	9.07
UDC-1	01/29/2013	4	<50	---	---	<0.50	<0.0010	0.0017	0.0083	0.070	0.0060	<0.00050	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	---	---	---	---	6.67
UDC-2	01/29/2013	4	2,080	---	---	<0.50	<0.0010	<0.0010	<0.0010	0.0024	0.0044	<0.00050	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	---	---	---	---	6.09
UDC-3	01/29/2013	4	<50	---	---	<0.50	<0.0010	<0.0010	<0.0010	0.0019	<0.0020	<0.00050	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	---	---	---	---	6.62
UDC-4	01/29/2013	4	<50	---	---	<0.50	<0.0010	<0.0010	<0.0010	0.0016	<0.0020	<0.00050	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	---	---	---	---	6.09
Pipe Joint-1	01/29/2013	4	<50	---	---	<0.50	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.00050	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	---	---	---	---	12.3
Pipe Joint-2	01/29/2013	4.5	<50	---	---	<0.50	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.00050	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	---	---	---	---	6.65
Pipe-2	01/29/2013	4.3	<50	---	---	<0.50	<0.0010	0.00019	0.0079	0.080	0.0078	<0.00050	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	---	---	---	---	7.07
SB-9	02/24/2015	1	---	15	16	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	<4.0

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
6039 COLLEGE AVENUE, OAKLAND, CALIFORNIA

Sample ID	Date	Depth (ft)	O&G (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	Ethanol (mg/kg)	HVOCs (mg/kg)	Diethyl phthalate (mg/kg)	Dimethyl phthalate (mg/kg)	PCBs (mg/kg)	Lead (mg/kg)
SB-9	02/24/2015	3	---	6.8	10	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	5.0
SB-9	02/25/2015	5	---	18	12	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	<2.0
SB-9	02/25/2015	10	---	<5.0	5.5	<0.098	<0.0020	<0.0020	<0.0020	<0.0039	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	4.9
SB-9	02/25/2015	14.5	---	160	440	650	0.15	0.0069	0.14	0.54	0.041	<0.010	---	---	---	---	<0.0042	<0.0042	---	---	---	---	---	6.3
SB-9	02/25/2015	19.5	---	360	1,200	360	0.013	0.018	0.0083	0.10	<0.020	<0.020	---	---	---	---	<0.0079	<0.0079	---	---	---	---	---	6.6
SB-9	02/25/2015	24.5	---	<5.0	<5.0	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	9.4
SB-9	02/25/2015	27.5	---	<4.9	7.2	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	8.1
SB-9	02/25/2015	30	---	6.2	53	3.4	<0.0020	<0.0020	<0.0020	<0.0040	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	4.6
SB-9	02/25/2015	34.5	---	<5.0	16	0.14	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.6
SB-9	02/25/2015	39.5	---	<4.9	9.1	0.51	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	5.9
SB-9	02/25/2015	44.5	---	<5.0	8.8	<0.099	<0.0020	<0.0020	<0.0020	<0.0039	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.1
SB-10	02/24/2015	1	---	<5.0	<5.0	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	6.7
SB-10	02/24/2015	3	---	<5.0	<5.0	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.0
SB-10	02/27/2015	5	---	13	45	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.1
SB-10	02/27/2015	10	---	<9.8	20	4.9	<0.0039	<0.0039	<0.0039	<0.0078	0.027	<0.0098	---	---	---	---	<0.0039	<0.0039	---	---	---	---	---	7.2
SB-10	02/27/2015	15	---	<9.9	63	640	<0.0099	<0.0099	<0.0099	<0.020	<0.025	<0.025	---	---	---	---	<0.0099	<0.0099	---	---	---	---	---	8.5
SB-10	02/27/2015	20	---	<9.9	24	0.88	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	8.4
SB-10	02/27/2015	25	---	<9.7	<9.7	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.4
SB-10	02/27/2015	30	---	<9.8	<9.8	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	8.1
SB-10	02/27/2015	34.5	---	<9.6	<9.6	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	8.8
SB-11	02/24/2015	1	---	5.2	9.9	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.0
SB-11	02/24/2015	3	---	5.0	<5.0	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	6.0
SB-11	02/26/2015	5	---	<10	15 g	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	6.0
SB-11	02/26/2015	10	---	<10	27 g	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.7
SB-11	02/26/2015	15	---	<9.9	36 g	19	0.018	<0.0090	<0.0090	<0.018	<0.023	<0.023	---	---	---	---	<0.0090	<0.0090	---	---	---	---	---	8.9
SB-11	02/26/2015	20	---	<5.0	9.4 g	<0.099	<0.0020	<0.0020	<0.0020	<0.0039	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.8
SB-11	02/26/2015	25	---	<9.9	<9.9	0.19	<0.0020	<0.0020	<0.0020	<0.0039	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.0
SB-11	02/26/2015	30	---	<4.9	50 g	15	<0.0043	<0.0043	<0.0043	0.022	<0.011	<0.011	---	---	---	---	<0.0043	<0.0043	---	---	---	---	---	8.0
SB-11	02/26/2015	34.5	---	<9.7	<9.7	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.8
SB-12	02/24/2015	1	---	44	37	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	8.3
SB-12	02/24/2015	3	---	18	17	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0051	<0.0051	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	4.2
SB-12	02/25/2015	5	---	180	68	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0020	<0.0020	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.7
SB-12	02/25/2015	10	---	<4.9	7.4	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	6.6
SB-12	02/25/2015	15	---	110	320	9.3	0.011	<0.0039	<0.0039	<0.0079	0.017	<0.0098	---	---	---	---	<0.0039	<0.0039	---	---	---	---	---	7.1
SB-12	02/25/2015	20	---	36	130	0.49	0.0023	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	9.1
SB-12	02/25/2015	25	---	<5.0	12	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	12
SB-12	02/25/2015	30	---	<5.0	<5.0	0.97	0.0023	<0.0020	<0.0020	0.0065	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.4
SB-12	02/25/2015	34.5	---	<9.8	<9.8	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.9

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
6039 COLLEGE AVENUE, OAKLAND, CALIFORNIA

Sample ID	Date	Depth (ft)	O&G (mg/kg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	Ethanol (mg/kg)	HVOCs (mg/kg)	Diethyl phthalate (mg/kg)	Dimethyl phthalate (mg/kg)	PCBs (mg/kg)	Lead (mg/kg)
SB-13	02/23/2015	1	---	50	55	<0.098	<0.0020	<0.0020	<0.0020	<0.0039	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.0
SB-13	02/23/2015	2	---	24	33	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	9.8
SB-13	02/23/2015	3	---	5.2	7.3	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.1
SB-13	02/27/2015	5	---	21	35	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	9.0
SB-13	02/27/2015	10	---	<9.6	34	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.5
SB-13	02/27/2015	15	---	<9.8	45	90	<0.0099	<0.0099	<0.0099	<0.0040	<0.025	<0.025	---	---	---	---	<0.0099	<0.0099	---	---	---	---	---	7.7
SB-13	02/27/2015	20	---	<10	<10	2.0	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	8.7
SB-13	02/27/2015	25	---	<9.7	<9.7	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	10
SB-13	02/27/2015	30	---	<5.0	6.3	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	9.0
SB-13	02/27/2015	34.5	---	<9.5	<9.5	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	8.4
SB-14	02/24/2015	1	---	16	17	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	2.7
SB-14	02/24/2015	3	---	13	12	<0.099	<0.0020	0.0023	<0.0020	<0.0040	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	3.3
SB-14	02/26/2015	5	---	36	28	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0049	<0.0049	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	6.5
SB-14	02/26/2015	10	---	<5.0	<5.0	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	6.0
SB-14	02/26/2015	15	---	270	1,400	2,700	3.9	<1.0	6.5	47	9.5	<2.5	<50	---	---	---	<1.0	<1.0	---	---	---	---	---	7.6
SB-14	02/26/2015	20	---	<9.9	48	2.9	0.0077	<0.0020	0.0026	0.017	0.0093	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	8.9
SB-14	02/26/2015	25	---	<9.9	13 g	<0.099	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	8.9
SB-14	02/26/2015	30	---	<5.0	5.6 g	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	6.1
SB-14	02/26/2015	34.5	---	<5.0	<5.0	<0.10	<0.0020	<0.0020	<0.0020	<0.0040	<0.0050	<0.0050	---	---	---	---	<0.0020	<0.0020	---	---	---	---	---	7.0
Shallow Soil (≤10 ft) ESL ^A :			NA	500	110	500	1.2	9.3	4.7	11	4.8	8.4	110	NA	NA	NA	0.91	0.51	NA	Various	0.035	0.035	0.74	320
Deep Soil (>10 ft) ESL ^A :			NA	1,000	110	1,000	1.2	9.3	4.7	11	4.8	8.4	110	NA	NA	NA	0.91	0.51	NA	Various	0.035	0.035	0.74	320

Notes:

- ftg = Feet below grade
- O&G = Total oil and grease analyzed by 1990 SM 503 D&E (Gravimetric), by 503E in August 1991, by 5520 in September 1993, by 1664 in January 2013, and by EPA Method 8015B in 2015.
- TPHmo = Total petroleum hydrocarbons as motor oil analyzed by EPA Method 8015
- TPHd = Total petroleum hydrocarbons as diesel analyzed by EPA Method 8015
- TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260; prior to 2004 and January 2013 analyzed by EPA Method 8015B.
- Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260; prior to 2004 analyzed by EPA Method 8015.
- Naphthalene analyzed by EPA Method 8260B.
- MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B unless otherwise noted
- TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
- DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
- ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
- TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
- 1,2-DCA = 1,2-Dichloroethane analyzed by EPA Method 8260B
- EDB = 1,2-Dibromoethane analyzed by EPA Method 8260B
- Ethanol analyzed by EPA Method 8260B
- HVOCs = Halogenated volatile organic compounds analyzed by EPA Method 8010
- Semi-volatile organic compounds analyzed by EPA Method 8270; all detections tabulated.

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA
 FORMER SHELL SERVICE STATION
 6039 COLLEGE AVENUE, OAKLAND, CALIFORNIA

Sample ID	Date	Depth (ft)	O&G (mg/kg)	TPH _{no} (mg/kg)	TPH _d (mg/kg)	TPH _g (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	Ethanol (mg/kg)	HVOCs (mg/kg)	Diethyl phthalate (mg/kg)	Dimethyl phthalate (mg/kg)	PCBs (mg/kg)	Lead (mg/kg)
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PCBs = Polychlorinated biphenyls analyzed by EPA Method 8080

Lead analyzed by EPA Method 7421 in January 1990, by EPA Method 6010B in January 2013 and February 2015.

mg/kg = Milligrams per kilogram

ND = Not detected at laboratory detection limits; see relevant lab report for details.

<x = Not detected at reporting limit x

-- = Not analyzed

ESL = Environmental screening level

NA = No applicable ESL

Results in bold equal or exceed applicable ESL

a = Quantity of unknown hydrocarbon(s) in sample based on gasoline

b = Not characteristic of standard diesel pattern

c = Total oil and grease analyzed by EPA Method 5520E

d = Non-polar oil and grease analyzed by EPA Method 5520E/F

e = Analyzed by Modified EPA Method 8020

g = Hydrocarbon result partly due to individual peak in quantitation range

h = San Francisco Bay Regional Water Quality Control Board (RWQCB) commercial/industrial ESL for soil where groundwater is not a source of drinking water (Tables B and D of *User's Guide: Derivation and Application of Environmental Screening Levels, RWQCB, Interim Final 2013*).