SIGNATURE DEVELOPMENT GROUP

RECEIVED
By Alameda County Environmental Health 7:46 am, Nov 02, 2016

October 28, 2016

Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Attention: Ms. Kit Soo, P.G.

TRANSMITTAL LETTER
RECORD REPORT OF CONSTRUCTION
PROGRESS REPORT
459 8TH STREET
OAKLAND, CALIFORNIA

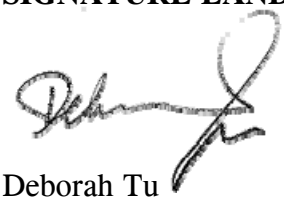
Dear Ms. Soo:

Submitted herewith for your review is *Record Report of Construction, Progress Report, 459 8th Street, Oakland, California* dated October 28, 2016, prepared by PES Environmental, Inc.

I declare, under penalty of perjury, that the information contained in the above-referenced report for the subject property are true and correct to the best of my knowledge.

Very truly yours,

SIGNATURE LAND ADVISORS, LLC



Deborah Tu
Project Manager

PES Environmental, Inc.
Engineering & Environmental Services

A Report Prepared For:

459 8th Street, LLC
2335 Broadway, Suite 200
Oakland, California 94612

RECORD REPORT OF CONSTRUCTION
PROGRESS REPORT
459 8TH STREET
OAKLAND, CALIFORNIA

OCTOBER 28, 2016

By:

Christopher J. Baldassari, P.G.
Senior Geologist

Kyle S. Flory, P.G.
Principal Geologist

935.038.01.005

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

1.0 INTRODUCTION

This Record Report of Construction, Progress Report (Report) has been prepared by PES Environmental, Inc. (PES), on behalf of 459 8th Street, LLC to document implementation of a Soil Management Plan (SMP) for subgrade construction associated with the redevelopment of 459 8th Street in Oakland, California (the site or subject property). Redevelopment plans for the site include: (1) removal of groundwater monitoring wells, former injection points, and soil vapor probes; (2) grading and soil excavation for utilities, parking features, and foundations; and (3) construction of a new multi-story mixed-use residential building and associated parking and landscaped areas. The site location is shown on Plate 1. This Report was requested by Alameda County Environmental Health (ACEH) in electronic correspondence to 459 8th Street, LLC dated August 29, 2016 (ACEH, 2016). Site redevelopment activities are still underway and a Final Record Report of Construction will be prepared and submitted to ACEH upon completion of the foundation to be constructed for the redevelopment project.

The soil excavation and disposal activities were conducted in accordance with the SMP dated August 14, 2015 (PES, 2015). ACEH required the SMP as part of redevelopment of the former Shell service station facility for mixed-use purposes. The SMP was developed to provide general, site-wide guidelines that should be followed in the event contaminated soil and/or groundwater is encountered during redevelopment activities as well as provide earthwork construction workers with: (1) information regarding the environmental condition of the site; (2) protocols for proper management of waste soils or extracted groundwater generated during site redevelopment activities; and (3) contingency procedures in the event that localized areas of unanticipated chemically-affected soil or other features of environmental concern are encountered during earthwork or excavation activities. A copy of the SMP is provided in Appendix A.

PES understands that the site redevelopment plan includes construction of a five story building with a garage and commercial spaces on the ground floor and residential units on the upper floors. The building will be completed at or near current grade, with the exception of two bays of parking structures (car stackers). PES further understands a copy of the Final Building Plans approved by the City of Oakland have been provided to ACEH by 459 8th Street, LLC. Further description of the redevelopment plan is provided in Section 2.5.

This SMP implementation report presents: (1) relevant background information; (2) a summary of excavation observation and soil management; (3) waste disposal documentation relating to off-site transport and disposal of excavated soil and construction debris; and (4) conclusions.

2.0 BACKGROUND INFORMATION

2.1 Site and Vicinity Characteristics

The site consists of approximately 0.344 acres of land (15,000 square feet) on one tax lot (Alameda County Assessor's office Assessor's Parcel Number [APN] 1-201-15) in downtown Oakland, California.

The site is bounded to the east by Broadway Street and to the north by 8th Street. It is bounded on south and west by zero-lot line properties with buildings. The south-adjacent building is a one-story structure with commercial tenants. The west-adjacent building is a four-story structure with ground-floor commercial space beneath three stories of apparent residential apartments.

2.2 On-Site Structures and Historical Use

The site was previously developed as a parking lot (PES, 2015). The only structures on the site were small, unmanned parking payment kiosks located at the northeastern and southwestern portions of the site.

The subject property has been developed for urban use (commercial/retail/urban residential) since at least 1889. The earliest known use in 1889 is a fraternal lodge. By 1902, the site was used as a rooming house and for small offices. In 1912, a candy factory, offices, a restaurant and a second hand shop occupied the subject property. From the 1920s to 1950, the site was occupied by a number of small businesses. The site was occupied in part by "Cascade Laundry" at 727 Broadway in 1920 through at least 1925, a taxi service at 723 Broadway in 1925, and "Costa Contra Laundry" in 1928. From approximately 1951 to 1961, the site was occupied by a hotel, a 'club room', a pool and restaurants.

Sometime between 1961 and 1967, the site was redeveloped. The existing buildings on the site were razed and a gasoline service station was constructed on the property. The service station appears to have operated at the site from the mid-1960s until May 1980. Reported occupants of the service station include American Oil and Gas (1967 through 1972) and Shell Oil (1972 through 1980). After removal of the service station in 1980, the site appears to have been used as a parking lot. Site structures were limited to self-serve parking kiosks. The parking lot and kiosks were removed from the site to allow redevelopment.

Groundwater monitoring wells, injection points, and soil vapor probes were installed on-site as part of the investigation of the former Shell service station. As discussed below, these features were destroyed prior to and during site redevelopment activities.

2.3 Geology and Hydrogeology

The subject property is situated on coastal lowlands on the eastern perimeter of San Francisco Bay. Surficial deposits in the area of the site are Holocene to Pleistocene sandstones of the Merritt Sand formation. Based on geologic map information (Graymer, 2000), bedrock beneath the Merritt Sand is inferred to include Cretaceous to Jurassic, folded and faulted rocks of the Franciscan Complex, including mélange and meta-sedimentary rocks. The bedrock formations are within the complexly faulted Hayward Fault Zone.

Well logs from borings installed at the site indicate that silty sand with gravel is present at the site from beneath the asphalt surface to approximately 2.5 to 5.0 feet below ground surface (bgs) at the site. This material is likely construction-related fill. Brown, silty sand is present from beneath the shallow fill to depths of at least 30 feet bgs. Depth-to-groundwater at the site consistently ranges from 20 to 25 feet bgs based on recent groundwater monitoring data from three on-site wells (S-8, S-9, and S-10; Conestoga-Rovers, 2014).

Based upon groundwater flow data from monitoring wells located on, and in the vicinity of, the subject property, the local shallow groundwater flow direction at the site is consistently to the south-southwest, towards the Oakland Inner Bay. This flow direction is consistent with the topography of the site and surrounding area. On-site monitoring has not identified any periods of groundwater flow in other directions. The nearest surface water bodies are the Oakland Inner Bay located approximately 2,500 feet to the south of the site and Lake Merritt, located approximately 3,500 feet east-northeast of the site.

2.4 Soil and Groundwater Environmental Conditions

Pertinent information regarding prior soil, soil vapor, and groundwater investigations conducted at the site is presented in the SMP.

A release of petroleum products was identified at the site in 1979 during off-site construction activities. Site investigation was initiated in 1981, and numerous environmental investigations and remedial activities have been performed by others at the site. The petroleum hydrocarbons release at the site is the subject of a leaking underground storage tank (LUST) case with the ACEH. The results of the previous investigations indicate that no known significant soil, soil vapor, or groundwater environmental concerns had been identified to be present within the identified areas of earthwork-related activities associated with the redevelopment project.

Soil Conditions in Planned Excavation Areas

Based on the analytical results for soil samples collected in 2014 from areas within the planned excavation (PES, 2014b), concentrations of metals in soil are below ESLs for direct exposure for both residential scenarios and construction/trench worker exposure concentrations and appear to be consistent with expected background concentrations. Total petroleum hydrocarbons quantified as gasoline (TPHg), TPH quantified as motor oil (TPHmo) and

volatile organic compounds (VOCs) were not detected at or above the respective laboratory reporting limits in any of the soil samples. TPH as diesel (TPHd) was detected at concentrations of 2.1 milligrams per kilogram (mg/kg, 5.0 to 5.5 feet bgs sample from boring PSB6) and 4.2 mg/kg (5.0 to 5.5 feet bgs sample from boring PSB4), and is below ESLs for direct exposure for both residential scenarios and construction/trench worker exposure concentrations (PES, 2015). The laboratory analytical results for the soil samples collected from within the areas of the planned excavations were used to characterize the soil for transportation to off-site receiving facilities.

Additionally, as noted in the SMP, soil vapor samples collected from five and 10 feet bgs in December 2011 and January 2012 and analyzed for gasoline range organics, benzene, toluene, ethylbenzene, and xylenes (BTEX), oxygen and argon, carbon dioxide, methane and helium indicated that ethylbenzene and xylenes were the only target analytes detected in the samples, and the concentrations detected were one to three orders of magnitude below the respective SFBRWQB shallow soil gas ESLs for commercial/industrial sites. As such, soil vapor is not considered a concern for construction workers at the site.

2.5 Site Redevelopment

The site redevelopment includes construction of a five story building with a garage and commercial spaces on the ground floor and residential units on the upper floors. The building will be completed at or near current grade, with the exception of two bays of parking structures (car stackers) to be located in the western-central and southwestern portions of the site (Plate 2), which were installed to approximately 14 feet below grade (fbg). The project included excavation into limited portions of the site to allow construction of car parking lifts (i.e., car stackers) as well as subsurface utility corridors. Soil excavation was conducted where the car stackers will be constructed (Plate 2), as well as for planned subsurface utility corridors. PES understands shallow fill material at the site was excavated, stockpiled and re-compacted on-site as an engineered fill material. Excavation to 14 feet bgs did not encounter shallow groundwater and construction dewatering was not required during subgrade activities.

2.6 Vapor Intrusion Mitigation

A site-specific Human Health Risk Assessment (HHRA) to assess soil vapor intrusion to indoor air, based on the approved project plans, was performed in 2015 by Conestoga-Rovers (Conestoga-Rovers, 2015). The HHRA concluded that it is unlikely that residual petroleum hydrocarbon concentrations pose an unacceptable risk to future on-site receptors, and no soil vapor mitigation or remediation was deemed necessary to address soil vapor intrusion concerns associated with the planned project. Based on the results of the HHRA, vapor mitigation is not part of the planned project.

3.0 EXCAVATION PLANNING

As described above, redevelopment plans for the subject property include subterranean parking and, due to the limited soil excavation for the car stackers and subsurface utility corridors, a net loss of soil from the site resulted. The construction required excavation to depths up to approximately 14 feet bgs. The SMP was prepared and implemented in order to manage soil excavated from the site as well as provide contingency measures to be followed in the event suspect materials were encountered during site redevelopment.

Destruction of groundwater monitoring wells, injection points, and soil vapor probes was conducted by Shell prior to the soil excavation (GHD, 2015). Groundwater monitoring wells S-8, S-9, S-10, S-12, S-13, S-14R, S-17 through S-20, S-21A, S-21B, S-22A, S-22B, S-23, injection points IP-1, IP-2, IP-3, and well OW-1 were destroyed under permit via pressure grouting. Soil vapor probes VP-2, VP-3, and VP-5 through VP-11 were destroyed by over-drilling under permit (GHD, 2015). Soil vapor probes VP-4 and VP-12 were located within the area of the car stackers and were removed during soil excavation conducted for redevelopment.

3.1 Soil Classification and SMP Excavation Areas

Existing soil laboratory analytical results from the previous investigations completed at the site were used to characterize the soil excavated for waste disposal profiling. As documented in the SMP, soil to be excavated was not anticipated to contain metals, petroleum hydrocarbons, or petroleum hydrocarbon-related constituents at concentrations that would result in the soil be classified as hazardous waste.

4.0 SMP IMPLEMENTATION

4.1 Summary of Soil Management Activities

Planned redevelopment of the project required removal of fill and native soil to depths ranging up to approximately 14 feet bgs (Plate 2). In accordance with the SMP, the following mitigation activities were completed between July 8, 2016 and September 18, 2016:

(1) Site control (e.g., fencing and access barriers) to limit access to the site from the public and area controls for open excavation pits;

(2) Removal of asphalt covered parking lot and parking lot kiosks from the site to allow redevelopment;

(3) Select excavation, with final depths based on subgrade features of the planned development;

(4) Inspection and field screening of material discovered during excavation that was suspected of containing petroleum hydrocarbons; and

(5) Off-site disposal of excavated soil and recycling of asphalt debris removed from the site.

Details of these activities are provided in the following sections.

4.2 Preliminary Activities

Prior to the start of soil excavation activities the general contractor, Hawk Development of Livermore, California, secured the site with fencing and access barriers to restrict access to the site.

Prior to excavation of soil from the site, asphalt pavement and the parking kiosks were removed from the site from July 8 through 11, 2016. Approximately 73 cubic yards (CY) of asphalt pavement was transported off-site to Brooklyn Basin in Oakland, California. The parking kiosks were removed from the site and disposed as construction debris.

4.3 Soil Excavation Activities

The soil excavation was performed by Hawk Development between July 12, 2016 and September 18, 2016. During the majority of soil excavation no indications of suspect soil or materials were observed and therefore PES was not contacted to implement procedures described in the SMP. However, as described below, PES was contacted to conduct a site inspection and screen the excavation for suspect materials encountered at the bottom of the excavation.

Based on the pre-excavation site investigation results (Section 2.3), the soil was excavated and transported to an appropriate, permitted off-site facility. Additionally, during soil excavation subsurface construction debris primarily consisting of bricks was transported off-site for disposal. Soil vapor probes VP-4 and VP-12 were removed from the site by Hawk Development during soil excavation conducted in the area of the car stackers. Groundwater was not encountered during soil excavation and no dewatering was required.

A shoring system extending from the ground surface to the final excavation bottom was installed along portions of the excavation perimeter. Soil and construction debris from the ground surface to final depth of the excavation was removed using a tracked excavator. Excavated material was loaded into end-dump trucks.

Construction debris removed during excavation was separated from the excavated soil. Once brought to the surface, these materials were broken into smaller pieces, as needed, and stockpiled separately in temporary stockpile staging areas, pending offsite recycling.

As noted above, on August 11, 2016, PES was contacted by Hawk Development to conduct a site inspection and screen the site for potentially suspect material. The vertical limits of the excavation in the area of the car stackers had been reached and soil potentially impacted by petroleum hydrocarbons was encountered. The potentially affected material was located at the base of the excavation (approximately 14 feet bgs) and approximately 1 foot of clean site soil was placed on top of the material as engineered fill. On August 11, 2016, PES staff inspected the site and collected total VOC readings using a photoionization detector (PID). PES staff reported that no indications of petroleum hydrocarbon-affected soil were observed (visual or olfactory) and no groundwater was present in the excavation. The PID readings were collected from areas away from the site (background levels), at the site perimeter and within the excavation on the site. The approximate locations of the PID readings are presented on Plate 2. The following total VOC levels were measured with the PID:

(1) Background: 0.00 parts per million by volume (ppmV);

(2) Site perimeter: 0.00 ppmV; and

(3) Within Excavation: 0.00 ppmV.

The results of the site inspection and field screening indicated further mitigation of the potentially suspect material was not required.

4.5 Waste Management and Disposal

4.5.1 Soil Disposal

The total estimated quantity of soil removed from the site is 2,220 CY. Copies of soil disposal documentation are provided in Appendix B.

In accordance with the results of the pre-excavation soil characterization, soil excavated was managed as non-hazardous waste. Approximately 2,000 CY of soil was transported to Keller Canyon Landfill facility in Pittsburg, California for disposal. Approximately 220 CY of soil was transported to 5th and Market, Oakland, California for placement as fill material beneath an I-880 underpass.

4.5.2 Waste Disposal

Waste generated at the site during redevelopment activities included asphalt pavement, and construction debris consisting of bricks and concrete. Copies of waste disposal documentation are provided in Appendix B.

Approximately 73 cubic yards (CY) of asphalt pavement and 84 CY of concrete was transported off-site to Brooklyn Basin in Oakland, California. The asphalt and concrete were incorporated into an ongoing aggregate base recycle operation at Brooklyn Basin. Approximately 137 CY of bricks encountered during site redevelopment was transported to Diablo Valley Rock in Martinez, California for recycling.

5.0 CONCLUSIONS

Site preparation, demolition of asphalt pavement and parking kiosks, soil excavation, management, loading, transportation, and disposal activities performed at the property located at 459 8th Street in Oakland, California were completed between July 8, 2016 and September 18, 2016. Site preparation, demolition, field screening, soil excavation, soil management and disposal activities were implemented in accordance with the SMP prepared for the subject property.

A total of approximately 2,220 CY of soil was excavated, removed and transported under non-hazardous waste manifesting procedures to appropriate disposal facilities. Minor amounts of construction debris were encountered, excavated, removed and transported off-site for reuse or recycling. Field screening was conducted in response to observations of potentially suspect material. The results of the field screening indicated further mitigation was not required. Upon completion of soil removal activities, the excavation was prepared for subsequent construction which includes placement of 21-inch thick concrete slab at the base of the excavation. As such, implementation of the SMP for the site has been successfully completed. The site contamination and the current conditions of the building foundation are consistent with the HHRA and SMP prepared for the site. As noted above, site redevelopment activities are still underway and a Final Record Report of Construction will be prepared and submitted to ACEH upon completion of the foundation to be constructed for the redevelopment project.

6.0 REFERENCES

Alameda County Environmental Health Services (ACEH), 2014. *Case File Review for Fuel Leak Case No. RO0000343 and GeoTracker Global ID T0600101263, Shell, 461 8th Street, Oakland, CA 94607.* April 24.

ACEH, 2016. *Electronic Correspondence, RO0343 - Shell, 461 8th Street, Oakland, CA - August 26, 2016 Conference Call Summary and Action Items*. August 29.

Cambria, 2003. *Subsurface Investigation Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. December 16.

Cambria, 2007. *Site Investigation Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. March 2.

Conestoga-Rovers, 2008a. *Site Investigation and Pilot Test Report and Corrective Action Plan, Former Shell Service Station, 461 8th Street, Oakland, CA*. February 25.

Conestoga-Rovers, 2008b. *Remedial Action Plan, Former Shell Service Station, 461 8th Street, Oakland, CA*. April 17.

Conestoga-Rovers, 2010. *In Situ Chemical Oxidation Pilot Test Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. September 21.

Conestoga-Rovers, 2012. *Subsurface Investigation Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. January 26.

Conestoga-Rovers, 2013a. *Groundwater Monitoring Report 4th Quarter 2012, Former Shell Service Station, 461 8th Street, Oakland, CA*. January 4.

Conestoga-Rovers, 2013b. *Groundwater Monitoring Report 2nd Quarter 2013, Former Shell Service Station, 461 8th Street, Oakland, CA*. June 14.

Conestoga-Rovers, 2014. *Groundwater Monitoring Report 2nd Quarter 2013, Former Shell Service Station, 461 8th Street, Oakland, CA*. January 9.

Conestoga-Rovers, 2014a. *Groundwater Monitoring Report 2nd Quarter 2014, Former Shell Service Station, 461 8th Street, Oakland, CA*. July 7.

Conestoga-Rovers, 2015. *Limited Human Health Risk Assessment, Former Shell Service Station, 461 8th Street, Oakland, CA*. February 27.

County of Alameda, 2009. *Closure Review, 461 8th Street, Oakland, CA LUST Cleanup Site*. November 6.

Enviros, 1993. *Work Plan for Soil and Groundwater Sampling, Former Shell Service Station, 461 8th Street, Oakland, CA*. November 2.

Enviros, 1994. *Site Investigation Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. August 16.

Enviros, 1995. *Site Investigation Report and Quarterly Monitoring Report – First Quarter 1995, Former Shell Service Station, 461 8th Street, Oakland, CA*. February 14.

GHD Services, Inc., 2015. *Subsurface Investigation and Third Quarter 2015 Groundwater Monitoring Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. November 9.

Graymer, 2000. *Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California*. USGS Misc. Field Studies – MF 2342, version 10.

GSI, 1993. *Work Plan, Former Shell Service Station, 461 8th Street, Oakland, CA. September 14.*

PES Environmental, Inc. (PES), 2014a. *Phase I Environmental Site Assessment*, *459 8th Street, Oakland, California*. September 23.

PES, 2014b. *Limited Subsurface Investigation Report*, *459 8th Street, Oakland, California.* September 25.

PES, 2015. *Soil Management Plan*, *459 8th Street, Oakland, California*. August 14.

Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), 2013. *Screening for Environmental Concerns at Site with Contaminated Soil and Groundwater*. December.

Shell, 2009. *Statement of Environmental Responsibility – 459 8th Street, Oakland, CA*. Letter from Shell Oil Products US to Broadway Oak Partners. August 8.

ILLUSTRATIONS

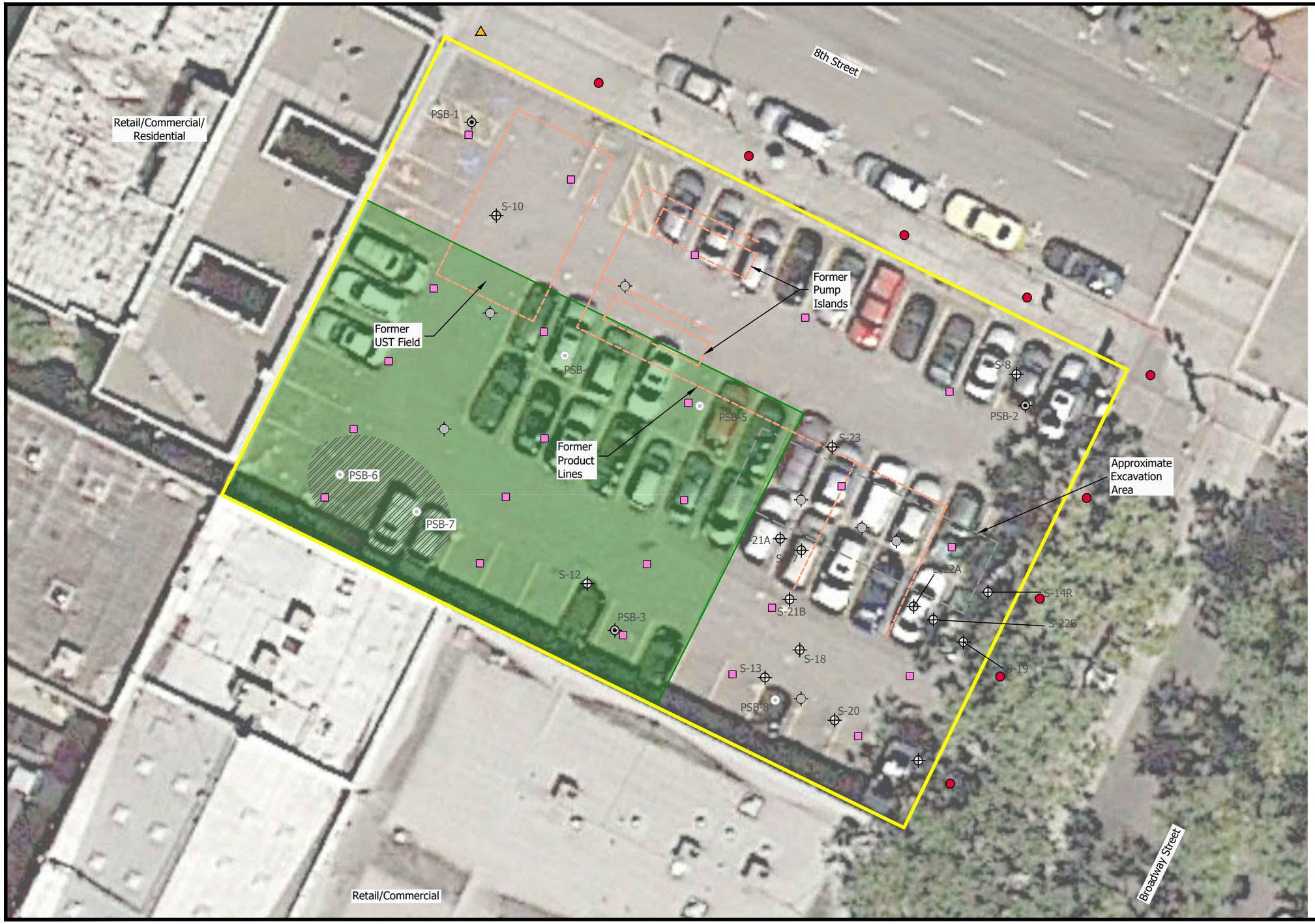
Aerial Photo: October 28, 2012 (Google 2014)

PES Environmental, Inc.
Engineering & Environmental Services

Site Location
Record Report of Construction - Progress Report
459 8th Street
Oakland, California

PLATE
1

935.038.01.005	93503801005_RRCPR_1-2	KSF	10/16
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

- Approximate Property Boundary
- Area Excavated to 14 Feet
- S-10 — Monitoring Well Location
- Observation/Monitoring Well Location
- PSB-1 — Soil and Groundwater Sample Location
- PSB-4 — Soil Sample Location
- PID — Photoionization Detector
- PID-B — PID Background
- PID-P — PID Perimeter
- PID-E — PID Excavation
- Area of Suspect Soil at 14 Feet Below Ground Surface

N

0 20

SCALE IN FEET

Aerial Photo: October 28, 2012 (Google 2014)

PES Environmental, Inc.
Engineering & Environmental Services

Site Plan with Air Sampling Locations
Record Report of Construction - Progress Report
459 8th Street
Oakland, California

PLATE
2

935.038.01.005	93503801005_RRCPR_1-2	KSF	10/16
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

APPENDIX A

SOIL MANAGEMENT PLAN

SIGNATURE
DEVELOPMENT
GROUP

Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Attention: Mr. Jerry Wickham

TRANSMITTAL LETTER
SOIL MANAGEMENT PLAN
459 8TH STREET
OAKLAND, CALIFORNIA

Dear Mr. Wickham:

Submitted herewith for your review is *Soil Management Plan, 459 8th Street, Oakland, California* dated August 14, 2015, prepared by PES Environmental, Inc.

I declare, under penalty of perjury, that the information contained in the above-referenced report for the subject property are true and correct to the best of my knowledge.

Very truly yours,

8TH STREET INVESTORS

Deborah Tu
Project Manager

PES Environmental, Inc.
Engineering & Environmental Services

A Report Prepared For:

Signature Land Advisors
2335 Broadway, Suite 200
Oakland, California 94612

Attention: Ms. Deborah Tu

SOIL MANAGEMENT PLAN
459 8TH STREET
OAKLAND, CALIFORNIA

AUGUST 14, 2015

By:

Christopher J. Baldassari, P.G.
Senior Geologist

Kyle S. Flory, P.G.
Principal Geologist

935.038.01.005

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued)

LIST OF ILLUSTRATIONS

1.0 INTRODUCTION

This Soil Management Plan (SMP) has been prepared by PES Environmental, Inc (PES) on behalf of Signature Land Advisors, Inc. (the Owner and project sponsor) for planned subgrade construction associated with the redevelopment of 459 8th Street in Oakland, California (the site or subject property). PES understands that redevelopment plans for the site include: (1) removal of groundwater monitoring and former injection gallery features; (2) grading and soil excavation for utilities, parking features, and foundations; and (3) construction of a new multi-story mixed-use residential building and associated parking and landscaped areas. The site location is shown on Plate 1.

PES understands Alameda County Environmental Health (ACEH) requires the SMP as part of redevelopment of the former Shell service station facility for mixed-use purposes. This SMP represents general, site-wide guidelines that should be followed in the event contaminated soil and/or groundwater is encountered during redevelopment activities as well as provide earthwork construction workers with: (1) information regarding the environmental condition of the site; (2) protocols for proper management of waste soils or extracted groundwater generated during site redevelopment activities; and (3) contingency procedures in the event that localized areas of unanticipated chemically-affected soil or other features of environmental concern are encountered during earthwork or excavation activities.

As discussed in the sections below, several phases of soil, soil vapor, and groundwater investigation have also been conducted by PES and others since 1979. These investigations indicate that based on the previous sampling results no significant soil or groundwater environmental concerns for construction workers and/or earthwork contractors are present at the site. While not expected, there is a possibility that previously unidentified and isolated occurrences of chemically-affected soil or other features of environmental concern may be encountered during redevelopment of the site.

2.0 BACKGROUND

2.1 Site and Vicinity Characteristics

The site consists of approximately 0.344 acres (ac.) of land (15,000 sq. ft) on one tax lot (Alameda County Assessor's office APN number 1-201-15) in downtown Oakland, California.

The site is bounded to the east by Broadway Street and to the north by 8th Street. It is bounded on south and west by zero-lot line properties with buildings. The south-adjacent building is a one-story structure with commercial tenants. The west-adjacent building is a four-story structure with ground-floor commercial space beneath three stories of apparent residential apartments. Site access is provided via two driveways on Broadway Street and one driveway on 8th Street

2.2 On-Site Structures and Historical Use

The site is currently developed as a parking lot (Plate 2). The only structures on the site are small, unmanned parking payment kiosks located at the northeastern and southwestern portions of the site.

The subject property has been developed for urban use (commercial/retail/urban residential) since at least 1889. The earliest known use in 1889 is a fraternal lodge. By 1902, the site was used as a rooming house and for small offices. In 1912, a candy factory, offices, a restaurant and a second hand shop occupied the subject property. From the 1920s to 1950, the site was occupied by a number of small businesses. The site was occupied in part by "Cascade Laundry" at 727 Broadway in 1920 through at least 1925, a taxi service at 723 Broadway in 1925, and "Costa Contra Laundry" in 1928. From approximately 1951 to 1961, the site was occupied by a hotel, a 'club room', a pool and restaurants.

Sometime between 1961 and 1967, the site was redeveloped. The existing buildings on the site were razed and a gasoline service station was constructed on the property. The service station appears to have operated at the site from the mid-1960s until May 1980. Reported occupants of the service station include American Oil and Gas (1967 through 1972) and Shell Oil (1972 through 1980). After removal of the service station in 1980, the site appears to have been used as a parking lot. This parking lot use continues to the present day.

2.3 Geology and Hydrogeology

The subject property is situated on coastal lowlands on the eastern perimeter of San Francisco Bay. Surficial deposits in the area of the site are Holocene to Pleistocene sandstones of the Merritt Sand formation. Based on geologic map information (Graymer, 2000), bedrock beneath the Merritt Sand is inferred to include Cretaceous to Jurassic, folded and faulted rocks of the Franciscan Complex, including mélange and meta-sedimentary rocks. The bedrock formations are within the complexly faulted Hayward Fault Zone.

Well logs from borings installed at the site indicate that silty sand with gravel is present at the site from beneath the asphalt surface to approximately 2.5 to 5.0 feet below ground surface (bgs) at the site. This material is likely construction-related fill. Brown, silty sand is present from beneath the shallow fill to depths of at least 30 feet bgs. Depth-to-groundwater at the site consistently ranges from 20 to 25 feet bgs based on recent groundwater monitoring data from three on-site wells (S-8, S-9, and S-10; Conestoga-Rovers, 2014).

Based upon groundwater flow data from monitoring wells located on, and in the vicinity of, the subject property, the local shallow groundwater flow direction at the site is consistently to the south-southwest, towards the Oakland Inner Bay. This flow direction is consistent with the topography of the site and surrounding area. On-site monitoring has not identified any periods of groundwater flow in other directions. The nearest surface water bodies are the Oakland

Inner Bay located approximately 2,500 feet to the south of the site and Lake Merritt, located approximately 3,500 feet east-northeast of the site.

2.4 Soil and Groundwater Environmental Conditions

A summary of prior soil, soil vapor, and groundwater investigations is presented in Appendix A. Copies of data from previous environmental investigation reports is presented in Appendix B. Copies of boring logs from a 2014 site investigation are presented in Appendix C.

A release of petroleum products was identified at the site in 1979 during off-site construction activities. Site investigation was initiated in 1981, and numerous environmental investigations and remedial activities have been performed by others at the site. The petroleum hydrocarbons release at the site is the subject of a leaking underground storage tank (LUST) case with the Alameda County Department of Environmental Health (ACEH). The results of the previous investigations indicate that no known significant soil, soil vapor, or groundwater environmental concerns have been identified to be present within the identified areas of earthwork-related activities associated with the redevelopment project.

Soil Conditions in Planned Excavation Areas

Based on the analytical results for soil samples collected in 2014 from areas within the planned excavation (PES, 2014b), concentrations of metals in soil are below ESLs for direct exposure for both residential scenarios and construction/trench worker exposure concentrations and appear to be consistent with expected background concentrations. Total petroleum hydrocarbons quantified as gasoline (TPHg), TPH quantifed as motor oil (TPHmo) and volatile organic compounds (VOCs) were not detected at or above the respective laboratory reporting limits in any of the soil samples. TPH as diesel (TPHd) was detected at concentrations of 2.1 milligrams per kilogram (mg/kg, 5.0 to 5.5 feet bgs sample from boring PSB6) and 4.2 mg/kg (5.0 to 5.5 feet bgs sample from boring PSB4), and is below ESLs for direct exposure for both residential scenarios and construction/trench worker exposure concentrations (Appendices A & B). The laboratory analytical results for the soil samples collected from within the areas of the planned excavations may be used to characterize the soil for transportation to an off-site receiving facility.

Additionally, as noted in Appendix A, soil vapor samples collected from five and 10 feet bgs in December 2011 and January 2012 and analyzed for gasoline range organics, benzene, toluene, ethylbenzene, and xylenes (BTEX), oxygen and argon, carbon dioxide, methane and helium indicated that ethylbenzene and xylenes were the only target analytes detected in the samples, and the concentrations detected were one to three orders of magnitude below the respective SFBRWQB shallow soil gas ESLs for commercial/industrial sites. As such, soil vapor is not considered a concern for future earth workers at the site.

2.5 Proposed Site Redevelopment

The site redevelopment proposed by the project sponsor calls for construction of a five story building with a garage and commercial spaces on the ground floor and residential units on the upper floors. A copy of the redevelopment plans are presented in Appendix D. The approved building will be completed at or near current grade, with the exception of two bays of parking structures (car stackers) to be located in the western-central and southwestern portions of the site (Figure 3), which will be installed to approximately 14 feet below grade (fbg). The project will involve excavation into limited portions of the site to allow construction of car parking lifts (i.e., car stackers) as well as subsurface utility corridors. The development plans in Appendix D show the approximate locations of the parking lifts. Soil excavation is expected where the car stackers will be constructed (Plate 2), as well as for planned subsurface utility corridors. PES understands shallow fill material at the site will be excavated, stockpiled and re-compacted on-site as an engineered fill material. Based on historical depth-to-groundwater measurements, construction to 14 feet bgs will not likely encounter shallow groundwater or require construction dewatering at the site.

2.6 Vapor Intrusion Mitigation

A site-specific Human Health Risk Assessment (HHRA) to assess soil vapor intrusion to indoor air, based on the approved project plans, was performed in 2015 by Conestoga-Rovers (Conestoga-Rovers, 2015). The HHRA concluded that it is unlikely that residual petroleum hydrocarbon concentrations pose an unacceptable risk to future on-site receptors, and no soil vapor mitigation or remediation was deemed necessary to address soil vapor intrusion concerns associated with the planned project. Based on the results of the HHRA, vapor mitigation is not part of the planned project.

3.0 RESPONSIBILITIES FOR PLAN IMPLEMENTATION

The subject property Owner shall oversee implementation of the SMP at the site. The Owner and General Contractor(s) shall make all third-party subcontractors working at the site aware of the requirements of the SMP, and provide an electronic copy and hard-copy to all subcontractors that are performing activities covered by this Plan (see Section 4.0), and who may encounter suspect subsurface conditions during execution of their work.

Prior to the initiation of construction activities that are covered under this Plan, the Owner shall confirm the Owner's project representative and project environmental consultant (Consultant) listed below. Regular and 24-hour emergency contact information for these individuals shall be confirmed and updated as necessary. A project contact sheet shall be provided to the General Contractor and posted in an accessible and suitable location at the subject property.

Project Responsibility	Company Name	Name	Phone Number Normal/24-hr
Owner Representative	Signature Land Advisors, Inc.	Deborah Tu, Project Manager	510-251-9284
Construction Manager	(To be Determined)	(To be Determined)	(To be Determined)
Environmental Consultant	PES Environmental, Inc.	Kyle Flory, P.G.	415-899-1600/ 415-497-2729

3.1 Worker Health and Safety

In addition to following the SMP, each contractor engaged in subsurface construction activities conducted under this SMP will have its workers comply with the site-specific HASP provided in Appendix E. The purpose of the HASP is to provide: (1) health and safety guidelines for those who may potentially encounter chemicals during site excavation for construction of subgrade portions of the building, and in areas where earthwork will be performed outside of the building footprint (e.g., dewatering well installation, underground utility work, etc.); and (2) contingency procedures to be implemented by contractors to protect worker health and safety should hazardous materials be encountered. A HASP has been prepared for the project in accordance with California Occupational Safety and Health Administration (CAL-OSHA) Construction Safety Orders within Title 8 of the California Code of Regulations (CCR). A copy of the HASP is included as Appendix E.

4.0 ACTIVITIES COVERED BY THE PLAN

The following activities constitute the work covered under this Plan.

- **Demolition** – activities associated with removal of the surface asphalt or concrete pavement;
- **Subsurface Construction or Repair** – any activity occurring beneath the grade level of existing pavements;
- **Utility Line Work** – any subterranean inspection, excavation, or repair of electrical, telephone, water, sanitary sewer or storm drains occurring within or outside of existing vaults (conducted prior to excavation);
- **Subsurface Injection Gallery** – any work associated with removal of the subsurface injection gallery present at the site;
- **Groundwater and Soil Vapor Monitoring Well Removals** - any work associated with removal of monitoring wells present at the site;

- **Groundwater Extraction or Construction De-watering** – any activity involving collection and removal of shallow groundwater during or after construction; or

- **Other** – other subgrade activities not expressly listed above.

5.0 PROPOSED MANAGEMENT OF SOILS

All soil management and handling activities shall be conducted in accordance with applicable federal, state, and local regulations. During implementation of the project other data may be collected to further refine the quantities and classification of the waste materials, and it may become necessary to obtain additional data for profiling purposes. Procedures for sampling soil stockpiles to further characterize soils designated for off-site disposal are presented in Section 5.2.2.

The general elements of soils management are as follows:

- The soil proposed for excavation during redevelopment activities will either be stockpiled on-site or transported directly to an appropriate off-site facility. Procedures for the management of excavated soils are detailed below in Section 5.2;

- Stockpile soil handling and sampling procedures, if/as required, are detailed in Section 5.2;

- Shallow groundwater is not anticipated to be encountered during excavation activities, and construction dewatering is not planned at the site. However, in the event groundwater is encountered and dewatering becomes necessary, groundwater management protocols are discussed in Section 6.0;

- If previously unidentified suspect soils are exposed during site construction, they will be managed using the contingency measures discussed in Section 7.0; and

- A Health & and Safety Plan (HASP) for site workers (presented in Appendix E).

5.1 Areas of Planned Excavation

Site-Wide Excavation and Earthwork

PES understands that soil across the entire site will be excavated to 5-feet bgs, stockpiled on-site, and re-distributed and re-compacted on-site as part of site grading activities. Significant quantities of excess soil requiring off-site transportation and disposal are not anticipated as a result of these site-wide over-excavation and re-compacting activities. Placement of this soil on plastic and sampling of the stockpiled material prior to placement and re-compaction on-site is not required as part of the SMP.

As noted previously, all constituents of potential concern (COPCs) detected in discrete site soil samples collected by PES in planned excavation areas were either below ESLs developed for residential direct exposure screening levels or consistent with naturally-occurring background concentrations. If soil encountered during the planned site-wide grading activities exhibits characteristics suggesting potential contamination, the contingency measures described in Section 7.0 should be implemented.

Parking Lift and Deep Utility Soil Excavation

The project involves excavation in two locations for the purpose of constructing car stacker bays, as well as for planned utility corridors (i.e., utilities generally deeper than 5-feet bgs). Excavation to depths of up to 14 feet bgs is expected, and excess soil generated as part of construction of these features may require off-site transport for re-use or disposal.

5.2 Management of Excavated Soil

5.2.1 Site-Wide Excavation and Earthwork

Temporary soil stockpiling is planned during the site-wide grading activities. As noted above, the COPCs detected in discrete site soil samples were all either below ESLs developed for residential direct exposure screening levels or consistent with naturally-occurring background concentrations, and no special handling for the temporary soil stockpiles generated from site grading activities is required in this SMP, unless observations indicate contaminated soil is suspected or encountered. In the event contaminated soil is encountered, the contingency measures discussed below in Section 7.0 should be followed.

5.2.2 Parking Lift and Deep Utility Soil Excavation

During the parking lift and deep utility soil excavations, temporary soil stockpiling may be required. As noted above, the COPCs detected in discrete site soil samples were either below ESLs developed for residential direct exposure screening levels or consistent with naturally-occurring background concentrations, and no special handling for the temporary soil stockpile generated from site grading activities is required in this SMP.

Waste Soil Characterization – Parking Lift Areas

Based on the analytical results of soil sampling conducted previously in the parking lift areas (Plate 2; PES, 2014b), approximately 1,555 bank cubic yards of soil are planned to be excavated in the parking lift areas (shown on Plate 2; and is represented by ten soil samples collected from sample locations PSB3 through PSB7). The ten soil samples (representing approximately one soil sample per 155 bank cubic yards) would likely be classified as non-hazardous waste for off-site disposal or re-use scenarios. TPHg, TPHmo, and VOCs were not detected at or above the respective laboratory reporting limits in any of the soil samples analyzed. Concentrations of TPHd were all well below the ESL developed by the RWQCB for

TPHd in soil for residential land use where underlying groundwater is considered a potential drinking water source (100 mg/kg). Concentrations of Title 22 metals detected in the soil samples representing excavation areas were within expected background levels and did not exceed respective Total Threshold Limit Concentrations, and were less than 10 times the respective STLC values.

5.3 Dust Control

Depending upon the soil conditions, during excavation there is a potential to generate a nuisance dust condition and odors. As noted in the City of Oakland General Administrative Code 15.04.035, dust control measures shall be based on "Best Management Practices" and shall be used throughout all phases of construction. Examples of dust mitigation activities include:

- Watering active construction areas to control dust emissions;
- Trucks hauling soil, sand, and other loose materials should be covered, or required to maintain at least 2 feet of freeboard;
- Apply water to unpaved and staging areas, or apply non-toxic soil stabilizers as necessary to control dust; and
- If visible soil material is carried onto adjacent public streets, streets should be swept daily (with water sweepers).

To complement air monitoring efforts that may be conducted under an applicable Health and Safety Plan, dust monitoring may be implemented by others to evaluate the effectiveness of dust control measures.

5.4 Decontamination Procedures

During soil excavation and loading, the work areas will be kept reasonably clean and free of excessive soil or debris. Care will be exercised to minimize the potential for tracking any soil out of the work area.

5.5 Off-Site Disposal Plan

The following activities will be performed as part of the off-site disposal plan: (1) waste characterization analytical testing in accordance with off-site facility waste acceptance criteria (as noted in Section 5.0, the existing data are considered sufficient to pre-profile the waste soils); (2) completing waste profiling for disposal purposes; (3) completing the waste manifest forms and documenting truck load volumes and/or weights; and (4) transportation of soil from the site to a permitted disposal facility.

5.6 Transportation Plan

Following acceptance of the excavated soil at an appropriate-licensed disposal facility, the soil will be loaded in licensed haul trucks (end-dumps or transfers) and transported off the site following appropriate California and Federal waste manifesting procedures. The appropriate waste manifest documentation will be provided to truck drivers hauling the affected soil off-site. As each truck is filled, an inspection will be made to verify that the waste soil is securely covered, to the extent practicable, and that the tires of the haul trucks are reasonably free of accumulated soil prior to leaving the site. A street sweeper will be made available, as needed, to keep the loading area clean. The soil will be wetted, as necessary, to reduce the potential for dust generation during loading and transportation activities. Transportation routes have been developed to minimize transporting the affected soil through residential areas. The affected soil will be transported via surface streets to the closest suitable freeway, which is Interstate 880. The proposed routes for transportation on Interstate 880 are as follows:

- To Interstate 880 South: Head northwest on 8th St toward Washington St; turn left at the 3rd cross street onto Jefferson St; turn left at the 3rd cross street onto 5th St; and use the left lane to take the ramp onto I-880 S; and

- To Interstate 880 North: Get on I-880 N from 8th St and 7th St.

The remainder of the freeway route(s) will be established upon selection of the appropriate landfill(s).

5.7 Soil Importation

While not anticipated, potential fill materials utilized at the site will be selected and tested in accordance with the DTSC *Information Advisory, Clean Imported Fill Material, October 2001* (DTSC Advisory). Specific laboratory analyses will be based on the fill source characteristics, once the borrow source area has been determined.

6.0 GROUNDWATER MANAGEMENT PROTOCOLS

The depth to groundwater at the site is typically encountered at 20 to 25 feet bgs. If dewatering of the excavation will be necessary during construction activities, a batch wastewater discharge permit may be obtained from the East Bay Municipal Utility District (EBMUD) for discharging water encountered during construction activities to the sanitary sewer system.

7.0 SOIL CONTINGENCY MEASURES

The following contingency measures shall be implemented in the event that previously unidentified suspected chemically-affected soil is identified during site excavation. All contingency measures will be conducted by HAZWOPER-trained environmental professionals using the HASP discussed in Section 5.0.

If soil encountered during the planned activities exhibits characteristics suggesting potential contamination, any suspect soil should be placed in temporary on-site stockpiles constructed with polyethylene plastic sheeting (10 mil minimum thickness) beneath and above the soil to prevent runon/runoff and fugitive dust emissions. Suspect stockpiled soil will be covered and secured at the end of each day.

7.1 Preliminary Assessment of Previously Unidentified Suspect Soils

Preliminary assessment of the previously unidentified suspect soil will include confirmation that access control measures installed by the General Contractor are adequate to provide necessary protection to on-site workers and the public during the evaluation phase. Confirmation will consist of visual assessment of the installed barriers as well as monitoring of the air outside the control area.

Air sampling will be conducted around the perimeter of the secured area using a combination photoionization detector (PID) meter to measure VOCs in the breathing zone and a lower explosive limit (LEL)/oxygen (O_2) meter to measure concentrations of combustible gases and available oxygen. If the air sampling suggests that the control measures are improperly positioned to provide necessary protection to on-site workers, the barriers will be relocated as necessary.

PES shall conduct a preliminary assessment to determine if the previously unidentified suspect soil is considered a significant risk to human health or the environment. If field observations suggest that the suspect conditions are *de minimis* and (1) do not present a threat to human health or the environment; or (2) would generally not be subject of an enforcement action if brought to the attention of appropriate governmental agencies; then the PES will terminate the contingency plan process and release the suspect areas to the General Contractor.

7.2 Evaluation of Previously Unidentified Suspect Soil

If conditions in the suspect area are not considered *de minimis*, PES shall evaluate the nature and extent of the potentially chemically-affected soil with in accordance with the following procedures.

Soil requiring further characterization will be sampled and analyzed as follows:

- Soil samples will be collected from the stockpiles using a pre-cleaned hand trowel and transferred into laboratory-supplied glass containers. One four point composite sample will be collected per disposal/accepting facility requirements;

- Following soil sample collection, the containers will be labeled for identification and immediately placed in a chilled, thermally insulated cooler containing bagged ice or blue ice. The cooler containing the samples will then be delivered under chain-of-custody protocol to a state-certified laboratory; and

- The composite samples collected from the soil stockpiles will be submitted, at a minimum, for laboratory analysis of TPHg and VOCs by U.S. EPA Test Method 8260B; TPHd and TPHmo by U.S. EPA Test Method 8015M, and Title 22 metals using U.S. EPA Test Method 6010B. If necessary, extractable metals tests (i.e., leaching test including STLC and/or TCLP) will be conducted on the samples with elevated total metals concentrations to establish if the soils are hazardous based on their leaching characteristics.

After the evaluation is complete, PES shall provide the Owner and General Contractor with conclusions regarding potential risks of the suspect material to human health and the environment as well as recommendations for proper removal and disposal of the affected soil. If soil removal is recommended then the procedures presented in Section 5.0 will be used to manage the soil. If VOC-affected soil is encountered, notification will be provided to Bay Area Air Quality Management District (BAAQMD) as required in the guidelines and notification requirements set by Regulation 8, Rule 40 of the BAAQMD Rules and Regulations for aeration of contaminated soil.

8.0 CONTINGENCY REPORTING

Following completion of contingency measures listed in Section 7.0, PES will prepare a report documenting soil and/or groundwater sampling, chemical analysis and proper disposal of the suspect materials, if encountered, during the site construction.

9.0 REFERENCES

Alameda County Environmental Health Services (ACEH), 2014. *Case File Review for Fuel Leak Case No. RO0000343 and GeoTracker Global ID T0600101263, Shell, 461 8th Street, Oakland, CA 94607.* April 24.

Cambria, 2003. *Subsurface Investigation Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. December 16.

Cambria, 2007. *Site Investigation Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. March 2.

Conestoga-Rovers, 2008a. *Site Investigation and Pilot Test Report and Corrective Action Plan, Former Shell Service Station, 461 8th Street, Oakland, CA*. February 25.

Conestoga-Rovers, 2008b. *Remedial Action Plan, Former Shell Service Station, 461 8th Street, Oakland, CA*. April 17.

Conestoga-Rovers, 2010. *In Situ Chemical Oxidation Pilot Test Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. September 21.

Conestoga-Rovers, 2012. *Subsurface Investigation Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. January 26.

Conestoga-Rovers, 2013a. *Groundwater Monitoring Report 4th Quarter 2012, Former Shell Service Station, 461 8th Street, Oakland, CA*. January 4.

Conestoga-Rovers, 2013b. *Groundwater Monitoring Report 2nd Quarter 2013, Former Shell Service Station, 461 8th Street, Oakland, CA*. June 14.

Conestoga-Rovers, 2014. *Groundwater Monitoring Report 2nd Quarter 2013, Former Shell Service Station, 461 8th Street, Oakland, CA*. January 9.

Conestoga-Rovers, 2014a. *Groundwater Monitoring Report 2nd Quarter 2014, Former Shell Service Station, 461 8th Street, Oakland, CA*. July 7.

Conestoga-Rovers, 2015. *Limited Human Health Risk Assessment, Former Shell Service Station, 461 8th Street, Oakland, CA*. February 27.

County of Alameda, 2009. *Closure Review, 461 8th Street, Oakland, CA LUST Cleanup Site*. November 6.

Enviros, 1993. *Work Plan for Soil and Groundwater Sampling, Former Shell Service Station, 461 8th Street, Oakland, CA*. November 2.

Enviros, 1994. *Site Investigation Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. August 16.

Enviros, 1995. *Site Investigation Report and Quarterly Monitoring Report – First Quarter 1995, Former Shell Service Station, 461 8th Street, Oakland, CA*. February 14.

Graymer, 2000. *Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California*. USGS Misc. Field Studies – MF 2342, version 10.

GSI, 1993. *Work Plan, Former Shell Service Station, 461 8th Street, Oakland, CA. September 14.*

PES Environmental, Inc. (PES), 2014a. *Phase I Environmental Site Assessment*, *459 8th Street, Oakland, California*. September 23.

PES, 2014b. *Limited Subsurface Investigation Report*, *459 8th Street, Oakland, California.* September 25.

Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), 2013. *Screening for Environmental Concerns at Site with Contaminated Soil and Groundwater*. December.

Shell, 2009. *Statement of Environmental Responsibility – 459 8th Street, Oakland, CA*. Letter from Shell Oil Products US to Broadway Oak Partners. August 8.

T&R, 2006. *Subsurface Investigation Report, Former Shell Service Station, 461 8th Street, Oakland, CA*. March 27.

ILLUSTRATIONS

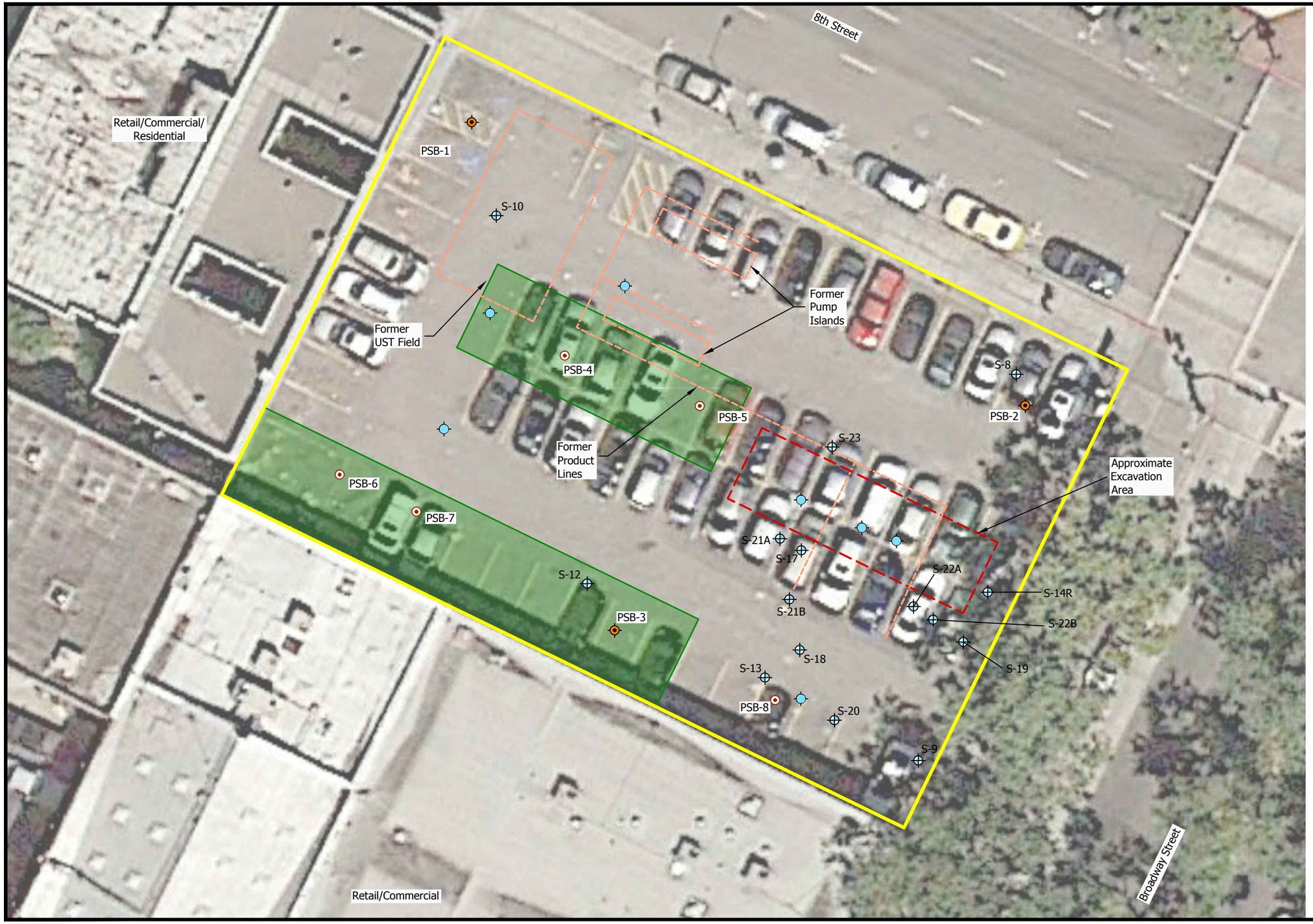
Aerial Photo: October 28, 2012 (Google 2014)

PES Environmental, Inc.
Engineering & Environmental Services

Site Location
Soil Management Plan
459 8th Street
Oakland, California

PLATE
1

935.038.01.005	93503801005_SMP_1-2	CJB	8/15
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

- Approximate Property Boundary
- Area to be Excavated to 14 feet
- S-10 — Monitoring Well Location
- Observation/Monitoring Well Location
- PSB-1 — Soil and Groundwater Sample Location
- PSB-4 — Soil Sample Location

N

0 20

SCALE IN FEET

Aerial Photo: October 28, 2012 (Google 2014)

PES Environmental, Inc.
Engineering & Environmental Services

Site Plan
Soil Management Plan
459 8th Street
Oakland, California

PLATE
2

935.038.01.005	93503801005_SMP_1-2	CJB	8/15
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

APPENDIX A

SUMMARY OF PRIOR ENVIRONMENTAL INVESTIGATIONS AND REMEDIAL ACTIONS

APPENDIX A

SUMMARY OF PRIOR ENVIRONMENTAL INVESTIGATIONS AND REMEDIAL ACTIONS

A number of environmental investigations have occurred at the site since 1979. In 1979, a discovery of separate phase hydrocarbons (SPH) occurred in a Bay Area Rapid Transit (BART) tunnel under the intersection of 7th Street and Broadway Street, approximately one-half block south of the subject property. A summary of site investigations from 1979 to 2006 is included in Section 4.1, below. Selected investigations and groundwater monitoring reports from 2007 to the present are discussed in subsequent sections. Copies of selected reports are included on CD-ROM in Appendix F.

A.1 Previous Investigations 1979-2006

The following site history information is excerpted from Cambria Environmental Technology, Inc. (Cambria, 2007). During January 1979, SPH was reported in a BART tunnel under the intersection of 7th Street and Broadway Street. At that time, a Shell gasoline service station was operating at the subject property. Tank and product line testing at the Shell station indicated a pressure leak in the lines and the product lines were replaced in January 1979. The USTs passed a tightness test. According to the BART Recovery Project Log (chronological list of events from 1/10/79 through 12/3/81), one observation well is reported to have been drilled onsite to a depth of 25 feet concurrent with piping replacement with no reports of contamination. Additional SPH samples taken from the BART tunnel in January 1979 and in May 1981 identified the product as Shell Regular leaded gasoline. Approximately 2,600 gallons of a gasoline-and-water mixture are reported to have been removed from the BART tunnel between October 1979 and April 1980. The Shell station discontinued operation in May 1980, and all existing improvements, tanks, and associated piping were reportedly removed at that time. Reports documenting subsurface conditions at the time of the removal of the tanks were not identified by PES during preparation of this report.

Seven monitoring wells (L-1 through L-7) were installed on and in the vicinity of the site in 1981. A recovery well was installed in the vicinity of well L-6 (now re-named S-6) in 1982. Well S-6 (Plate 2) is located approximately one block south of the site. According to a September 14, 1993 GeoStrategies Inc. (GSI) Work Plan (GSI, 1993), groundwater extraction from S-6 began in February 1982 and continued until August 1982, when the system was shut down because the effluent discharge exceeded permitted discharge levels. Wells L-1 through L-3 were destroyed during construction of the BART tunnels in the mid-1980s. Wells L-4, L-5 and L-6 were renamed S-4, S-5 and S-6 (Plate 2). Gettler-Ryan Inc. began gauging wells S-4 through S-6 in 1986 and collecting groundwater samples for analysis in 1988. A November 2, 1993 Work Plan for Soil and Groundwater Sampling prepared by Enviros, Inc. (Enviros, 1993) indicates that groundwater was extracted from wells S-5 and S-6 by bailing or by using a vacuum truck beginning in October 1988.

During July 1994, nine soil borings (B-1 through B-9) were installed in the vicinity of the former pump islands and the former USTs at the site. Investigation activities are described in an August 16, 1994 Enviros Site Investigation Report (Enviros, 1994). The maximum total petroleum hydrocarbons as gasoline (TPHg) and benzene concentrations reported in soil samples were 15 milligrams per kilogram (mg/Kg) and 0.24 mg/Kg, respectively, collected near the former pump islands. No TPHg or benzene was reported in the area of the former piping or the former UST locations.

During December 1994, onsite monitoring wells S-8, S-9 and S-10 were installed in similar locations as the previously destroyed wells L-2, L-3 and L-1, respectively. Investigation activities are described in a February 14, 1995 Enviros Site Investigation Report and Quarterly Monitoring Report- First Quarter 1995 (Enviros, 1995). Except for 0.014 mg/Kg benzene in a sample from S-8 at 21.5 bgs, no TPHg or benzene were reported in soil samples collected from wells S-8 and S-9. Except for 760 mg/Kg TPHg and 0.0032 mg/Kg benzene reported in the sample from S-10 at 11.5 bgs, no TPHg or benzene was reported in soil samples collected from well S-10.

During October 2003, one soil boring (HA-l) was installed in 7th Street south of the site. Three additional offsite soil borings, one in Broadway near well S-5, one northwest of Broadway within 6th Street, and one near the eastern corner of Broadway and 6th Street, were attempted. However, subsurface obstructions and utility corridors were encountered, and the borings could not be completed. No TPHg, benzene, or methyl tertiary butyl ether (MTBE) were detected in soil samples collected from boring HA-l. No TPHg or benzene, and 6.3 micrograms per liter (μg/L) MTBE were detected in a grab groundwater sample collected from boring HA-l. Investigation activities are described in Cambria's December 16, 2003 Subsurface Investigation Report (Cambria, 2003).

During May 2004, Treadwell & Rollo, Inc. (T&R) of Oakland, California installed four soil borings (TR-1 through TR-4) onsite to collect soil and soil vapor samples. No TPHg or volatile organic compounds (VOCs) were detected in soil samples, and no benzene, toluene, ethylbenzene, or xylenes (BTEX) were detected in soil vapor samples (as presented in the laboratory analytical report, only BTEX compounds were analyzed in the soil vapor samples collected by T&R in 2004). Investigation results are summarized in T&R's March 27, 2006 Subsurface Investigation report (T&R, 2006).

A.2 2007 Cambria Site Investigation Report

In 2007, Cambria (2007) prepared a report of a site investigation conducted at the subject property. A copy of the Cambria (2007) report is included in Appendix F. Fourteen (14) borings were completed at the site during the investigation.

Samples of soil and groundwater collected from the borings were analyzed for gasoline range organics, BTEX and oxygenates. Cambria identified impacted vadose zone soils in four borings (B-12, B-13, B-14, and B-19). Benzene concentrations in vadose zone soils at B-12 exceeded the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Soil Environmental Screening Levels (ESLs) for Evaluation of Potential Vapor Intrusion Concerns in a residential setting at 10 feet bgs.

Groundwater grab samples from each boring (except B-20) indicated impacts to groundwater beneath, and downgradient (southwest) of, the former dispenser islands. Benzene concentrations from nine of the borings were at, or above, the SFBRWQCB Groundwater ESL for Evaluation of Potential Vapor Intrusion Concerns for residential land use with high permeability soils and eight of the grab groundwater samples exceed the benzene ESL for commercial land use with high permeability soil.

A.3 2008 Conestoga-Rovers Site Investigation, Pilot Test and CAP Report

In 2008, Conestoga-Rovers (2008a) prepared a report of a site investigation, remedial action pilot test results and a corrective action plan (CAP) for the subject property. Four soil borings were advanced (B-24 through B-27). The borings were advanced from 14 to 37 feet bgs. All borings encountered refusal in attempts to drill to 50 feet bgs. Vapor monitoring points were installed in the borings (VP-1 through VP-4). In addition, five new groundwater monitoring wells (S-12 through S-16) and one air sparge test well (AS-1) were installed onsite. Soil samples were collected at 5-foot intervals from the borings and analyzed for gasoline range hydrocarbons and BTEX. Groundwater from boring B-24 was also analyzed for gasoline range hydrocarbons and BTEX. Vapor samples from the vapor monitoring points were collected at 5 feet and 9.5 feet bgs and analyzed for gasoline range organics, BTEX, methane, propane, isobutane and butane.

Gasoline range organics and BTEX were detected in soil samples from all borings but not at all sampled intervals. Gasoline range organics and BTEX were detected in the groundwater sample. Gasoline range organics, BTEX, isobutane and butane were detected in the vapor samples; however, concentrations detected in only one vapor point (VP-1 at 5.0 and 9.5 feet bgs) exceeded allowable ESLs. Benzene at 5.0 feet exceeded the residential ESL. Gasoline range organics and benzene at 9.5 feet in VP-1 exceeded the residential and commercial ESLs.

Conestoga-Rovers conducted air sparge/soil vapor extraction (AS/SVE) and dual phase extraction (DPE) pilot testing at the site. Upon completion of the pilot testing, Conestoga-Rovers conducted a remedial action alternatives evaluation. Based on their evaluation, they recommended AS/SVE for the site. A copy of the Conestoga-Rovers (2008a) report is included in Appendix F.

A.4 2008 Conestoga-Rovers Remedial Action Plan

In 2008, Conestoga-Rovers (2008b) prepared a remedial action plan (RAP) for the site that called for excavation of a portion of the site. The RAP called for the excavation of a 20 feet by 60 feet area in the southeast section of the property to a depth of approximately 20 feet, in the vicinity of the eastern canopy (and likely above a pump island location). This remedial action was conducted during June 2008. Based upon subsequent reporting, the excavation was carried out as planned and approximately 1,340 tons of soil were removed from the site for offsite disposal. A copy of the Conestoga-Rovers (2008b) report is included in Appendix F.

A.5 2010 Conestoga-Rovers In Situ Chemical Oxidation Pilot Test

Following the June 2008 excavation of soils, Conestoga-Rovers (2010) conducted an in situ chemical oxidation (ISCO) pilot test to enhance groundwater remediation at the site. In preparation for the test, an infiltration gallery was installed in the 2008 excavation prior to backfilling.

Conestoga-Rovers conducted a series of ISCO injection events at the site in 2008 through 2010. For these events, they injected approximately 15,800 pounds (lbs) of 30 to 40 percent sodium persulfate and 10,900 gallons of 10 percent peroxide solution.

Groundwater monitoring results following each of the ISCO pilot test injection events showed that gasoline range organics and benzene levels were being reduced, and oxidation-reduction potential (ORP) and dissolved oxygen (DO) readings indicated that further degradation of gasoline range organics and benzene was expected. Based on the results, Conestoga-Rovers recommended that no further ISCO pilot tests were warranted. A copy of the Conestoga-Rovers (2010) report is included in Appendix F.

A.6 2012 Conestoga-Rovers Subsurface Investigation Report

In 2012, Conestoga-Rovers (2012) prepared a report of a subsurface soil vapor investigation conducted at the site. Eight nested soil vapor probes (VP-5 through VP-12) were installed at the site for this investigation. Soil vapor samples were collected from 5 and 10 feet bgs in each of the probes in December 2011 and January 2012 and analyzed for gasoline range organics, BTEX, oxygen and argon, carbon dioxide, methane and helium. Ethylbenzene and xylenes were the only target analytes detected in the samples and the concentrations detected were one to three orders of magnitude below the respective SFBRWQB shallow soil gas ESLs for commercial/industrial sites.

Conestoga-Rovers concluded that no additional soil gas investigations were warranted at the site assuming commercial use of the site. They recommended continued groundwater monitoring at the site. A copy of the Conestoga-Rovers (2008a) report is included in Appendix F.

A.7 2014 Limited Site Investigation - Soil and Groundwater Results

Based on historical research performed as part of a Phase I ESA prepared by PES, two former "cleaners" were identified as operating onsite between 1889 and 1961, and several offsite dry cleaners were also identified. There was insufficient information in the historical sources to determine if the on-site "cleaners" were dry cleaners or traditional laundry service providers. At Signature's request, the soil and grab groundwater sampling was conducted and included: (1) assessment of soil and groundwater for petroleum hydrocarbons and VOCs at two upgradient and one downgradient (with respect to on-Site groundwater flow direction) locations; and (2) focused assessment of soil chemistry in planned parking lift excavation areas for petroleum hydrocarbons and metals.

A.7.1 Soil Results

The soil sample results indicated that TPHd was the only organic constituent detected in soil samples. TPHd was detected at relatively low concentrations in 2 of 16 soil samples analyzed for this constituent. TPHd was detected at concentrations of 2.1 milligrams per kilogram (mg/kg, 5.0-5.5 feet bgs sample from boring PSB6) and 4.2 mg/kg (5.0-5.5 feet bgs sample from boring PSB4). TPHg, TPHmo, and other VOCs were not detected at or above the respective laboratory reporting limits in any of the soil samples.

Concentrations of metals in the soil samples collected within the proposed parking lift excavation areas were generally at background levels. Arsenic was the only metal detected at concentrations greater than the residential ESL. The maximum concentration of arsenic was 3.6 mg/kg. The concentrations of arsenic, as well as the other metals detected, were within expected background levels.

A.7.2 Groundwater Results

Multiple aromatic VOCs, typically associated with fuel releases, were detected in the groundwater samples collected at boring locations PSB1, PSB2, and PSB3. Organic constituents in groundwater samples that were detected above their respective residential ESL concentrations are summarized below:

- Benzene was detected above the residential drinking water ESL (1.0 micrograms per liter [μg/L]) in boring PSB3 (14 μg/L); and
- Xylenes were detected above the residential drinking water ESL (20 μg/L) in boring PSB3 (98 μg/L).

As noted above, the planned development includes residential units above ground level commercial retail as well as subterranean parking, and commercial ESLs for vapor intrusion (VI) concerns from groundwater may be applicable. The detected concentrations in groundwater sample PSB3 were below the commercial ESL for benzene for VI concerns from groundwater (270 μg/L). No ESL level is provided for VI concerns related to xylenes in groundwater in a commercial setting (RWQCB, 2013).

Groundwater analytical results did not indicate impact from off-site or onsite releases of chlorinated solvents in any of the three analyzed groundwater samples.

Based on the analytical results, soil in the areas of the planned parking lift excavation areas (represented by samples PSB3 through PSB8) would likely be classified as non-hazardous waste should off-site disposal be required. As such, additional investigation or remediation of soil within the planned soil excavation areas (i.e., at parking lift locations) was not recommended.

A.8 Recent Groundwater Monitoring Reports

Periodic on- and off-site groundwater monitoring has been conducted at the site since 1981. PES reviewed the groundwater monitoring reports for the site from January 2013, June 2013, January 2014, and July 2014 (Conestoga-Rovers, 2013a; 2013b; 2014; 2014a). Groundwater samples were analyzed for gasoline range organics and BTEX. Conestoga-Rovers did not compare the sampling results to potentially applicable ESLs. For comparison purposes, PES evaluated the results against the SFRWQCB Tier 1 ESLs for groundwater in a residential land use scenario. These ESLs are considered protective of groundwater for drinking water, vapor intrusion and aquatic habitats.

In summary, onsite wells S-8 through S-10, S-12, S-14 and S-17 through S-23 were sampled in 2012 and 2013. No SPH has ever been detected in these wells. Up to 0.39 feet of SPH was measured in on-site well S-13 (SPH a depth of approximately 25.70 feet bgs), and up to 1.15 feet of SPH was measured in off-site well S-5 during the March 14, 2014 and April 21, 2014 monitoring events (Conestoga-Rovers, 2014a). In 2013, the only onsite wells that did not have detections of gasoline range organics or BTEX at concentrations exceeding the default ESLs were wells S-8, S-21b and S-22b. All remaining onsite wells sampled in 2013 contained gasoline range organics and/or one or more BTEX compounds at concentrations exceeding their respective ESLs. Of note for the 2013 sample from S-19 is that the gasoline range organics and BTEX concentrations detected (170,000, 1,200, 3,800, 7,300 and 22,000 μg/L, respectively) were more than an order of magnitude higher than any concentrations detected in this well since installation in 2008. For 2012, all wells except S-10 contained gasoline range organics and/or one or more BTEX compounds at concentrations exceeding their respective ESLs for drinking water and vapor intrusion protection. With the exception of S-19 in 2013, the detection concentrations of target analytes in the onsite wells during 2012-2014 were generally consistent with concentrations detected in the last four to five years.

Offsite wells S-4, S-5 and S-6 were periodically sampled in 2012, 2013, and 2014. With the exception of well S-5, no SPH was detected in these wells during this period. S-4 has never had detected SPH, prior to 2014 SP-5 had not previously had SPH detected since 1998, and SP-6 last had a sheen detected in 2004. In 2012 and 2013, samples from S-5 and S-6 contained gasoline range organics and BTEX concentrations exceeding their respective ESLs. Of note for the 2013 sample from S-5 is that the gasoline range organics concentration detected (350,000 μg/L) was ten times higher than it has been since 2011 and five times higher than any concentration detected since January 2001. For S-4, the 2013 sample contained gasoline and BTEX below their respective ESLs. In 2012, gasoline and benzene concentrations from well S-4 exceeded their ESLs.

APPENDIX B

DATA FROM PREVIOUS ENVIRONMENTAL INVESTIGATION REPORTS

Table 1A
Summary of Soil Analytical Results - Organic Constituents
Subsurface Investigation
459 8th Street
Oakland, California

Boring Identification	Sample Identification	Sample Depth (feet bgs)	Date Collected	Petroleum Hydrocarbons (mg/kg)			VOCs (µg/kg)
				TPHg	TPHd	TPHmo	All VOCs
PSB1	PSB1-8.0	8 to 8.5	6/25/2014	ND(180)	ND(0.99)	ND(49)	ND
	PSB1-15.0	15 to 15.5	6/25/2014	ND(160)	ND(0.99)	ND(49)	ND
PSB2	PSB2-8.0	8 to 8.5	6/25/2014	ND(190)	ND(0.98)	ND(49)	ND
	PSB2-15.0	15 to 15.5	6/25/2014	ND(190)	ND(1.0)	ND(50)	ND
PSB3	PSB3-8.0	8 to 8.5	6/25/2014	ND(190)	ND(0.99)	ND(49)	ND
	PSB3-15.0	15 to 15.5	6/25/2014	ND(180)	ND(0.99)	ND(50)	ND
PSB4	PSB4-5.0	5 to 5.5	6/25/2014	ND(200)	**4.2**	ND(50)	ND
	PSB4-10.0	10 to 10.5	6/25/2014	ND(190)	ND(1.0)	ND(50)	ND
PSB5	PSB5-5.0	5 to 5.5	6/25/2014	ND(200)	ND(1.0)	ND(50)	ND
	PSB5-10.0	10 to 10.5	6/25/2014	ND(160)	ND(0.99)	ND(50)	ND
PSB6	PSB6-5.0	5 to 5.5	6/25/2014	ND(200)	**2.1**	ND(49)	ND
	PSB6-10.0	10 to 10.5	6/25/2014	ND(230)	ND(0.99)	ND(49)	ND
PSB7	PSB7-5.0	5 to 5.5	6/25/2014	ND(200)	ND(0.99)	ND(50)	ND
	PSB7-10.0	10 to 10.5	6/25/2014	ND(180)	ND(0.99)	ND(49)	ND
PSB8	PSB8-5.0	5 to 5.5	6/25/2014	ND(230)	ND(0.99)	ND(50)	ND
	PSB8-10.0	10 to 10.5	6/25/2014	ND(190)	ND(1.0)	ND(50)	ND
Shallow (<3 meters bgs) Soil ESL[1]				**100**	**100**	**100**	N/A
Deep (>3 meters bgs) Soil ESL[1]				**500**	**110**	**500**	N/A

Notes:

Detected concentrations are shown in bold.

mg/kg = Milligrams per kilogram.

µg/kg = Micrograms per kilogram.

ND(5.0) = Not detected at or above the indicated laboratory reporting limit.

ND = Not detected at or above the laboratory reporting limit (varies by analyte).

NA = Not analyzed.

N/A = Not applicable.

TPHg = Total petroleum hydrocarbons quantified as gasoline.

TPHd = Total petroleum hydrocarbons quantified as diesel.

VOCs = volatile organic compounds.

bgs = Below ground surface.

Y= Sample exhibits chromatographic pattern which does not resemble standard.

ESL = Environmental Screening Level.

- Results exceeding residential ESLs are shaded.

(1) = San Francisco Bay Regional Water Quality Control Board (SFRWQCB) ESL for residential land use where potentially impacted groundwater is a current or potential drinking water resource (December 2013).

Table 1B
Summary of Soil Analytical Results - Metals
Subsurface Investigation
459 8th Street
Oakland, California

Boring Identification	Sample Identification	Sample Depth (feet bgs)	Date Collected	Metals (mg/kg)															
				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
PSB1	PSB1-8.0	8 to 8.5	6/25/2014	ND(0.48)	**1.6**	**68**	ND(0.095)	ND(0.12)	**72**	**2.9**	**7.3**	**2.0**	**0.069**	ND(0.48)	**36**	ND(0.95)	ND(0.24)	ND(0.48)	**30**	**22**
	PSB1-15.0	15 to 15.5	6/25/2014	ND(0.47)	ND(0.94)	**42**	ND(0.094)	ND(0.12)	**45**	**6.2**	**7.4**	**2.4**	**0.062**	ND(0.47)	**25**	ND(0.94)	ND(0.24)	ND(0.47)	**15**	**20**
PSB2	PSB2-8.0	8 to 8.5	6/25/2014	ND(0.43)	**2.2**	**71**	ND(0.087)	ND(0.11)	**45**	**5.5**	**8.0**	**1.6**	**0.040**	ND(0.43)	**32**	ND(0.87)	ND(0.22)	ND(0.43)	**29**	**21**
	PSB2-15.0	15 to 15.5	6/25/2014	ND(0.50)	**1.3**	**48**	**0.11**	ND(0.13)	**53**	**5.8**	**7.0**	**1.4**	**0.041**	ND(0.50)	**31**	ND(1.0)	ND(0.25)	ND(0.50)	**31**	**19**
PSB3	PSB3-8.0	8 to 8.5	6/25/2014	ND(0.42)	**2.1**	**36**	**0.11**	ND(0.10)	**45**	**6.2**	**7.7**	**2.1**	**0.048**	ND(0.42)	**30**	ND(0.83)	ND(0.21)	ND(0.42)	**27**	**19**
	PSB3-15.0	15 to 15.5	6/25/2014	ND(0.43)	**1.3**	**50**	**0.16**	ND(0.11)	**51**	**7.4**	**9.0**	**2.0**	**0.051**	ND(0.43)	**30**	ND(0.87)	ND(0.22)	ND(0.43)	**34**	**23**
PSB4	PSB4-5.0	5 to 5.5	6/25/2014	ND(0.42)	**1.5**	**49**	ND(0.085)	ND(0.11)	**24**	**2.5**	**6.4**	**16**	**0.19**	**1.0**	**12**	ND(0.85)	ND(0.21)	ND(0.42)	**15**	**37**
	PSB4-10.0	10 to 10.5	6/25/2014	ND(0.50)	**2.2**	**42**	ND(0.099)	ND(0.12)	**49**	**4.9**	**7.9**	**1.7**	**0.11**	ND(0.50)	**33**	ND(0.99)	ND(0.25)	ND(0.50)	**31**	**23**
PSB5	PSB5-5.0	5 to 5.5	6/25/2014	ND(0.47)	**3.6**	**42**	**0.28**	ND(0.12)	**42**	**6.8**	**6.6**	**1.9**	**0.031**	ND(0.47)	**16**	ND(0.93)	ND(0.23)	ND(0.47)	**44**	**18**
	PSB5-10.0	10 to 10.5	6/25/2014	ND(0.43)	**2.4**	**49**	**0.13**	**0.12**	**47**	**5.7**	**8.1**	**1.7**	**0.031**	ND(0.43)	**32**	ND(0.87)	ND(0.22)	ND(0.43)	**32**	**28**
PSB6	PSB6-5.0	5 to 5.5	6/25/2014	ND(0.44)	**1.5**	**43**	ND(0.088)	ND(0.11)	**32**	**2.3**	**5.2**	**2.8**	**0.040**	ND(0.44)	**15**	ND(0.88)	ND(0.22)	ND(0.44)	**19**	**15**
	PSB6-10.0	10 to 10.5	6/25/2014	ND(0.43)	**2.3**	**56**	**0.099**	ND(0.11)	**47**	**4.9**	**7.5**	**1.8**	**0.021**	ND(0.43)	**33**	ND(0.87)	ND(0.22)	ND(0.43)	**31**	**23**
PSB7	PSB7-5.0	5 to 5.5	6/25/2014	ND(0.46)	**1.5**	**44**	ND(0.093)	ND(0.12)	**29**	**3.0**	**5.0**	**1.6**	**0.019**	ND(0.46)	**14**	ND(0.93)	ND(0.23)	ND(0.46)	**19**	**14**
	PSB7-10.0	10 to 10.5	6/25/2014	ND(0.42)	**2.0**	**63**	**0.11**	ND(0.11)	**50**	**4.2**	**7.7**	**1.7**	**0.021**	ND(0.42)	**33**	ND(0.85)	ND(0.21)	ND(0.42)	**29**	**22**
PSB8	PSB8-5.0	5 to 5.5	6/25/2014	ND(0.49)	**1.9**	**30**	**0.11**	ND(0.12)	**36**	**2.3**	**5.2**	**1.7**	**0.041**	ND(0.49)	**14**	ND(0.97)	ND(0.24)	ND(0.49)	**23**	**13**
	PSB8-10.0	10 to 10.5	6/25/2014	ND(0.42)	**2.6**	**38**	**0.14**	ND(0.11)	**41**	**5.5**	**8.0**	**1.8**	**0.047**	ND(0.42)	**31**	ND(0.84)	ND(0.21)	ND(0.42)	**32**	**21**
Shallow (<3 meters bgs) Soil ESL [1]				**20.0**	**0.39**	**750**	**4.0**	**12**	**750 [2]**	**23**	**230**	**80**	**6.7**	**40**	**150**	**10**	**20**	**0.78**	**200**	**600**
Deep (>3 meters bgs) Soil ESL [1]				**31**	**0.39**	**2,500**	**160**	**78**	**2,500 [2]**	**23**	**2,500**	**80**	**6.7**	**390**	**1,500**	**390**	**390**	**0.78**	**390**	**2,500**
TTLC values [3]				**500**	**500**	**10,000**	**75**	**100**	**2,500**	**8,000**	**2,500**	**1,000**	**20**	**3,500**	**2,000**	**100**	**500**	**700**	**2,400**	**5,000**

Notes:
Detected concentrations are shown in bold.
mg/kg = Milligrams per kilogram.
ND(0.48) = Not detected at or above the indicated laboratory reporting limit.
NA = Not analyzed.
bgs = Below ground surface.
ESL = Environme - Results exceeding residential ESLs are shaded.

[1] = San Francisco Bay Regional Water Quality Control Board (SFRWQCB) ESL for residential land use where potentially impacted groundwater is a current or potential drinking water resource (December 2013).
[2] = ESL value is for chromium III.
TTLC = Total Threshold Limit Concentration.
[3] = Set by the Department of Toxic Substances Control (DTSC).

Table 2
Summary of Grab Groundwater Analytical Results
Subsurface Investigation
459 8th Street
Oakland, California

Boring Identification	Date Collected	Petroleum Hydrocarbons (µg/L)			VOCs (µg/L)															
		TPHg	TPHd	TPHmo	cis-1,2-DCE	trans-1,2-DCE	TCE	PCE	Vinyl Chloride	Benzene	Toluene	Ethylbenzene	Xylenes	Chloroform	Isopropylbenzene	Naphthalene	N-Propylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other SVOCs
PSB1-W	6/25/2014	ND(50)	ND(51)	ND(310)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	**11**	ND(0.50)	ND(1.0)	ND(1.0)	ND(0.50)	ND(0.50)	ND
PSB2-W	6/25/2014	ND(50)	ND(50)	ND(300)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	**3.2**	ND(0.50)	ND(1.0)	ND(1.0)	ND(0.50)	ND(0.50)	ND
PSB3-W	6/25/2014	ND(50)	ND(50)	ND(300)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	**14**	**37**	**23**	**98**	**3.6**	**1.2**	**4.8**	**3.0**	**16**	**4.3**	ND
Groundwater ESL [1]		**100**	**100**	**100**	**6.0**	**10**	**5.0**	**5.0**	**0.5**	**1.0**	**40**	**30**	**20**	**80**	NE	**6.1**	NE	NE	NE	NE
Groundwater ESL for Evaluation of Potential Vapor Intrusion Concerns at Residential Site [2]		NE	NE	NE	**3,100**	**14,000**	**130**	**63**	**1.8**	**27**	**95,000**	**310**	**37,000**	**170**	NE	**160**	NE	NE	NE	NE

Notes:

Detected concentrations are shown in bold.
µg/L = Micrograms per liter.
ND(50) = Not detected at or above the indicated laboratory reporting limit.
NE = Not established.
ND = Not detected at or above the laboratory reporting limit (varies by analyte).
TPHg = Total petroleum hydrocarbons quantified as gasoline.
TPHd = Total petroleum hydrocarbons quantified as diesel (with silica gel cleanup).
TPHmo = Total petroleum hydrocarbons quantified as motor oil (with silica gel cleanup).
cis-1,2-DCE = cis-1,2-dichloroethene.
trans-1,2-DCE = trans-1,2-dichloroethene.
TCE = Trichloroethene.
SVOCs = Semi-volatile organic compounds.
VOCs = Volatile organic compounds.
ESL = Environmental Screening Level.
 - Results exceeding groundwater ESLs are shaded.
[1] = San Francisco Bay Regional Water Quality Control Board (SFRWQCB) ESL for residential land use where potentially impacted groundwater is a current or potential drinking water resource (December 2013).
[2] = SFRWQCB Table E-1 Groundwater ESL for Evaluation of Potential Vapor Intrusion Concerns for residential land use (December 2013).

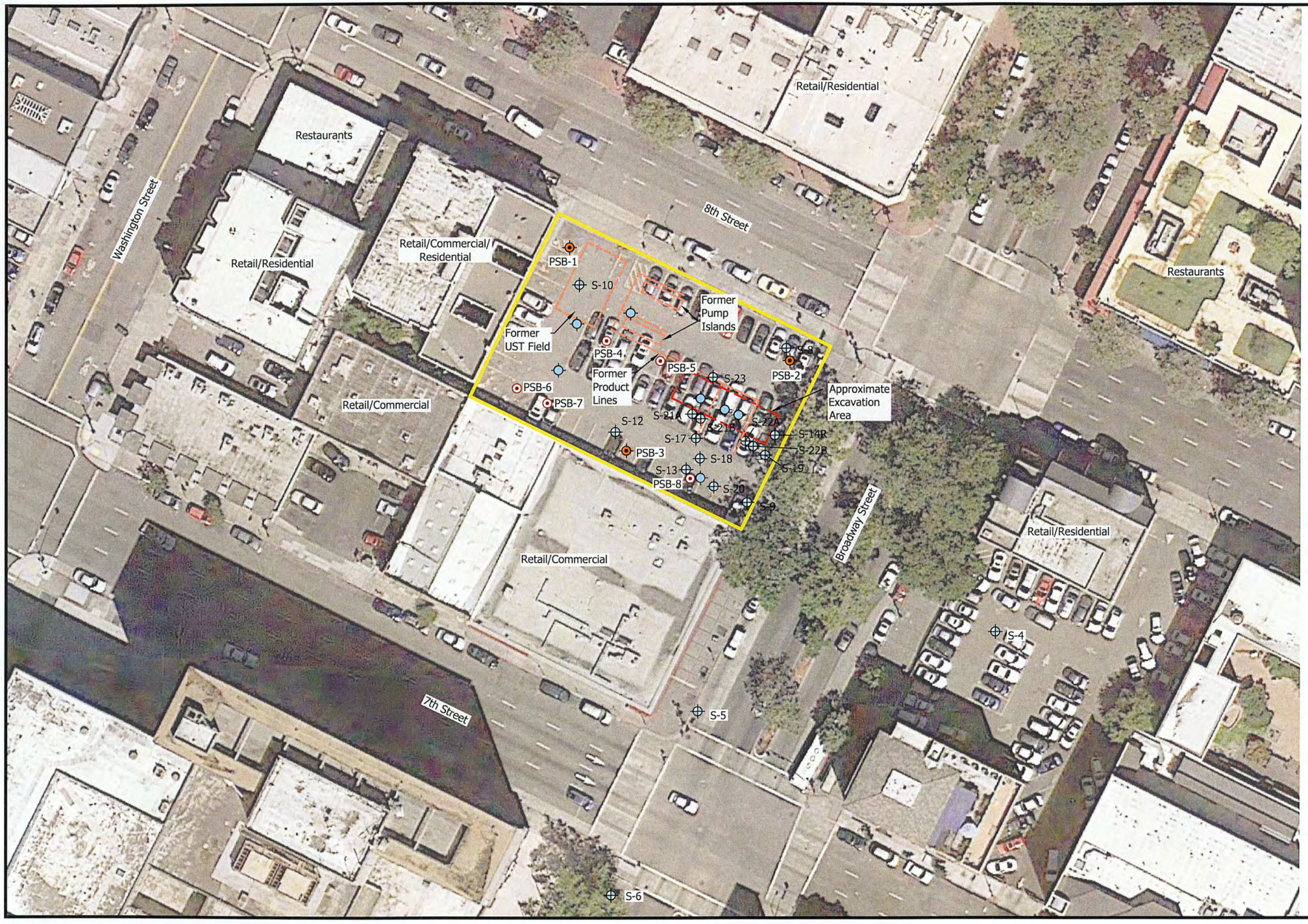
Aerial Photo: October 28, 2012 (Google 2014)

PES Environmental, Inc.
Engineering & Environmental Services

Site Location
Subsurface Investigation Report
459 8th Street
Oakland, California

PLATE
1

935.038.01.005	93503801005_SIR_1-4	CJB	9/14
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



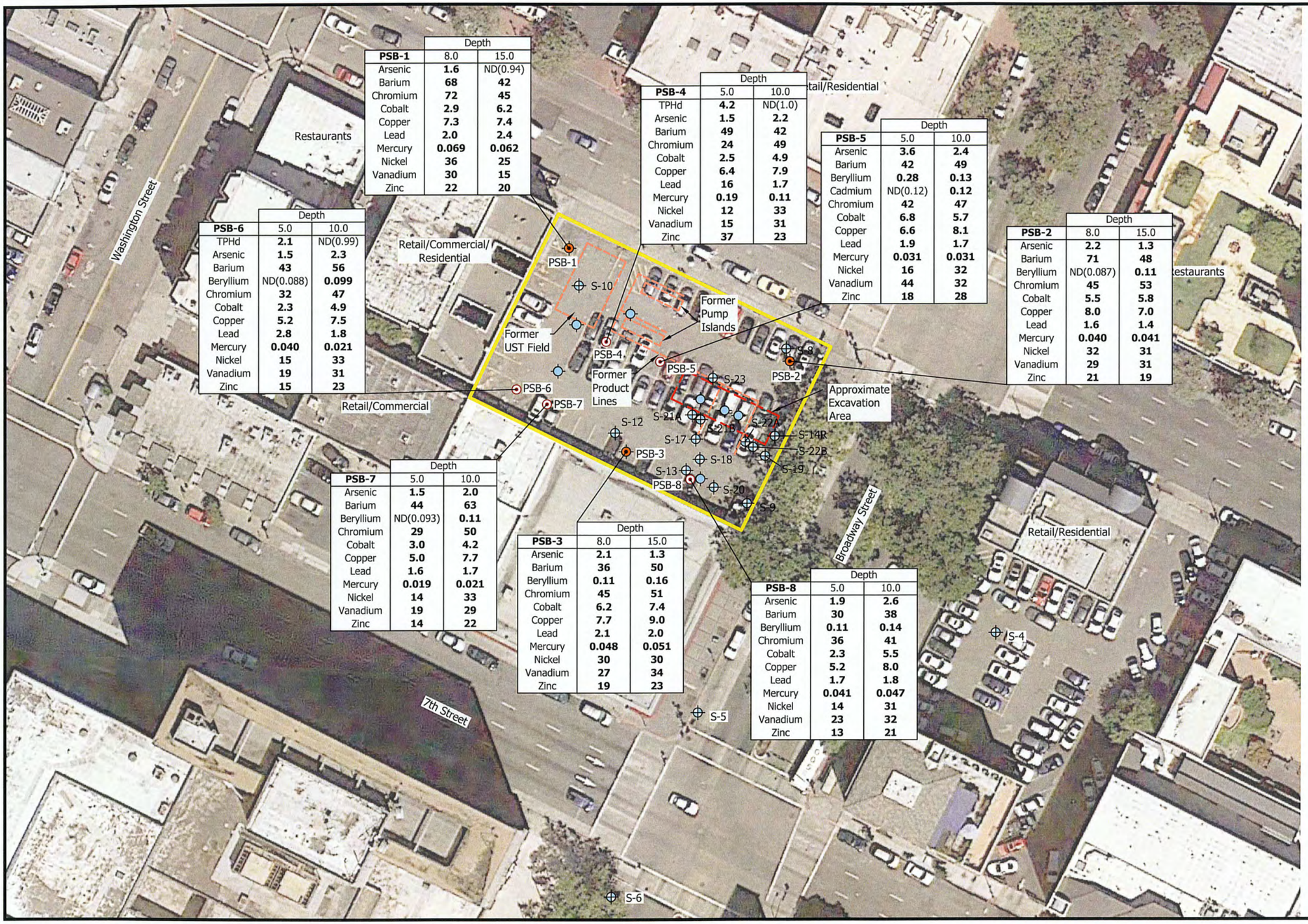
Aerial Photo: October 28, 2012 (Google 2014)

PES Environmental, Inc.
Engineering & Environmental Services

Site Plan and Sample Locations
Subsurface Investigation Report
459 8th Street
Oakland, California

PLATE
2

935.038.01.005	93503801005_SIR_1-4	CJB	9/14
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



PSB-1	Depth 8.0	Depth 15.0
Arsenic	**1.6**	ND(0.94)
Barium	**68**	**42**
Chromium	**72**	**45**
Cobalt	**2.9**	**6.2**
Copper	**7.3**	**7.4**
Lead	**2.0**	**2.4**
Mercury	**0.069**	**0.062**
Nickel	**36**	**25**
Vanadium	**30**	**15**
Zinc	**22**	**20**

PSB-4	Depth 5.0	Depth 10.0
TPHd	**4.2**	ND(1.0)
Arsenic	**1.5**	**2.2**
Barium	**49**	**42**
Chromium	**24**	**49**
Cobalt	**2.5**	**4.9**
Copper	**6.4**	**7.9**
Lead	**16**	**1.7**
Mercury	**0.19**	**0.11**
Nickel	**12**	**33**
Vanadium	**15**	**31**
Zinc	**37**	**23**

PSB-5	Depth 5.0	Depth 10.0
Arsenic	**3.6**	**2.4**
Barium	**42**	**49**
Beryllium	**0.28**	**0.13**
Cadmium	ND(0.12)	**0.12**
Chromium	**42**	**47**
Cobalt	**6.8**	**5.7**
Copper	**6.6**	**8.1**
Lead	**1.9**	**1.7**
Mercury	**0.031**	**0.031**
Nickel	**16**	**32**
Vanadium	**44**	**32**
Zinc	**18**	**28**

PSB-2	Depth 8.0	Depth 15.0
Arsenic	**2.2**	**1.3**
Barium	**71**	**48**
Beryllium	ND(0.087)	**0.11**
Chromium	**45**	**53**
Cobalt	**5.5**	**5.8**
Copper	**8.0**	**7.0**
Lead	**1.6**	**1.4**
Mercury	**0.040**	**0.041**
Nickel	**32**	**31**
Vanadium	**29**	**31**
Zinc	**21**	**19**

PSB-6	Depth 5.0	Depth 10.0
TPHd	**2.1**	ND(0.99)
Arsenic	**1.5**	**2.3**
Barium	**43**	**56**
Beryllium	ND(0.088)	**0.099**
Chromium	**32**	**47**
Cobalt	**2.3**	**4.9**
Copper	**5.2**	**7.5**
Lead	**2.8**	**1.8**
Mercury	**0.040**	**0.021**
Nickel	**15**	**33**
Vanadium	**19**	**31**
Zinc	**15**	**23**

PSB-7	Depth 5.0	Depth 10.0
Arsenic	**1.5**	**2.0**
Barium	**44**	**63**
Beryllium	ND(0.093)	**0.11**
Chromium	**29**	**50**
Cobalt	**3.0**	**4.2**
Copper	**5.0**	**7.7**
Lead	**1.6**	**1.7**
Mercury	**0.019**	**0.021**
Nickel	**14**	**33**
Vanadium	**19**	**29**
Zinc	**14**	**22**

PSB-3	Depth 8.0	Depth 15.0
Arsenic	**2.1**	**1.3**
Barium	**36**	**50**
Beryllium	**0.11**	**0.16**
Chromium	**45**	**51**
Cobalt	**6.2**	**7.4**
Copper	**7.7**	**9.0**
Lead	**2.1**	**2.0**
Mercury	**0.048**	**0.051**
Nickel	**30**	**30**
Vanadium	**27**	**34**
Zinc	**19**	**23**

PSB-8	Depth 5.0	Depth 10.0
Arsenic	**1.9**	**2.6**
Barium	**30**	**38**
Beryllium	**0.11**	**0.14**
Chromium	**36**	**41**
Cobalt	**2.3**	**5.5**
Copper	**5.2**	**8.0**
Lead	**1.7**	**1.8**
Mercury	**0.041**	**0.047**
Nickel	**14**	**31**
Vanadium	**23**	**32**
Zinc	**13**	**21**

Explanation

- Approximate Property Boundary
- S-10 — Monitoring Well Location
- Observation/Monitoring Well Location
- PSB-1 — Soil and Groundwater Sample Location
- PSB-4 — Soil Sample Location

Notes

TPHd = Total Petroleum Hydrocarbons quantified as diesel

ND(0.12) = Not Detected at or above the indicated laboratory reporting limit

All analytical results in milligrams per kilogram (mg/kg)

N

0 50

SCALE IN FEET

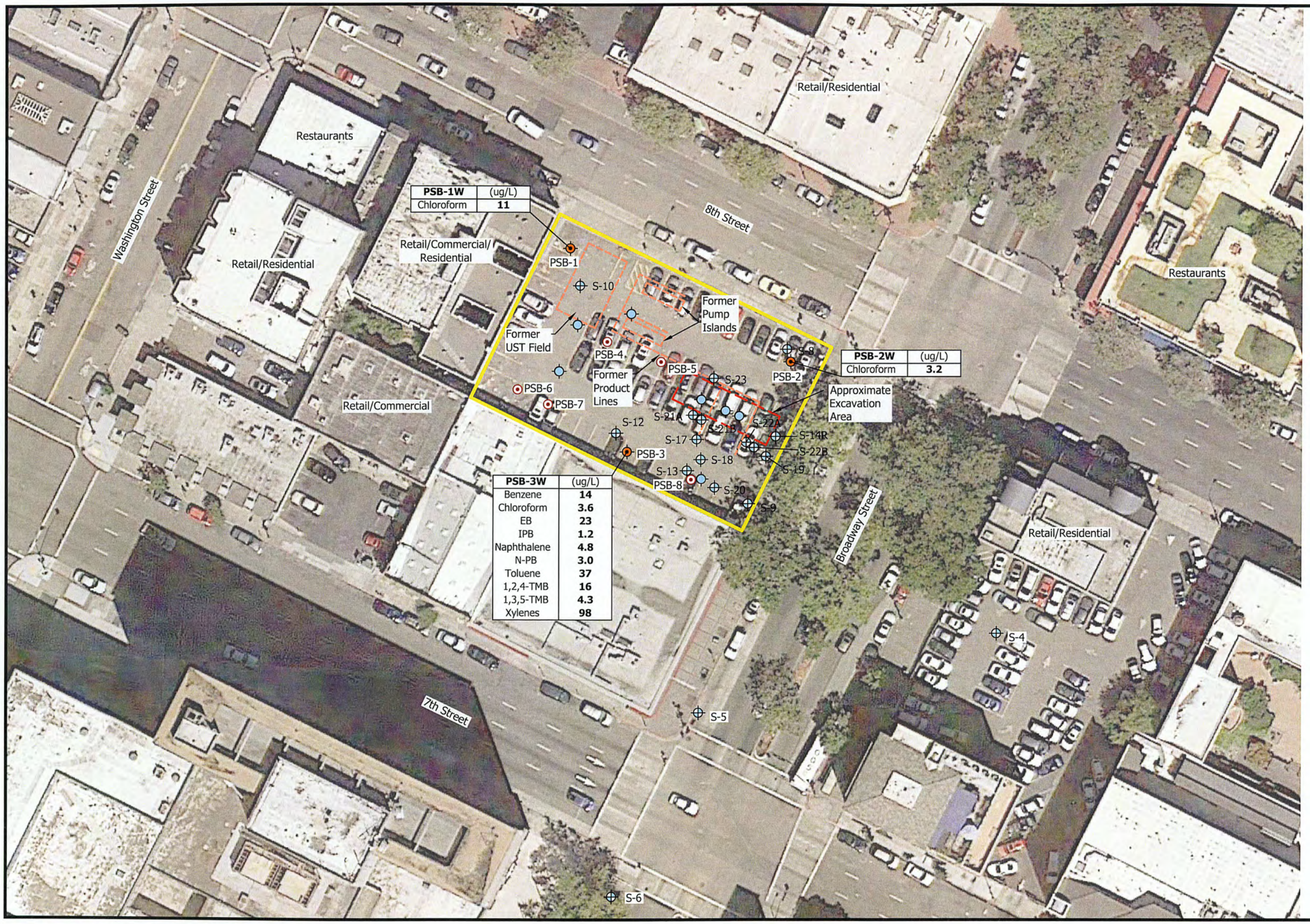
Aerial Photo: October 28, 2012 (Google 2014)

PES Environmental, Inc.
Engineering & Environmental Services

Soil Analytical Results
Subsurface Investigation Report
459 8th Street
Oakland, California

PLATE 3

935.038.01.005	93503801005_SIR_1-4	CJB	9/14
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Explanation

- Approximate Property Boundary
- S-10 Monitoring Well Location
- Observation/Monitoring Well Location
- PSB-1 Soil and Groundwater Sample Location
- PSB-4 Soil Sample Location

Notes

EB = Ethylbenzene
IPB = Isopropylbenzene
N-PB = N-propylbenzene
1,2,4-TMB = 1,2,4- Trimethylbenzene
1,3,5-TMB = 1,3,5-Trimethylbenzene
µg/L = micrograms per liter

N

0 50

SCALE IN FEET

Aerial Photo: October 28, 2012 (Google 2014)

PES Environmental, Inc.
Engineering & Environmental Services

Groundwater Analytical Results
Subsurface Investigation Report
459 8th Street
Oakland, California

PLATE 4

935.038.01.005	93503801005_SIR_1-4	CJB	9/14
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

02/26/2015

EXPLANATION

- B-28 — Soil boring location
- SVP-1 — Subslab soil vapor probe location
- S-4 — Monitoring well location
- S-21B — Deeper monitoring well location
- OW-1 — Observation well location
- IP-1 — Injection point
- B-25/ VP-2 — Soil boring/vapor probe location
- B-24/ VP-1 — Destroyed soil boring/ vapor probe location
- S-1 — Destroyed well location
- B-1 — Soil boring location
- TR-V1 — Soil vapor boring location

I:\Shell\6-chan\2415--\241501-Oakland 461 8th\241501-FIGURES\241501 SITE PLAN.DWG

Site Plan

CONESTOGA-ROVERS & ASSOCIATES

Former Shell Service Station
461 8th Street
Oakland, California

FIGURE
2

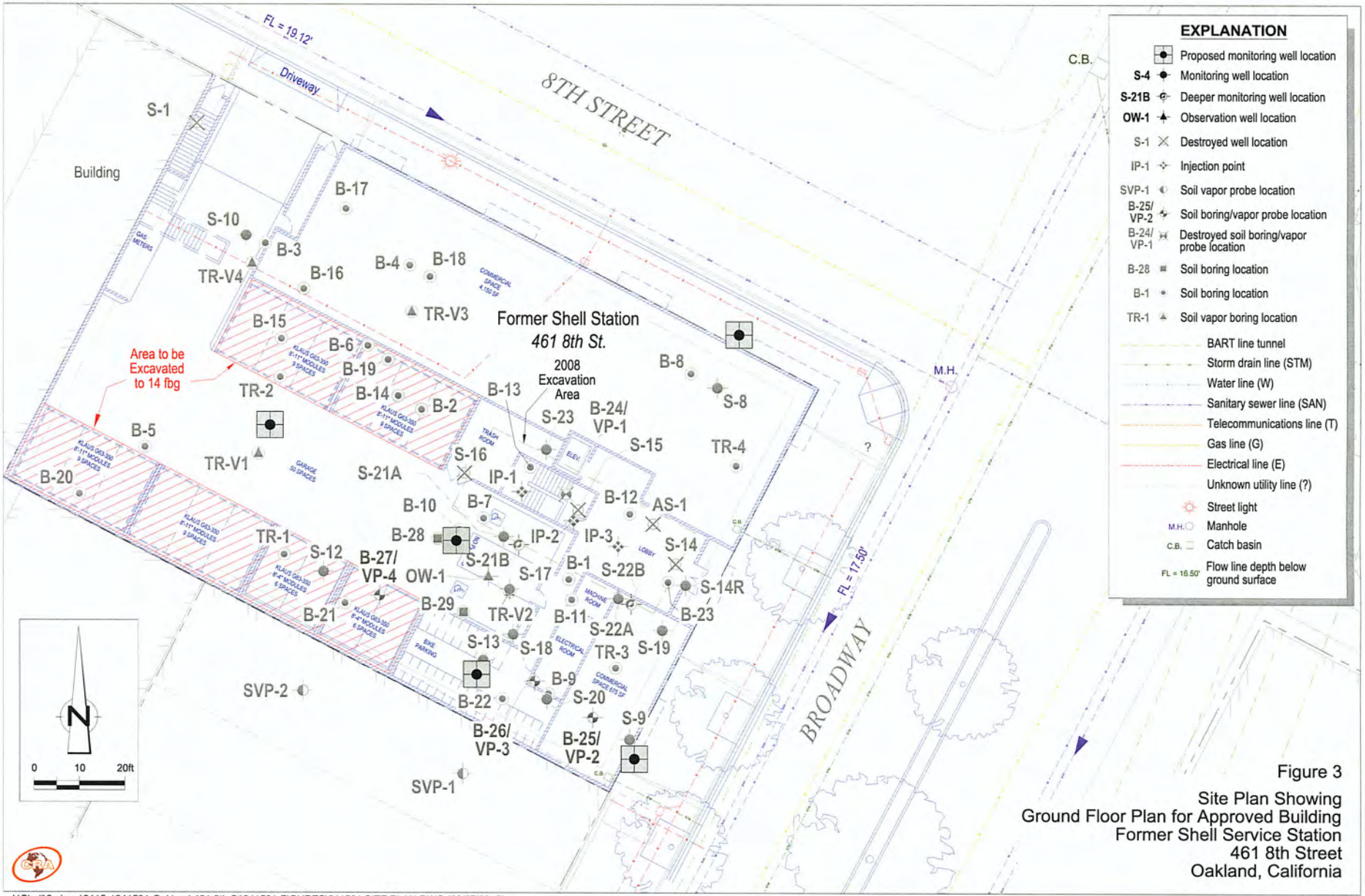


Figure 3

Site Plan Showing
Ground Floor Plan for Approved Building
Former Shell Service Station
461 8th Street
Oakland, California

I:\Shell\6-chars\2415--\241501-Oakland 461 8th St\241501-FIGURES\241501 SITE PLAN.DWG (02/27/2015)

02/11/2015

EXPLANATION

- B-28 — Soil boring location
- SVP-1 — Subslab soil vapor probe location
- S-4 — Monitoring well location
- S-21B — Deeper monitoring well location
- OW-1 — Observation well location
- IP-1 — Injection point
- B-25/VP-2 — Soil boring/vapor probe location
- B-24/VP-1 — Destroyed soil boring/vapor probe location
- S-1 — Destroyed well location
- B-1 — Soil boring location
- TR-V1 — Soil vapor boring location

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-1-5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025
B-1-10.0	<1	<0.0025	<0.0025	<0.0025	<0.0025

Notes:
Soil sample ID and concentrations in milligrams per kilogram
TPHg = Total petroleum hydrocarbons as gasoline
Eth. = Ethylbenzene
Xylenes = Total xylenes
<X = Not detected at reporting limit X
NA = Not analyzed

Former Shell Station
461 8th St.

8TH STREET

Former USTs

Former Dispenser Islands

Former Fuel Lines

Excavation Area

S-1 S-10 B-3 TR-V4 B-16 B-17 B-4 B-18 TR-V3 B-15 B-6 B-19 TR-2 B-14 B-2 B-5 TR-V1 B-20 B-8 S-8 S-23 S-16 B-13 B-24/VP-1 TR-4 B-7 IP-1 S-15 B-12 S-21A IP-2 B-28 B-10 S-21B IP-3 S-14 TR-1 S-12 OW-1 S-17 B-1 B-23 S-22A S-14R B-27/VP-4 TR-V2 B-29 B-11 S-22B B-21 S-18 S-19 S-13 B-26/VP-3 TR-3 SVP-2 B-22 B-9 S-20 B-25/VP-2 S-9 SVP-1

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-16-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-16-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-16-15	<1.0	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-3-10.0	<1	<0.0025	<0.0025	<0.0025	<0.0025
B-3-15.0	<1	<0.0025	<0.0025	<0.0025	0.025

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-10-6.5	<1	<0.0025	<0.0025	<0.0025	<0.0025
S-10-11.5	760	0.0032	0.028	6.4	6.9
S-10-16.5	<1	<0.0025	<0.0025	<0.0025	<0.0025

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-15-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-15-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-15-15	<1.0	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
TR-2-0.5	<1.0	NA	NA	NA	NA
TR-2-5.0	<0.97	NA	NA	NA	NA
TR-2-8.0	<1.1	NA	NA	NA	NA

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-2-5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025
B-2-15.0	<1	<0.0025	<0.0025	<0.0025	<0.0025

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-23-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-23-10.5	1.3	<0.0050	<0.0050	<0.0050	<0.010
S-23-15.5	<0.50	0.0078	<0.0050	<0.0050	0.0082

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-13-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-13-10	<1.0	0.022	<0.0050	<0.0050	<0.010
B-13-15	<1.0	0.028	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-16-4.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-16-9.5	<0.50	0.048	0.013	<0.0050	0.0171
S-16-14.5	1.6	0.31	0.25	0.039	0.233
S-16-19.5	230	0.042	0.21	0.18	1.28

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-5-5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025
B-5-9.75	<1	<0.0025	<0.0025	<0.0025	<0.0025

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-20-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-20-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-20-15	<1.0	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-7-5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025
B-7-10.0	14	0.24	0.89	0.31	2.0

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-10-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-10-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-10-15	<1.0	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-28-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
B-28-10.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
B-28-15.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
OW-1-6.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
OW-1-11	<0.50	<0.0050	<0.0050	<0.0050	<0.010
OW-1-16	<0.50	<0.0050	<0.0050	<0.0050	<0.010
OW-1-19.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-27-5	<0.50	<0.0050	0.015	<0.0050	<0.010
B-27-10	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
TR-1-0.5	<0.98	NA	NA	NA	NA
TR-1-5.0	<1.1	NA	NA	NA	NA
TR-1-8.0	<1.1	NA	NA	NA	NA

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-12-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-12-9.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-12-14.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-12-19.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-21-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-21-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-21-15	<1.0	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-29-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
B-29-10.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
B-29-15.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-13-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-13-10	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-13-15	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-22-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-22-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-22-15	<1.0	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-17-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-17-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-17-15	<1.0	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-6-5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025
B-6-18.5	<1	<0.0025	<0.0025	<0.0025	<0.0025

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-19-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-19-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-19-15	<1.0	0.028	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-14-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-14-10	<2.0	<0.010	<0.010	<0.010	<0.020
B-14-15	<1.0	0.039	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-4-5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025
B-4-10.0	15	<0.0025	0.037	0.027	0.21

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-18-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-18-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-18-15	<1.0	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-15-4.5	6.5	<0.0050	0.0058	<0.0050	0.044
S-15-9.5	5,000	93	350	100	660
S-15-14.5	1,900	34	290	72	460
S-15-19.5	220	4.0	19	5.8	33.8

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-21A-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-21A-10.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-21A-15.5	<0.50	<0.0050	<0.0050	<0.0050	0.041

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-21B-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-21B-15.5	1.9	0.028	0.11	0.030	0.38

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-12-5	<1.0	0.028	0.018	<0.0050	<0.010
B-12-10	2,300	0.54	7.5	<0.50	180
B-12-15	1,700	2.9	35	22	190

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-24-5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
B-24-11.5	0.51	0.043	0.021	0.0094	0.116
B-24-15	<0.50	0.020	0.0064	<0.0050	0.0140

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-8-5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025
B-8-9.0	<1	<0.0025	<0.0025	<0.0025	<0.0025

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-8-6.5	<1	<0.0025	<0.0025	<0.0025	<0.0025
S-8-11.5	<1	<0.0025	<0.0025	<0.0025	<0.0025

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
TR-4-0.5	<1.0	NA	NA	NA	NA
TR-4-5.0	<1.0	NA	NA	NA	NA

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
AS-1-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
AS-1-9.5	1,800	<0.0050	0.59	0.88	29
AS-1-14.5	150	<0.12	0.27	0.29	1.93
AS-1-19.5	3,400	38	210	110	610

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-14-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-14-10	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-14-15.5	0.014	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-23-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-23-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-23-15	<1.0	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-14R-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-14R-10.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-14R-15.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-22A-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-22A-10.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-22A-15.5	3.5	<0.0050	<0.0050	<0.0050	0.013

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-22B-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-22B-10.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-22B-15.5	1.9	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-19-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-19-10.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-19-15.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-1-5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025
B-1-10.0	<1	<0.0025	<0.0025	<0.0025	<0.0025

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-11-5	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-11-10	<1.0	<0.0050	<0.0050	<0.0050	<0.010
B-11-15	<1.0	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-17-6	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-17-11	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-17-16	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-18-6	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-18-11	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-18-15.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-8-5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025
B-8-14.5	<1	<0.0025	<0.0025	<0.0025	<0.0025

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-20-5.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-20-10.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
S-20-15.5	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
S-9-6.5	<1	<0.0025	<0.0025	<0.0025	<0.0025
S-9-11.5	<1	<0.0025	<0.0025	<0.0025	<0.0025

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-25-5	0.76	<0.0050	0.31	0.011	0.070
B-25-10	<0.50	<0.0050	<0.0050	<0.0050	<0.010

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
TR-3-0.5	<0.93	NA	NA	NA	NA
TR-3-5.0	<1.0	NA	NA	NA	NA

Sample ID	TPHg	Benzene	Toluene	Eth.	Xylenes
B-26-5	<0.50	<0.0050	<0.0050	<0.0050	<0.010
B-26-10	<0.50	<0.0050	<0.0050	<0.0050	<0.010
B-26-15	<0.50	<0.0050	<0.0050	<0.0050	<0.010

0 10 20 40
Scale (ft)

FIGURE
4

Historical Vadose-Zone Soil Analytical Data

Former Shell Service Station
461 8th Street
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

I:\Shell\6-chart\241501-Oakland 461 8th\241501-FIGURES\241501 SITE PLAN.DWG

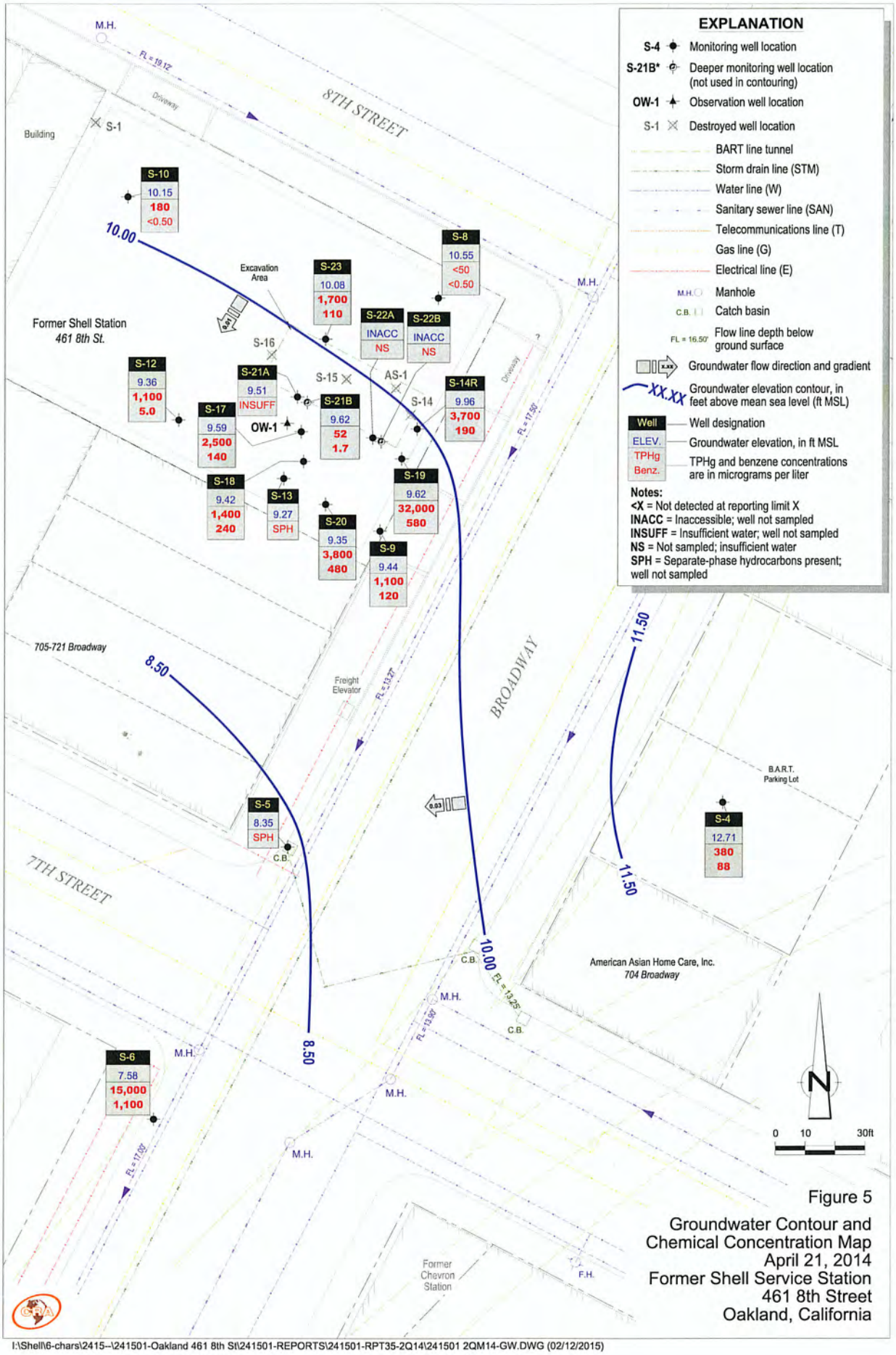


Figure 5

Groundwater Contour and Chemical Concentration Map
April 21, 2014
Former Shell Service Station
461 8th Street
Oakland, California

I:\Shell\6-chars\2415--\241501-Oakland 461 8th St\241501-REPORTS\241501-RPT35-2Q14\241501 2QM14-GW.DWG (02/12/2015)

TABLES

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (µg/m3)*	*B (µg/m3)*	*T (µg/m3)*	*E (µg/m3)*	*X (µg/m3)*	*Isobutane (µg/m3)*	*Butane (µg/m3)*	*Propane (µg/m3)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
TR-V1 a	05/20/2005	4.5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
TR-V1 b	05/20/2005	4.5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
TR-V1 c	05/20/2005	4.5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
TR-V2 b	05/20/2005	5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
TR-V3 b	05/20/2005	5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
TR-V4 b	05/20/2005	5	---	<1,000	<1,000	<1,000	<1,000	---	---	---	---	---	---	---
VP-1-5 d	12/11/2007	5	<19,000	170	150	56	613	---	---	---	---	---	---	---
VP-1-9.5 d	12/11/2007	9.5	160,000	**9,600**	4,400	1,200	12,700	---	---	---	---	---	---	---
VP-2-5	12/11/2007	5	<20,000	<2.7	6.4	<3.7	<18.7	---	---	---	---	---	---	---
VP-2-5	12/08/2008	5	<9,700	3.3	<3.2	5.1	<15	<20	<20	<46	---	---	---	---
VP-2-5	01/05/2009	5	<9,500	5.7	3.3	<3.6	<14	<20	<20	<45	---	---	---	---
VP-2-5	03/12/2009	5	<8,700	<2.4	<2.9	<3.3	<13	<18	<18	<41	---	---	---	---
VP-2-5-DUP	03/12/2009	5	<9,200	5.1	<3.0	<3.5	<14	<19	<19	<44	---	---	---	---
VP-2-5	04/27/2009	5	<8,000	<2.2	<2.6	<3.0	<12	<17	<17	<38	---	---	---	---
VP-2-5-DUP	04/27/2009	5	<8,000	<2.2	<2.6	<3.0	<12	<17	<17	<38	---	---	---	---
VP-2-9.5	12/08/2008	9.5	<9,500	13	<3.1	7.0	<14	<20	<20	<45	---	---	---	---
VP-2-9.5	01/05/2009	9.5	<8,900	<2.5	<2.9	<3.4	<14	<19	<19	<42	---	---	---	---
VP-2-9	03/12/2009	9.5	<8,500	<2.4	<2.8	<3.2	<13	<18	<18	<40	---	---	---	---
VP-2-9	04/27/2009	9.5	<8,000	<2.2	<2.6	<3.0	<12	<17	<17	<38	---	---	---	---
VP-3-5	12/11/2007	5	<17,000	<2.4	5	<3.3	<16.3	30	10	ND	---	---	---	---
VP-3-5	12/08/2008	5	<9,900	<2.7	<3.2	<3.7	<15	77	<20	<47	---	---	---	---
VP-3-5	01/05/2009	5	<8,400	<2.3	5.0	<3.2	<13	160	<17	<40	---	---	---	---
VP-3-5	03/12/2009	5	<9,200	<2.6	<3.0	<3.5	<14	<19	<19	<44	---	---	---	---
VP-3-5	04/27/2009	5	<8,800	<2.5	<2.9	<3.3	<13	<18	<18	<42	---	---	---	---
VP-3-9.5	12/11/2007	9.5	<18,000	5	20	4	36	348	---	---	---	---	---	---
VP-3-9.5	12/08/2008	9.5	<10,000	<2.8	<3.4	<3.9	<15	<21	<21	<48	---	---	---	---
VP-3-9.5	01/05/2009	9.5	<9,900	<2.8	5.5	<3.8	<15	560	21	<47	---	---	---	---
VP-3-9	03/12/2009	9.5	<9,300	<2.6	<3.1	<3.5	<14	<19	<19	<44	---	---	---	---
VP-3-9	04/27/2009	9.5	<8,600	<2.4	<2.8	<3.3	<13	<18	<18	<41	---	---	---	---

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (µg/m3)*	*B (µg/m3)*	*T (µg/m3)*	*E (µg/m3)*	*X (µg/m3)*	*Isobutane (µg/m3)*	*Butane (µg/m3)*	*Propane (µg/m3)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
VP-4-5	12/11/2007	5	<18,000	<2.6	35	<3.5	14	---	6.9	---	---	---	---	---
VP-4-5	12/08/2008	5	170,000	<11	<13	<15	<60	55,000	1,200	7,900	---	---	---	---
VP-4-5 DUP	12/08/2008	5	170,000	<11	<13	<15	<61	84,000	1,200	8,600	---	---	---	---
VP-4-5	01/05/2009	5	<8,300	<2.3	4.8	<3.1	<13	61	<17	<39	---	---	---	---
VP-4-5	03/12/2009	5	<8,800	<2.5	<2.9	<3.3	<13	<18	<18	<42	---	---	---	---
VP-4-5	04/27/2009	5	<8,400	<2.3	<2.8	<3.2	<13	<17	<17	<40	---	---	---	---
VP-4-9.5	12/11/2007	9.5	<16,000	<2.2	79	4.3	40.4	ND	ND	ND	---	---	---	---
VP-4-9.5	12/08/2008	9.5	26,000	<2.6	4.2	<3.5	<14	8,800	120	94	---	---	---	---
VP-4-9.5	01/05/2009	9.5	<10,000	<2.8	4.3	<3.8	<15	1,900	<21	120	---	---	---	---
VP-4-9.5-DUP	01/05/2009	9.5	<8,900	<2.5	4.4	<3.4	<14	1,600	19	<42	---	---	---	---
VP-4-9	03/12/2009	9.5	<8,500	<2.4	<2.8	<3.2	<13	<18	<18	<40	---	---	---	---
VP-4-9	04/27/2009	9.5	<8,600	<2.4	<2.8	<3.3	<13	<18	<18	<41	---	---	---	---
Outdoor Ambient	05/29/2003		<19,000	16	16	<3.1	<9.2	---	---	---	---	---	---	---
Outdoor Ambient	01/05/2009		<8,700	2.5	5.4	<3.3	<13	<18	<18	<41	---	---	---	---
Outdoor Ambient	03/12/2009		<8,900	<2.5	<2.9	<3.4	<13	<18	<18	<42	---	---	---	---
Outdoor Ambient	04/27/2009		<8,700	<2.4	<2.9	<3.3	<13	<18	<18	<41				
SVP-1	11/21/2008		<230	---	---	---	---	---	---	---	---	---	---	---
SVP-1-DUP	11/21/2008		460	---	---	---	---	---	---	---	---	---	---	---
SVP-1	01/05/2009		<9,300	<2.6	<3.1	<3.5	<14	<19	<19	<44	---	---	---	---
SVP-1	03/12/2009		<8,500	<2.4	<2.8	<3.2	<13	<18	<18	<40	---	---	---	---
SVP-1-DUP	03/12/2009		<11,000	<3.0	<3.5	<4.0	<16	<22	<22	<50	---	---	---	---
SVP-1	04/27/2009		<8,400	<2.3	<2.8	<3.2	<13	<17	<17	<40				
SVP-2	11/21/2008		360	---	---	---	---	---	---	---	---	---	---	---
SVP-2	01/05/2009		13,000	<2.6	4.4	<3.6	<14	1,800	51	90	---	---	---	---
SVP-2	03/13/2009		<10,000	<2.9	<3.4	<3.9	<16	<21	<21	<48	---	---	---	---
SVP-2	04/27/2009		<9,200	<2.6	<3.0	<3.5	<14	25	<19	<44	---	---	---	---
SVP-3	11/21/2008		<230	---	---	---	---	---	---	---	---	---	---	---
SVP-3	01/05/2009		<8,100	<2.4	<2.9	<3.3	<13	<18	130	<41	---	---	---	---
SVP-3-DUP	01/05/2009		<10,000	<3.2	<3.8	<4.4	<17	<24	150	<54	---	---	---	---
SVP-3	03/12/2009		<9,200	<2.6	<3.0	<3.5	<14	<19	<19	<43	---	---	---	---
SVP-3	04/27/2009		<9,900	<11	<13	<15	<60	<82	<82	<190	---	---	---	---
SVP-3-DUP	04/27/2009		<8,300	<9.3	<11	<13	<50	<69	<69	<160	---	---	---	---
Indoor Ambient Air	11/21/2008		510	---	---	---	---	---	---	---	---	---	---	---

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (µg/m3)*	*B (µg/m3)*	*T (µg/m3)*	*E (µg/m3)*	*X (µg/m3)*	*Isobutane (µg/m3)*	*Butane (µg/m3)*	*Propane (µg/m3)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*
Indoor Ambient Air DUP	11/22/2008		510	---	---	---	---	---	---	---	---	---	---	---
Indoor Ambient Air	12/08/2008		<9,900	<2.7	4.2	<3.7	<15	<20	<20	<47	---	---	---	---
Indoor Ambient Air	01/05/2009		<9,300	<2.6	4.9	<3.5	<14	<19	<19	<44	---	---	---	---
Indoor Ambient Air	03/12/2009		<8,500	<2.4	3.2	<3.2	<13	28	<18	<40	---	---	---	---
Indoor Ambient Air	04/27/2009		<7,900	3.2	12	<3.0	<12	62	63	<37	---	---	---	---
VP-5	12/01/2011	5	<3,800	<16 e	<19 e	57 e	54 e	---	---	---	<0.500	7.46	16.2	<0.0100
VP-5	12/01/2011	10	<3,800	<16 e	<19 e	28 e	<43 e	---	---	---	<0.500	19.9	5.06	<0.0100
VP-6	01/05/2012	5	<3,800	<16 e	<19 e	88 e	120 e	---	---	---	<0.500	3.51	19.0	0.276
VP-6	01/05/2012	10	<3,800	<16 e	<19 e	48 e	55 e	---	---	---	<0.500	14.2	9.40	0.792
VP-7	12/01/2011	5	<3,800	<16 e	<19 e	29 e	<43 e	---	---	---	<0.500	10.3	13.6	<0.0100
VP-7	12/01/2011	10	<3,800	<16 e	<19 e	55 e	54 e	---	---	---	<0.500	20.8	4.42	<0.0100
VP-8	12/01/2011	5	<3,800	<16 e	<19 e	32 e	<43 e	---	---	---	<0.500	1.80	21.2	<0.0100
VP-8	12/01/2011	10	<3,800	<16 e	<19 e	31 e	<43 e	---	---	---	<0.500	5.98	17.1	<0.0100
VP-9	12/01/2011	5	<3,800	<16 e	<19 e	<22 e	<43 e	---	---	---	<0.500	8.19	15.9	0.0221
VP-9	12/01/2011	10	<3,800	<16 e	<19 e	<22 e	<43 e	---	---	---	<0.500	17.1	9.78	<0.0100
VP-10	12/01/2011	5	<3,800	<16 e	<19 e	57 e	58 e	---	---	---	<0.500	3.66	19.1	<0.0100
VP-10	12/01/2011	10	<3,800	<16 e	<19 e	<22 e	<43 e	---	---	---	<0.500	6.63	16.3	<0.0100
VP-11	12/01/2011	5	<3,800	<16 e	<19 e	<22 e	<43 e	---	---	---	<0.500	1.72	21.4	<0.0100
VP-11	12/01/2011	10	<3,800	<16 e	<19 e	30 e	<43 e	---	---	---	<0.500	3.53	19.7	<0.0100
VP-12	12/01/2011	5	<3,800	<16 e	<19 e	<22 e	<43 e	---	---	---	<0.500	5.00	18.2	<0.0100
VP-12	12/01/2011	10	<3,800	<16 e	<19 e	35 e	<43 e	---	---	---	<0.500	12.9	9.62	<0.0100
Commercial/Industrial Land Use ESL[f]:			***2,500,000***	***420***	***1,300,000***	***4,900***	***440,000***	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
Residential Land Use ESL[f]:			***300,000***	***42***	***160,000***	***490***	***52,000***	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by Modified EPA Method TO-3 GC/FID or EPA Method TO-3M.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by Modified EPA Method TO-15 or EPA Method TO-15 unless otherwise noted
Isobutane, butane, and propane analyzed by EPA Method TO-15.
Methane, carbon dioxide, and oxygen + argon analyzed by ASTM D-1946
fbg = Feet below grade

TABLE 1

HISTORICAL SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (µg/m3)*	*B (µg/m3)*	*T (µg/m3)*	*E (µg/m3)*	*X (µg/m3)*	*Isobutane (µg/m3)*	*Butane (µg/m3)*	*Propane (µg/m3)*	*Methane (%v)*	*Carbon Dioxide (%v)*	*Oxygen + Argon (%v)*	*Helium (%v)*

µg/m3 = Micrograms per cubic meter
%v = Percentage by volume
<x = Not detected at reporting limit x
--- = Not analyzed
VP = Vapor probe
SVP = Sub slab vapor probe
ESL = Environmental screening level
NA = No applicable ESL
Results in **bold** exceed ESL.
Shading indicates that the soil vapor probe location was subsequently excavated; results are likely not representative of current soil vapor conditions.

a = Sample collected after 1 purge volume; BTEX analyzed by EPA Method 8260B
b = Sample collected after 3 purge volumes; BTEX analyzed by EPA Method 8260B
c = Sample collected after 7 purge volumes; BTEX analyzed by EPA Method 8260B
d = VP-1 destroyed
e = BTEX analyzed by Modified EPA Method 8260B
f = San Francisco Bay Regional Water Quality Control Board (RWQCB) ESLs for shallow soil gas (Table E of User's Guide: Derivation and Application of Environmental Screening Levels, RWQCB, Interim Final - 2013)

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
B1-5.0	07/06/1994	5	28 a	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B1-10.0	07/06/1994	10	<2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B2-5.0	07/06/1994	5	<2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B2-15.0	07/06/1994	15	<2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B2-20.0	07/06/1994	20	<2	<1	<0.0025	0.0028	<0.0025	0.003	---	---	---	---	---	---	---
B3-10.0	07/06/1994	10	50 a	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B3-15.0	07/06/1994	15	4.1	<1	<0.0025	<0.0025	<0.0025	0.025	---	---	---	---	---	---	---
B4-5.0	07/06/1994	5	<2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B4-10.0	07/06/1994	10	13 b	15	<0.0025	0.037	0.027	0.21	---	---	---	---	---	---	---
B5-5.0	07/07/1994	5	<2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B5-9.75	07/07/1994	9.75	<2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B6-5.0	07/07/1994	5	<2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B6-18.5	07/07/1994	18.5	<2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B7-5.0	07/07/1994	5	31 a	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B7-10.0	07/07/1994	10	**410 b**	14	0.24	0.89	0.31	2.0	---	---	---	---	---	---	---
B8-5.0	07/07/1994	5	<2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B8-9.0	07/07/1994	9	<4	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B9-5.0	07/07/1994	5	<1	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
B9-14.5	07/07/1994	14.5	<2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
S-8-6.5	12/07/1994	6.5	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
S-8-11.5	12/07/1994	11.5	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
S-8-21.5	12/07/1994	21.5	---	<1	0.014	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
S-9-6.5	12/07/1994	6.5	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
S-9-11.5	12/07/1994	11.5	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
S-9-21.5	12/07/1994	21.5	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
S-10-6.5	12/07/1994	6.5	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
S-10-11.5	12/07/1994	11.5	---	760	0.0032	0.028	**6.4**	6.9	---	---	---	---	---	---	---
S-10-16.5	12/07/1994	16.5	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
S-10-21.5	12/07/1994	21.5	---	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---	---	---	---	---	---
HA-1-10.0	10/14/2003	10.0	---	< 1.0 d	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---
HA-1-16.5	10/14/2003	16.5	---	< 1.0 d	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---
TR-1-0.5	05/20/2005	0.5	---	<0.98	---	---	---	---	---	---	---	---	---	---	---
TR-1-5.0	05/20/2005	5	---	<1.1	---	---	---	---	---	---	---	---	---	---	---
TR-1-8.0	05/20/2005	8	---	<1.1	---	---	---	---	---	---	---	---	---	---	---
TR-2-0.5	05/20/2005	0.5	---	<1.0	---	---	---	---	---	---	---	---	---	---	---
TR-2-5.0	05/20/2005	5	---	<0.97	---	---	---	---	---	---	---	---	---	---	---
TR-2-8.0	05/20/2005	8	---	<1.1	---	---	---	---	---	---	---	---	---	---	---
TR-3-0.5	05/20/2005	0.5	---	<0.93	---	---	---	---	---	---	---	---	---	---	---
TR-3-5.0	05/20/2005	5	---	<1.0	---	---	---	---	---	---	---	---	---	---	---
TR-4-0.5	05/20/2005	0.5	---	<1.0	---	---	---	---	---	---	---	---	---	---	---
TR-4-5.0	05/20/2005	5	---	<1.0	---	---	---	---	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
B-10-5	12/13/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-10-10	12/13/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-10-15	12/13/2006	15	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-10-20	12/13/2006	20	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-10-25	12/13/2006	25	---	**7,800**	**49**	**290**	**160**	**800**	<0.50	<5.0	<2.0	<2.0	<2.0	<0.50	<0.50
B-11-5	12/13/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-11-10	12/13/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-11-15	12/13/2006	15	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-11-20	12/13/2006	20	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-11-25	12/13/2006	25	---	**3,500**	**30**	**200**	**97**	**510**	<0.50	<5.0	<2.0	<2.0	<2.0	<0.50	<0.50
B-12-5	12/11/2006	5	---	<1.0	0.028	0.018	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-12-10	12/11/2006	10	---	**2,300**	0.54	7.5	<0.50	**180**	<0.50	<5.0	<2.0	<2.0	<2.0	<0.50	<0.50
B-12-15	12/11/2006	15	---	**1,700**	**2.9**	**35**	**22**	**190**	<0.50	<5.0	<2.0	<2.0	<2.0	<0.50	<0.50
B-12-20	12/11/2006	20	---	**5,900**	**30**	**250**	**100**	**570**	<0.50	<5.0	<2.0	<2.0	<2.0	<0.50	<0.50
B-12-25	12/11/2006	25	---	750	0.70	8.3	**13**	**73**	<0.12	<1.2	<0.50	<0.50	<0.50	<0.12	<0.12
B-13-5	12/11/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-13-10	12/11/2006	10	---	<1.0	0.022	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-13-15	12/11/2006	15	---	<1.0	0.028	<0.0050	<0.0050	<0.010	<0.0050	0.053	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-13-20	12/11/2006	20	---	4.5	0.12	0.18	0.070	0.54	<0.0050	0.083	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-13-25	12/11/2006	25	---	**1,400**	**1.2**	**19**	**17**	**97**	<0.12	<1.2	<0.50	<0.50	<0.50	<0.12	<0.12
B-14-5	12/11/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-14-10	12/11/2006	10	---	<2.0	<0.010	<0.010	<0.010	<0.020	<0.010	<0.10	<0.020	<0.010	<0.010	<0.010	<0.010
B-14-15	12/11/2006	15	---	<1.0	0.039	<0.0050	<0.0050	<0.010	<0.0050	0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-14-20	12/11/2006	20	---	<2.0	0.019	<0.010	<0.010	<0.020	<0.010	<0.10	<0.020	<0.010	<0.010	<0.010	<0.010
B-14-25	12/11/2006	25	---	<2.0	0.017	<0.010	0.016	0.023	<0.010	<0.10	<0.020	<0.010	<0.010	<0.010	<0.010

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
B-15-5	12/12/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-15-10	12/12/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-15-15	12/12/2006	15	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-15-20	12/12/2006	20	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-15-25	12/12/2006	25	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-16-5	12/12/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-16-10	12/12/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-16-15	12/12/2006	15	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-16-20	12/12/2006	20	---	1.6	0.054	0.11	0.043	0.26	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-16-25	12/12/2006	25	---	2.5	0.19	0.17	0.12	0.54	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-17-5	12/12/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-17-10	12/12/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-17-15	12/12/2006	15	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-17-20	12/12/2006	20	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-17-25	12/12/2006	25	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-18-5	12/12/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-18-10	12/12/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-18-15	12/12/2006	15	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-18-20	12/12/2006	20	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-18-25	12/12/2006	25	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-19-5	12/12/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-19-10	12/12/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-19-15	12/12/2006	15	---	<1.0	0.028	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-19-20	12/12/2006	20	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
B-19-25	12/12/2006	25	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-20-5	12/11/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-20-10	12/11/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-20-15	12/11/2006	15	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-20-20	12/11/2006	20	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-20-25	12/11/2006	25	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-21-5	12/11/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-21-10	12/11/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-21-15	12/11/2006	15	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-21-20	12/11/2006	20	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-21-24	12/11/2006	24	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-21-28	12/11/2006	28	---	<1.0	<0.0050	0.0087	0.011	0.060	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-22-5	12/13/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-22-10	12/13/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-22-15	12/13/2006	15	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-22-20	12/13/2006	20	---	**1,800**	0.81	**10**	**26**	**180**	<0.50	<5.0	<2.0	<2.0	<2.0	<0.50	<0.50
B-22-25	12/13/2006	25	---	**3,000**	**14**	**140**	**85**	**470**	<0.50	<5.0	<2.0	<2.0	<2.0	<0.50	<0.50
B-23-5	12/12/2006	5	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-23-10	12/12/2006	10	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-23-15	12/12/2006	15	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-23-20	12/12/2006	20	---	1.7	<0.0050	0.0053	0.010	0.075	<0.0050	<0.050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
B-23-25	12/12/2006	25	---	**4,900**	**7.0**	**78**	**60**	**450**	<0.25	<2.5	<1.0	<1.0	<1.0	<0.25	<0.25
B-24-5	11/30/2007	5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
B-24-11.5	11/30/2007	11.5	---	0.51	0.043	0.021	0.0094	0.116	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
B-24-15	11/30/2007	15	---	<0.50	0.020	0.0064	<0.0050	0.0140	---	---	---	---	---	---	---
B-24-20	11/30/2007	20	---	1.3	0.036	0.049	0.016	0.102	---	---	---	---	---	---	---
B-24-25	11/30/2007	25	---	12	<0.0050	0.039	0.040	0.308	---	---	---	---	---	---	---
B-24-30	11/30/2007	30	---	**3,000**	**2.2**	**23**	**26**	**140**	---	---	---	---	---	---	---
B-24-32	11/30/2007	32	---	220	<0.12	0.73	1.3	6.14	---	---	---	---	---	---	---
B-25-5	12/03/2007	5	---	0.76 e	<0.0050	0.31	0.011	0.070	---	---	---	---	---	---	---
B-25-10	12/03/2007	10	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
B-26-5	11/30/2007	5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
B-26-10	11/30/2007	10	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
B-26-15	11/30/2007	15		<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
B-27-5	12/03/2007	5	---	<0.50	<0.0050	0.015	<0.0050	<0.0100	---	---	---	---	---	---	---
B-27-10	12/03/2007	10	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-12-5.5	12/13/2007	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-12-9.5	12/13/2007	9.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-12-14.5	12/13/2007	14.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-12-19.5	12/13/2007	19.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-12-24.5	12/13/2007	24.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-12-29.5	12/13/2007	29.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-12-34.5	12/13/2007	34.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-13-5.5	12/12/2007	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-13-10	12/12/2007	10	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-13-15	12/12/2007	15	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-13-20.5	12/12/2007	20.5	---	340	<0.0050	0.48	1.1	8.7	---	---	---	---	---	---	---
S-13-25	12/12/2007	25	---	62	0.017	0.053	0.030	0.146	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
S-13-31	12/12/2007	31	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-13-35	12/12/2007	35	---	1.2	<0.0050	0.0069	<0.0050	0.0077	---	---	---	---	---	---	---
S-14-5	12/12/2007	5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-14-10	12/12/2007	10	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-14-15.5	12/12/2007	15.5	---	<0.50	0.014	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-14-20	12/12/2007	20	---	**3,100**	**6.7**	**42**	**66**	**308**	---	---	---	---	---	---	---
S-14-25.5	12/12/2007	25.5	---	2.9	0.0050	0.0074	0.037	0.091	---	---	---	---	---	---	---
S-14-30	12/12/2007	30	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-14-35	12/12/2007	35	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-15-4.5*	12/11/2007	4.5	---	6.5	<0.0050	0.0058	<0.0050	0.044	---	---	---	---	---	---	---
S-15-9.5	12/11/2007	9.5	---	**5,000**	**93**	**350**	**100**	**660**	---	---	---	---	---	---	---
S-15-14.5	12/11/2007	14.5	---	**1,900**	**34**	**290**	**72**	**460**	---	---	---	---	---	---	---
S-15-19.5	12/11/2007	19.5	---	220	**4.0**	**19**	**5.8**	**33.8**	---	---	---	---	---	---	---
S-15-24.5	12/11/2007	24.5	---	66	0.020	0.054	0.027	0.163	---	---	---	---	---	---	---
S-15-29.5	12/11/2007	29.5	---	1.6	<0.0050	0.0062	<0.0050	<0.0100	---	---	---	---	---	---	---
S-15-34.5	12/11/2007	34.5	---	1.6	<0.0050	0.0062	<0.0050	0.0078	---	---	---	---	---	---	---
S-16-4.5*	12/11/2007	4.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-16-9.5	12/11/2007	9.5	---	<0.50	0.048	0.013	<0.0050	0.0171	---	---	---	---	---	---	---
S-16-14.5	12/11/2007	14.5	---	1.6	0.31	0.25	0.039	0.233	---	---	---	---	---	---	---
S-16-19.5	12/11/2007	19.5	---	230	0.042	0.21	0.18	1.28	---	---	---	---	---	---	---
S-16-24.5	12/11/2007	24.5	---	0.59	<0.0050	0.017	0.014	0.083	---	---	---	---	---	---	---
S-16-29.5	12/11/2007	29.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
S-16-34.5	12/11/2007	34.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
AS-1-5.5	12/13/2007	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
AS-1-9.5	12/13/2007	9.5	---	**1,800**	<0.0050	0.59	0.88	**29**	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
AS-1-14.5	12/13/2007	14.5	---	150	<0.12	0.27	0.29	1.93	---	---	---	---	---	---	---
AS-1-19.5	12/13/2007	19.5	---	**3,400**	**38**	**210**	**110**	**610**	---	---	---	---	---	---	---
AS-1-25.5	12/13/2007	25.5	---	91	0.26	0.99	1.1	5.1	---	---	---	---	---	---	---
AS-1-30	12/13/2007	30	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0100	---	---	---	---	---	---	---
AS-1-34.5	12/13/2007	34.5	---	7.6	0.099	0.16	0.058	0.220	---	---	---	---	---	---	---
S-17-6	05/30/2008	6	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-17-11	05/30/2008	11	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-17-16	05/30/2008	16	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-17-21	05/30/2008	21	---	0.63	<0.0050	0.008	0.0086	0.043	---	---	---	---	---	---	---
S-17-26	05/30/2008	26	---	**3,000**	**3.7**	**40**	**40**	**193**	---	---	---	---	---	---	---
S-17-31	05/30/2008	31	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-17-34.5	05/30/2008	34.5	---	210	0.83	6.3	3.1	**17.5**	---	---	---	---	---	---	---
S-18-6	05/30/2008	6	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-18-11	05/30/2008	11	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-18-15.5	05/30/2008	15.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-18-21	05/30/2008	21	---	**5,200**	**5.3**	**96**	**120**	**630**	---	---	---	---	---	---	---
S-18-26	05/30/2008	26	---	1.3	0.021	0.080	0.026	0.158	---	---	---	---	---	---	---
S-18-31	05/30/2008	31	---	<0.50	<0.0050	0.0055	0.0234	<0.010	---	---	---	---	---	---	---
S-18-34.5	05/30/2008	34.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
OW-1-6.5	05/30/2008	6.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
OW-1-11	05/30/2008	11	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
OW-1-16	05/30/2008	16	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
OW-1-19.5	05/30/2008	19.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
EB-1	06/11/2008	23	---	190	<0.12	<0.12	<0.12	1.17	---	---	---	---	---	---	---
EB-2	06/11/2008	23	---	**2,500**	**5.0**	**48**	**41**	**220**	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
EB-3	06/11/2008	23	---	13	0.42	2.5	0.33	2.26	---	---	---	---	---	---	---
EB-4	06/11/2008	23	---	**2,900**	**11**	**170**	**69**	**430**	---	---	---	---	---	---	---
EB-5	06/11/2008	23	---	**2,100**	**7.4**	**98**	**47**	**298**	---	---	---	---	---	---	---
EB-6	06/11/2008	23	---	**3,300**	**4.7**	**62**	**56**	**339**	---	---	---	---	---	---	---
EB-7	06/11/2008	23	---	100	0.90	2.6	1.2	7.7	---	---	---	---	---	---	---
EB-8	06/11/2008	23	---	**3,300**	**22**	**230**	**63**	**470**	---	---	---	---	---	---	---
EB-9	06/11/2008	23	---	**3,900**	**16**	**230**	**85**	**540**	---	---	---	---	---	---	---
EB-10	06/11/2008	23	---	**3,600**	**6.3**	**120**	**74**	**470**	---	---	---	---	---	---	---
B-28-5.5	09/26/2008	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
B-28-10.5	09/26/2008	10.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
B-28-15.5	09/26/2008	15.5	---	<0.50	0.0059	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
B-28-20.5	09/26/2008	20.5	---	<0.50	0.0051	0.0054	<0.0050	0.013	---	---	---	---	---	---	---
B-28-25.5	09/26/2008	25.5	---	**1,500**	<2.5	7.0	**17**	**72**	---	---	---	---	---	---	---
B-28-30.5	09/26/2008	30.5	---	62	<0.50	<0.50	<0.50	2.6	---	---	---	---	---	---	---
B-28-35.5	09/26/2008	35.5	---	<50	<0.50	0.51	<0.50	1.4	---	---	---	---	---	---	---
B-28-40.5	09/26/2008	40.5	---	<0.50	<0.0050	0.013	0.0074	0.044	---	---	---	---	---	---	---
B-28-45.5	09/26/2008	45.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
B-29-5.5	09/26/2008	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
B-29-10.5	09/26/2008	10.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
B-29-15.5	09/26/2008	15.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
B-29-20.5	09/26/2008	20.5	---	<0.50	<0.0050	0.0055	<0.0050	0.020	---	---	---	---	---	---	---
B-29-25.5	09/26/2008	25.5	---	**5,800**	**14**	**260**	**82**	**600**	---	---	---	---	---	---	---
B-29-30.5	09/26/2008	30.5	---	0.69	0.0063	0.033	0.0087	0.058	---	---	---	---	---	---	---
B-29-35.5	09/26/2008	35.5	---	<0.50	<0.0050	0.0089	<0.0050	0.030	---	---	---	---	---	---	---
B-29-40.5	09/26/2008	40.5	---	<0.50	<0.0050	0.031	0.011	0.073	---	---	---	---	---	---	---
B-29-45.5	09/26/2008	45.5	---	<0.50	<0.0050	0.0064	<0.0050	0.020	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
S-14R-5.5	09/23/2008	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-14R-10.5	09/23/2008	10.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-14R-15.5	09/23/2008	15.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-14R-20.5	09/23/2008	20.5	---	99	<0.50	<0.50	0.66	2.8	---	---	---	---	---	---	---
S-14R-25.5	09/23/2008	25.5	---	<0.50	<0.0050	<0.0050	<0.0050	0.023	---	---	---	---	---	---	---
S-14R-30.5	09/23/2008	30.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-14R-34.5	09/23/2008	34.5	---	56	<0.50	0.73	0.60	3.2	---	---	---	---	---	---	---
S-19-5.5	09/22/2008	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-19-10.5	09/22/2008	10.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-19-15.5	09/22/2008	15.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-19-20.5	09/22/2008	20.5	---	<0.50	0.019	<0.0050	<0.0050	0.0064	---	---	---	---	---	---	---
S-19-25.5	09/22/2008	25.5	---	<0.50	0.0086	0.028	0.014	0.073	---	---	---	---	---	---	---
S-19-30.5	09/22/2008	30.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-19-35.5	09/22/2008	35.5	---	<0.50	<0.0050	<0.0050	<0.0050	0.0054	---	---	---	---	---	---	---
S-19-40.5	09/22/2008	40.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-19-45.5	09/22/2008	45.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-20-5.5	09/22/2008	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-20-10.5	09/22/2008	10.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-20-15.5	09/22/2008	15.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-20-20.5	09/22/2008	20.5	---	28 f	0.0088	0.018	0.15	0.66 f	---	---	---	---	---	---	---
S-20-25.5	09/22/2008	25.5	---	0.58	0.012	0.023	0.015	0.073	---	---	---	---	---	---	---
S-20-30.5	09/22/2008	30.5	---	58	<0.50	<0.50	<0.50	1.4	---	---	---	---	---	---	---
S-20-35.5	09/22/2008	35.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-20-40.5	09/22/2008	40.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-20-45.5	09/22/2008	45.5	---	<0.50	<0.0050	0.0067	<0.0050	0.012	---	---	---	---	---	---	---
S-21A-5.5	09/25/2008	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
S-21A-10.5	09/25/2008	10.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-21A-15.5	09/25/2008	15.5	---	<0.50	<0.0050	<0.0050	<0.0050	0.041	---	---	---	---	---	---	---
S-21A-20.5	09/25/2008	20.5	---	**3,000**	**12**	**140**	**61**	**360**	---	---	---	---	---	---	---
S-21A-26.5	09/25/2008	26.5	---	**3,500**	**4.8**	**29**	**38**	**170**	---	---	---	---	---	---	---
S-21B-5.5	09/23/2008	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-21B-15.5	09/23/2008	15.5	---	1.9	0.028	0.11	0.030	0.38	---	---	---	---	---	---	---
S-21B-20.5	09/23/2008	20.5	---	**2,300**	<5.0	**88**	**52**	**360**	---	---	---	---	---	---	---
S-21B-25.5	09/23/2008	25.5	---	**7,100**	**37**	**250**	**130**	**760**	---	---	---	---	---	---	---
S-21B-30.5	09/23/2008	30.5	---	0.51	<0.0050	<0.0050	<0.0050	0.028	---	---	---	---	---	---	---
S-21B-35.5	09/23/2008	35.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-21B-40.5	09/23/2008	40.5	---	<0.50	<0.0050	0.012	<0.0050	0.028	---	---	---	---	---	---	---
S-21B-45.5	09/23/2008	45.5	---	<0.50	<0.0050	0.013	0.0063	0.039	---	---	---	---	---	---	---
S-22A-5.5	09/25/2008	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-22A-10.5	09/25/2008	10.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-22A-15.5	09/25/2008	15.5	---	3.5	<0.0050	<0.0050	<0.0050	0.013	---	---	---	---	---	---	---
S-22A-20.5	09/25/2008	20.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-22A-26.5	09/25/2008	26.5	---	**3,900**	**11**	**70**	**55**	**310**	---	---	---	---	---	---	---
S-22B-5.5	09/22/2008	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-22B-10.5	09/22/2008	10.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-22B-15.5	09/22/2008	15.5	---	1.9	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-22B-20.5	09/22/2008	20.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-22B-25.5	09/22/2008	25.5	---	**1,200**	**2.6**	**13**	**17**	**81**	---	---	---	---	---	---	---
S-22B-30.5	09/22/2008	30.5	---	<0.50	<0.0050	<0.0050	<0.0050	0.0063	---	---	---	---	---	---	---
S-22B-35.5	09/22/2008	35.5	---	56	<0.50	0.83	0.69	3.7	---	---	---	---	---	---	---
S-22B-40.5	09/22/2008	40.5	---	14 f	0.012	<0.0050	<0.0050	0.29 f	---	---	---	---	---	---	---
S-22B-45.5	09/22/2008	45.5	---	<0.50	<0.0050	<0.0050	<0.0050	0.0079	---	---	---	---	---	---	---

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*
S-23-5.5	09/24/2008	5.5	---	<0.50	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-23-10.5	09/24/2008	10.5	---	1.3	<0.0050	<0.0050	<0.0050	<0.010	---	---	---	---	---	---	---
S-23-15.5	09/24/2008	15.5	---	<0.50	0.0078	<0.0050	<0.0050	0.0082	---	---	---	---	---	---	---
S-23-20.5	09/24/2008	20.5	---	**3,700**	**17**	**170**	**86**	**480**	---	---	---	---	---	---	---
S-23-25.5	09/24/2008	25.5	---	**1,600**	**1.5**	**15**	**16**	**87**	---	---	---	---	---	---	---
S-23-30.5	09/24/2008	30.5	---	<0.50	<0.0050	<0.0050	<0.0050	0.0072	---	---	---	---	---	---	---
S-23-34.5	09/24/2008	34.5	---	68	<0.0050	<0.0050	<0.0050	0.014	---	---	---	---	---	---	---
Shallow Soil (≤10 fbg) ESL[s]:			***110***	***500***	***1.2***	***9.3***	***4.7***	***11***	***8.4***	***110***	***NA***	***NA***	***NA***	***0.91***	***0.51***
Deep Soil (>10 fbg) ESL[s]:			***110***	***1,000***	***1.2***	***9.3***	***4.7***	***11***	***8.4***	***110***	***NA***	***NA***	***NA***	***0.91***	***0.51***

Notes:
fbg = Feet below grade
mg/kg = Milligrams per kilogram
TPHd = Total petroleum hydrocarbons as diesel analyzed by EPA Method 8015
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; before 12/11/06, analyzed by EPA Method 8015 unless otherwise n
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; before 10/14/2003, analyzed by EPA Method 8020
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B
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
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
* = Sample may have contained backfilled soil fgrom air-knife clearance activities.

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd (mg/kg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (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)*

NA = No applicable ESL
Results in **bold** equal or exceed applicable ESL
Shading indicates that soil sample location was subsequently excavated; results are not representative of residual soil.

a = Positive result appears to be a heavier hydrocarbon than diesel
b = Positive result appears to be a lighter hydrocarbon than diesel
c = Analyzed by EPA Method 7421
d = Analyzed by EPA Method 8260B
e = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based on the specified standard.
f = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
g = 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).

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-4	10/26/1988	130	3.8	13	4.0	30	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	02/14/1989	<50	0.50	<1.0	<1.0	3.0	---	---	---	---	---	---	---	---	93.51	12.82	---	80.69	---	---
S-4	05/01/1989	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	16.48	---	77.03	---	---
S-4	07/27/1989	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.84	---	77.67	---	---
S-4	10/05/1989	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.98	---	77.53	---	---
S-4	01/09/1990	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.86	---	77.65	---	---
S-4	04/30/1990	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	93.51	14.48	---	79.03	---	---
S-4	07/31/1990	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	10/30/1990	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	05/06/1991	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.23	---	78.28	---	---
S-4	06/27/1991	<50	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	---	93.51	13.54	---	79.97	---	---
S-4	09/24/1991	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.85	---	77.66	---	---
S-4	11/07/1991	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	15.60	---	77.91	---	---
S-4	02/13/1992	<50	<0.50	<0.50	<0.50	3.0	---	---	---	---	---	---	---	---	93.51	14.27	---	79.24	---	---
S-4	05/11/1992	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	12/03/1992	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	05/13/1993	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	14.81	---	78.70	---	---
S-4	07/22/1993	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	14.42	---	79.09	---	---
S-4	10/20/1993	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	---	---	---	---	---
S-4	01/25/1994	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	14.60	---	78.91	---	---
S-4	04/25/1994	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	93.51	14.39	---	79.12	---	---
S-4	07/21/1994	<50	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	---	93.51	22.29	---	71.22	---	---
S-4	10/24/1994	<500	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	---	93.51	22.72	---	70.79	---	---
S-4	12/22/1994	<50	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	---	25.77	22.25	---	3.52	---	---
S-4	04/20/1995	<50	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	---	25.77	21.16	---	4.61	---	---
S-4	10/04/1995	<50	1.2	0.70	<0.50	<0.50	---	---	---	---	---	---	---	---	25.77	22.25	---	3.52	---	---
S-4	01/03/1996	<50	0.60	<0.50	<0.50	1.7	---	---	---	---	---	---	---	---	25.77	23.28	---	2.49	---	---
S-4	04/11/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	21.58	---	4.19	---	---
S-4	07/11/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	21.60	---	4.17	---	---
S-4	10/02/1996	<50	<0.50	<0.50	<0.50	<0.50	2.6	---	---	---	---	---	---	---	25.77	22.46	---	3.31	---	---
S-4	01/22/1997	<50	0.73	<0.50	<0.50	0.63	<2.5	---	---	---	---	---	---	---	25.77	20.06	---	5.71	---	---
S-4	07/21/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	22.10	---	3.67	---	---
S-4	01/22/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	20.50	---	5.27	---	---
S-4	07/08/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	20.86	---	4.91	---	---
S-4	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.41	---	4.36	---	---
S-4	01/28/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	22.34	---	3.43	---	---
S-4	04/23/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.43	---	4.34	---	---
S-4	07/29/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	---	---	---	---	---	---	---	25.77	21.45	---	4.32	---	---
S-4	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	22.08	---	3.69	---	---
S-4	01/07/2000	<50	<0.50	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	25.77	22.29	---	3.48	---	---
S-4	04/11/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.11	---	4.66	---	---
S-4	07/19/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	---	---	25.77	21.19	---	4.58	---	---

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-4	10/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	22.22	---	3.55	---	---
S-4	01/09/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	---	---	25.77	22.17	---	3.60	---	---
S-4	04/06/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.50	---	4.27	---	---
S-4	07/25/2001	<50	2.0	0.52	<0.50	1.0	---	<5.0	---	---	---	---	---	---	25.77	21.50	---	4.27	---	---
S-4	11/01/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.95	---	3.82	---	---
S-4	01/17/2002	<50 d	<0.50 d	<0.50 d	<0.50 d	<0.50 d	---	<5.0 d	---	---	---	---	---	---	25.77	21.13	---	4.64	---	---
S-4	05/08/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	25.77	21.35	---	4.42	---	---
S-4	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	---	---	34.41	21.19	---	13.22	---	---
S-4	10/15/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.42	---	12.99	---	---
S-4	01/02/2003	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	---	---	34.41	20.75	---	13.66	---	---
S-4	04/15/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.08	---	13.33	---	---
S-4	07/14/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	19.93	---	14.48	---	---
S-4	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	19.56	---	14.85	---	---
S-4	01/22/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.41	19.12	---	15.29	---	---
S-4	04/19/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	19.15	---	15.26	---	---
S-4	07/13/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.48	---	13.93	---	---
S-4	10/28/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.00	---	13.41	---	---
S-4	01/17/2005	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.41	20.17	---	14.24	---	---
S-4	04/14/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	19.82	---	14.59	---	---
S-4	07/28/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.71	---	13.70	---	---
S-4	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.85	---	13.56	---	---
S-4	02/09/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	---	---	34.41	19.47	---	14.94	---	---
S-4	05/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	19.52	---	14.89	---	---
S-4	08/23/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.75	---	13.66	---	---
S-4	11/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.03	---	14.38	---	---
S-4	01/30/2007	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.41	21.30	---	13.11	---	---
S-4	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.15	---	13.26	---	---
S-4	08/15/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.38	---	13.03	---	---
S-4	11/28/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.55	---	12.86	---	---
S-4	02/08/2008	64 f	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	34.41	22.75	---	11.66	---	---
S-4	05/08/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	22.18	---	12.23	---	---
S-4	08/14/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.77	---	12.64	---	---
S-4	11/11/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.68	---	13.73	---	---
S-4	01/05/2009	250	1.8	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	34.41	20.92	---	13.49	---	---
S-4	04/09/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.10	---	13.31	---	---
S-4	07/23/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.76	---	12.65	---	---
S-4	10/01/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	22.10	---	12.31	---	---
S-4	01/28/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	34.41	21.75	---	12.66	---	---
S-4	05/20/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.44	---	12.97	---	---
S-4	08/31/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.72	---	12.69	---	---
S-4	12/29/2010	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.91	---	13.50	---	---
S-4	02/01/2011	<50	<0.50	<0.50	<0.50	1.1	---	---	---	---	---	---	---	---	34.41	21.19	---	13.22	1.84	157

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-4	04/25/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	17.32	---	17.09	---	---
S-4	07/28/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	20.92	---	13.49	---	---
S-4	10/28/2011	---	---	---	---	---	---	---	---	---	---	---	---	---	34.41	21.35	---	13.06	---	---
S-4	05/07/2012	240	86	22	9.5	25	---	---	---	---	---	---	---	---	34.41	20.65	---	13.76	2.52	119
S-4	05/02/2013	55	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	34.41	21.45	---	12.96	---	---
S-4	04/21/2014	380	88	58	14	42	---	---	---	---	---	---	---	---	34.41	21.70	---	12.71	---	---
S-5	04/16/1987	130,000	15,000	16,000	a	14,000	---	---	---	---	---	---	---	---	99.36	---	---	---	---	---
S-5	10/26/1988	110,000	20,000	25,000	2,300	10,000	---	---	---	---	---	---	---	---	99.36	---	---	---	---	---
S-5	02/14/1989	94,000	16,000	21,000	1,800	10,000	---	---	---	---	---	---	---	---	99.36	19.87	---	79.49	---	---
S-5	05/01/1989	120,000	29,000	35,000	3,100	15,000	---	---	---	---	---	---	---	---	99.36	21.23	---	78.13	---	---
S-5	07/27/1989	110,000	20,000	29,000	2,400	14,000	---	---	---	---	---	---	---	---	99.36	20.41	---	78.95	---	---
S-5	10/05/1989	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	20.43	0.01	78.94	---	---
S-5	01/09/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.16	0.01	78.21	---	---
S-5	04/30/1990	100,000	13,000	22,000	2,100	11,000	---	---	---	---	---	---	---	---	99.36	20.96	---	78.40	---	---
S-5	07/31/1990	53,000	8,300	14,000	1,200	7,400	---	---	---	---	---	---	---	---	99.36	20.88	---	78.48	---	---
S-5	10/30/1990	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.96	0.03	77.42	---	---
S-5	05/06/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	23.00	0.13	76.46	---	---
S-5	06/27/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	20.53	0.03	78.85	---	---
S-5	09/24/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.40	0.06	78.01	---	---
S-5	11/07/1991	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.33	0.25	78.23	---	---
S-5	02/13/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.52	0.31	77.09	---	---
S-5	05/11/1992	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.46	0.58	77.36	---	---
S-5	12/03/1992	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	99.36	---	---	---	---	---
S-5	05/13/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.22	0.27	77.36	---	---
S-5	07/22/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.68	0.25	77.88	---	---
S-5	10/20/1993	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	20.51	0.23	79.03	---	---
S-5	01/25/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.93	0.18	77.57	---	---
S-5	04/25/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.97	0.35	77.67	---	---
S-5	05/26/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	20.84	0.35	78.80	---	---
S-5	06/10/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	21.01	0.32	78.61	---	---
S-5	07/21/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.18	0.47	77.56	---	---
S-5	08/25/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.01	0.44	77.70	---	---
S-5	09/22/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.00	0.15	77.48	---	---
S-5	10/24/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	99.36	22.28	0.56	77.53	---	---
S-5	12/22/1994	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	22.88	0.99	0.85	---	---
S-5	04/20/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	21.66	0.33	1.54	---	---
S-5	10/04/1995	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	22.18	---	0.76	---	---
S-5	01/03/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	22.80	0.83	0.80	---	---
S-5	04/11/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	21.15	0.67	2.33	---	---
S-5	07/11/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	22.62	0.90	1.04	---	---
S-5	10/02/1996	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	23.07	0.64	0.38	---	---

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-5	01/22/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	20.83	0.16	2.24	---	---
S-5	07/21/1997	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	21.16	0.05	1.82	---	---
S-5	01/22/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	20.04	0.04	2.93	---	---
S-5	07/08/1998	220	14	40	5.8	34	3.3	---	---	---	---	---	---	---	22.94	18.61	---	4.33	---	---
S-5	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	17.31	---	5.63	---	---
S-5	01/28/1999	51,000	13,000	1,200	1,200	2,400	2,400	---	---	---	---	---	---	---	22.94	20.11	---	2.83	---	---
S-5	04/23/1999	65,600	2,540	7,300	1,790	9,840	<1,000	---	---	---	---	---	---	---	22.94	19.21	---	3.73	---	---
S-5	07/29/1999	61,400	3,320	6,980	1,520	7,700	<1,000	---	---	---	---	---	---	---	22.94	14.77	---	8.17	---	---
S-5	11/01/1999	48,200	2,700	5,740	1,290	7,850	<500	<40.0	---	---	---	---	---	---	22.94	15.56	---	7.38	---	---
S-5	01/07/2000	39,000	3,900	8,500	790	8,300	1,500	---	---	---	---	---	---	---	22.94	15.82	---	7.12	---	---
S-5	04/11/2000	29,300	1,680	5,060	1,130	6,220	<250	---	---	---	---	---	---	---	22.94	18.19	---	4.75	---	---
S-5	07/19/2000	6,420	2,110	207	252	681	355	253 b	---	---	---	---	---	---	22.94	19.01	---	3.93	---	---
S-5	10/12/2000	41,500	2,940	4,940	1,520	7,770	<250	<66.7	---	---	---	---	---	---	22.94	19.62	---	3.32	---	---
S-5	01/09/2001	142,000	7,030	9,550	2,340	12,600	779	---	---	---	---	---	---	---	22.94	19.94	---	3.00	---	---
S-5	04/06/2001	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	22.94	---	---	---	---	---
S-5	04/13/2001	59,800	4,810	10,800	1,950	10,100	842	<10.0	---	---	---	---	---	---	22.94	14.72	---	8.22	---	---
S-5	07/25/2001	71,000	2,900	6,800	1,700	9,100	---	<250	---	---	---	---	---	---	22.94	14.91	---	8.03	---	---
S-5	08/13/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	22.94	19.43	---	3.51	---	---
S-5	11/01/2001	Unable to locate		---	---	---	---	---	---	---	---	---	---	---	22.94	---	---	---	---	---
S-5	01/17/2002	58,000 d	460 d	3,300 d	1,900 d	8,400 d	---	<200 d	---	---	---	---	---	---	c	14.27	---	---	---	---
S-5	05/08/2002	60,000 d	d	2,700 d	1,800 d	8,800 d	---	<100 d	---	---	---	---	---	---	22.94	18.40	---	4.54	---	---
S-5	07/18/2002	53,000	240	1,200	1,500	6,400	---	<100	---	---	---	---	---	---	27.36	14.25	---	13.11	---	---
S-5	10/15/2002	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	27.36	---	---	---	---	---
S-5	10/17/2002	42,000	420	1,100	1,200	5,500	---	<10	---	---	---	---	---	---	27.36	14.90	---	12.46	---	---
S-5	01/02/2003	26,000	680	1,500	780	3,800	---	<5.0	---	---	---	---	---	---	27.36	14.72	---	12.64	---	---
S-5	04/15/2003	3,600	29	38	65	370	---	<5.0	---	---	---	---	---	---	e	14.45	---	---	---	---
S-5	07/14/2003	21,000	210	460	650	2,900	---	<10	---	---	---	---	---	---	e	14.10	---	---	---	---
S-5	10/20/2003	37,000	390	590	870	3,500	---	<13	---	---	---	---	---	---	e	14.63	---	---	---	---
S-5	01/22/2004	29,000	200	210	710	2,400	---	<13	---	---	---	---	---	---	e	14.08	---	---	---	---
S-5	04/19/2004	25,000	490	460	750	2,400	---	19	---	---	---	---	---	---	e	13.43	---	---	---	---
S-5	07/13/2004	28,000	300	280	690	2,400	---	<13	---	---	---	---	---	---	e	14.88	---	---	---	---
S-5	08/14/2008	31,000	1,700	1,600	1,400	3,350	---	<10	---	---	---	---	<5.0	<10	e	16.65	---	---	---	---
S-5	11/11/2008	37,000 i	2,500 i	1,300 i	2,000 i	3,490 i	---	<50 i	---	---	---	---	<25 i	<50 i	e	16.81	---	---	---	---
S-5	11/11/2008	40,000 j	2,300 j	1,400 j	1,900 j	3,630 j	---	<50 j	---	---	---	---	<25 j	<50 j	e	16.81	---	---	---	---
S-5	01/05/2009	57,000	2,300	1,400	1,500	2,900	---	<10	---	---	---	---	<5.0	<10	e	16.71	---	---	---	---
S-5	04/09/2009	52,000	2,100	3,500	1,900	5,400	---	<20	---	---	---	---	<10	<20	e	16.31	---	---	0.3	163
S-5	07/23/2009	37,000	1,800	1,900	1,400	3,800	---	---	---	---	---	---	---	---	e	16.62	---	---	1.48	-84
S-5	10/01/2009	36,000	1,800	1,900	1,400	3,700	---	---	---	---	---	---	---	---	27.24	16.35	---	10.89	0.86	-52
S-5	01/28/2010	35,000	1,200	1,900	1,500	3,600	---	---	---	---	---	---	---	---	27.24	16.35	---	10.89	---	---
S-5	05/20/2010	36,000	1,600	2,500	1,700	4,500	---	---	---	---	---	---	---	---	27.24	16.50	---	10.74	1.22	227
S-5	08/31/2010	32,000	1,300	1,100	1,600	3,400	---	---	---	---	---	---	---	---	27.24	16.95	---	10.29	0.58	-102
S-5	12/29/2010	26,000	970	1,500	1,500	3,200	---	---	---	---	---	---	---	---	27.24	16.25	---	10.99	1.18	233

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-5	02/01/2011	27,000	1,100	1,500	1,400	3,100	---	---	---	---	---	---	---	---	27.24	15.38	---	11.86	1.65	-83
S-5	04/25/2011	70,000	380	440	720	1,200	---	---	---	---	---	---	---	---	27.24	13.98	---	13.26	0.95	-109
S-5	07/28/2011	21,000	340	430	570	1,000	---	---	---	---	---	---	---	---	27.24	13.80	---	13.44	0.71	-95
S-5	10/28/2011	23,000	430	480	570	1,300	---	---	---	---	---	---	---	---	27.24	14.28	---	12.96	6.05	190
S-5	05/07/2012	16,000	150	200	350	760	---	---	---	---	---	---	---	---	27.24	13.82	---	13.42	3.61	120
S-5	08/31/2012	12,000	330	300	330	850	---	---	---	---	---	---	---	---	27.24	14.68	---	12.56	1.38	253
S-5	12/11/2012	14,000	420	700	550	1,500	---	---	---	---	---	---	---	---	27.24	16.00	---	11.24	1.07/1.29	162/63
S-5	01/24/2013	29,000	910	1,700	1,200	2,700	---	---	---	---	---	---	---	---	27.24	16.46	---	10.78	---	---
S-5	05/02/2013	35,000	650	1,500	1,400	4,500	---	---	---	---	---	---	---	---	27.24	18.59	---	8.65	---	---
S-5	08/09/2013	350,000	820	9,800	6,900	34,000	---	---	---	---	---	---	---	---	27.24	19.12	---	8.12	---	---
S-5	11/07/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	27.24	k	k	k	---	---
S-5	01/31/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	27.24	19.87	0.91	8.10	---	---
S-5	03/14/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	27.24	19.98	1.15	8.18	---	---
S-5	04/21/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	27.24	19.80	1.14	8.35	---	---
S-5	**07/31/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**18.58**	**0.29**	**8.89**	**---**	**---**
S-5	**09/22/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**18.55**	**0.15**	**8.81**	**---**	**---**
S-5	**10/03/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**18.45**	**---**	**8.79**	**---**	**---**
S-5	**10/10/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**10.48**	**---**	**16.76**	**---**	**---**
S-5	**10/17/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**18.44**	**---**	**8.80**	**---**	**---**
S-5	**10/24/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**18.54**	**---**	**8.70**	**---**	**---**
S-5	**11/21/2014**	**34,000**	**350**	**830**	**1,400**	**14,000**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**18.58**	**---**	**8.66**	**---**	**---**
S-5	**12/23/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**27.24**	**25.19**	**---**	**2.05**	**---**	**---**
S-6	04/16/1987	81,000	16,000	9,000	a	6,400	---	---	---	---	---	---	---	---	100.58	---	---	---	---	---
S-6	10/26/1988	110,000	29,000	18,000	2,500	8,200	---	---	---	---	---	---	---	---	100.58	---	---	---	---	---
S-6	02/14/1989	54,000	18,000	4,500	1,400	4,000	---	---	---	---	---	---	---	---	100.58	20.87	---	79.71	---	---
S-6	05/01/1989	93,000	43,000	9,900	3,000	8,000	---	---	---	---	---	---	---	---	100.58	20.49	---	80.09	---	---
S-6	07/27/1989	52,000	20,000	3,200	1,700	5,500	---	---	---	---	---	---	---	---	100.58	21.01	---	79.57	---	---
S-6	10/05/1989	55,000	20,000	2,900	1,600	5,500	---	---	---	---	---	---	---	---	100.58	21.24	---	79.34	---	---
S-6	01/09/1990	76,000	35,000	9,100	2,300	8,600	---	---	---	---	---	---	---	---	100.58	22.62	Sheen	77.96	---	---
S-6	04/30/1990	39,000	13,000	2,300	900	2,800	---	---	---	---	---	---	---	---	100.58	22.10	---	78.48	---	---
S-6	07/31/1990	48,000	20,000	4,600	1,500	4,900	---	---	---	---	---	---	---	---	100.58	22.00	---	78.58	---	---
S-6	10/30/1990	27,000	7,400	900	600	1,400	---	---	---	---	---	---	---	---	100.58	22.14	---	78.44	---	---
S-6	05/06/1991	35,000	3,900	2,700	2,300	3,500	---	---	---	---	---	---	---	---	100.58	22.40	---	78.18	---	---
S-6	06/27/1991	51,000	19,000	5,600	1,700	6,300	---	---	---	---	---	---	---	---	100.58	21.21	---	79.37	---	---
S-6	09/24/1991	42,000	14,000	4,300	1,200	4,000	---	---	---	---	---	---	---	---	100.58	22.26	---	78.32	---	---
S-6	11/07/1991	39,000	11,000	2,000	800	2,300	---	---	---	---	---	---	---	---	100.58	22.35	---	78.23	---	---
S-6	02/13/1992	64,000	21,000	6,200	1,600	5,100	---	---	---	---	---	---	---	---	100.58	22.28	---	78.30	---	---
S-6	05/11/1992	57,000	22,000	7,600	2,200	7,700	---	---	---	---	---	---	---	---	100.58	22.10	---	78.48	---	---
S-6	12/03/1992	110,000	26,000	9,400	2,100	8,700	---	---	---	---	---	---	---	---	100.58	22.14	---	78.44	---	---
S-6	05/13/1993	58,000	21,000	6,800	2,500	9,800	---	---	---	---	---	---	---	---	100.58	22.16	---	78.42	---	---
S-6	07/22/1993	70,000	31,000	14,000	3,000	13,000	---	---	---	---	---	---	---	---	100.58	21.64	---	78.94	---	---

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-6	10/20/1993	48,000	28,000	9,800	3,200	12,000	---	---	---	---	---	---	---	---	100.58	21.62	---	78.96	---	---
S-6	01/25/1994	70,000	23,000	7,500	2,500	8,000	---	---	---	---	---	---	---	---	100.58	21.80	---	78.78	---	---
S-6	04/25/1994	61,000	16,000	4,000	1,800	5,100	---	---	---	---	---	---	---	---	100.58	21.68	---	78.90	---	---
S-6	07/21/1994	44,000	8,200	3,600	1,400	3,900	---	---	---	---	---	---	---	---	100.58	21.78	---	78.80	---	---
S-6 (D)	07/21/1994	32,000	7,800	3,400	1,300	3,700	---	---	---	---	---	---	---	---	100.58	---	---	---	---	---
S-6	10/24/1994	2,936	1,184	440.6	163.4	648.4	---	---	---	---	---	---	---	---	100.58	22.06	---	78.52	---	---
S-6 (D)	10/24/1994	2,968	770.8	325.3	144.1	622	---	---	---	---	---	---	---	---	22.08*	---	---	---	---	---
S-6	12/22/1994	32,000	7,000	2,900	790	2,400	---	---	---	---	---	---	---	---	22.08	21.91	---	0.17	---	---
S-6 (D)	12/22/1994	32,000	8,000	3,800	1,100	3,400	---	---	---	---	---	---	---	---	22.08	---	---	---	---	---
S-6	04/20/1995	56,000	15,000	3,800	1,900	4,900	---	---	---	---	---	---	---	---	22.08	21.38	---	0.70	---	---
S-6 (D)	04/20/1995	49,000	13,000	3,500	1,800	4,700	---	---	---	---	---	---	---	---	22.08	---	---	---	---	---
S-6	10/04/1995	49,000	8,400	4,700	1,800	4,800	---	---	---	---	---	---	---	---	22.08	21.80	---	0.28	---	---
S-6 (D)	10/04/1995	41,000	8,400	4,100	1,400	4,400	---	---	---	---	---	---	---	---	22.08	---	---	---	---	---
S-6	01/03/1996	52,000	9,100	7,100	1,800	5,800	---	---	---	---	---	---	---	---	22.08	21.70	---	0.38	---	---
S-6	04/11/1996	59,000	11,000	7,100	2,100	6,400	<500	---	---	---	---	---	---	---	22.08	21.62	---	0.46	---	---
S-6 (D)	04/11/1996	59,000	11,000	6,800	1,900	6,400	<500	---	---	---	---	---	---	---	22.08	---	---	---	---	---
S-6	07/11/1996	72,000	18,000	6,600	2,500	8,400	<1,000	---	---	---	---	---	---	---	22.08	21.65	---	0.43	---	---
S-6	10/02/1996	57,000	11,000	6,500	1,500	5,100	<500	---	---	---	---	---	---	---	22.08	21.80	---	0.28	---	---
S-6	01/22/1997	67,000	15,000	5,000	1,800	5,400	<1,000	---	---	---	---	---	---	---	22.08	19.95	---	2.13	---	---
S-6 (D)	01/22/1997	63,000	15,000	4,800	1,800	5,200	<1,000	---	---	---	---	---	---	---	22.08	---	---	---	---	---
S-6	07/21/1997	61,000	15,000	2,100	1,100	3,500	1,900	---	---	---	---	---	---	---	22.08	20.61	---	1.47	---	---
S-6	01/22/1998	46,000	14,000	3,200	1,300	3,400	<500	---	---	---	---	---	---	---	22.08	19.82	---	2.26	---	---
S-6	07/08/1998	74,000	26,000	7,500	2,200	6,200	<1,000	---	---	---	---	---	---	---	22.08	18.20	---	3.88	---	---
S-6	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	22.08	18.81	---	3.27	---	---
S-6	01/28/1999	120,000	9,000	14,000	2,700	14,000	3,700	---	---	---	---	---	---	---	22.08	19.73	---	2.35	---	---
S-6	04/23/1999	58,500	15,900	1,360	1,640	3,030	<2500	---	---	---	---	---	---	---	22.08	17.58	---	4.50	---	---
S-6	07/29/1999	36,200	10,300	760	930	1,360	<1,000	---	---	---	---	---	---	---	22.08	21.35	---	0.73	---	---
S-6	11/01/1999	36,000	11,700	767	865	1,670	<1,250	<40.0	---	---	---	---	---	---	22.08	19.23	---	2.85	---	---
S-6	01/07/2000	36,000	7,600	4,600	840	3,600	<1,000	---	---	---	---	---	---	---	22.08	19.53	---	2.55	---	---
S-6	04/11/2000	14,600	7,540	205	306	609	621	---	---	---	---	---	---	---	22.08	18.16	---	3.92	---	---
S-6	07/19/2000	2,590	629	63.9	99.6	267	124	72.7 b	---	---	---	---	---	---	22.08	18.40	---	3.68	---	---
S-6	10/12/2000	32,900	14,200	966	1,060	1,790	<500	<100	---	---	---	---	---	---	22.08	19.52	---	2.56	---	---
S-6	01/09/2001	27,600	11,200	675	666	1,580	1,430	<10.0 b	---	---	---	---	---	---	22.08	19.69	---	2.39	---	---
S-6	02/05/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	22.08	19.20	---	2.88	---	---
S-6	04/06/2001	16,900	7,800	343	172	966	809	<20.0	---	---	---	---	---	---	22.08	18.25	---	3.83	---	---
S-6	07/25/2001	29,000	9,800	1,700	1,000	1,800	---	<250	---	---	---	---	---	---	22.08	18.27	---	3.81	---	---
S-6	11/01/2001	41,000	15,000	2,400	1,100	2,500	---	<500	---	---	---	---	---	---	22.08	19.30	---	2.78	---	---
S-6	01/17/2002	38,000 d	11,000 d	1,700 d	990 d	2,200 d	---	<500 d	---	---	---	---	---	---	22.08	18.51	---	3.57	---	---
S-6	05/08/2002	72,000	21,000	4,400	2,200	5,300	---	<1,000	---	---	---	---	---	---	22.08	18.30	---	3.78	---	---
S-6	07/18/2002	71,000	17,000	4,300	1,700	4,800	---	<1,000	---	---	---	---	---	---	30.56	18.19	---	12.37	---	---
S-6	10/15/2002	55,000	16,000	4,600	1,500	4,600	---	<100	---	---	---	---	---	---	30.56	18.77	---	11.79	---	---
S-6	01/02/2003	75,000	21,000	5,000	2,400	6,400	---	<50	---	---	---	---	---	---	30.56	18.60	---	11.96	---	---

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-6	04/15/2003	64,000	29,000	6,400	2,700	5,600	---	<1,000	---	---	---	---	---	---	30.56	18.27	---	12.29	---	---
S-6	07/14/2003	47,000	19,000	4,300	1,500	4,300	---	<100	---	---	---	---	---	---	30.56	18.05	---	12.51	---	---
S-6	10/20/2003	63,000	21,000	5,800	1,900	5,200	---	<130	---	---	---	---	---	---	30.56	18.55	Sheen	12.01	---	---
S-6	01/22/2004	41,000	21,000	4,300	1,800	4,000	---	<130	---	---	---	---	---	---	30.56	18.18	Sheen	12.38	---	---
S-6	04/19/2004	58,000	23,000	4,200	2,200	3,900	---	<130	---	---	---	---	---	---	30.56	17.32	---	13.24	---	---
S-6	05/03/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	30.56	17.30	---	13.26	---	---
S-6	06/17/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	30.56	17.70	---	12.86	---	---
S-6	07/13/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	30.56	17.85	---	12.71	---	---
S-6	10/28/2004	45,000	21,000	3,600	1,700	3,300	---	<130	---	---	---	---	---	---	30.56	18.45	---	12.11	---	---
S-6	01/17/2005	61,000	21,000	3,500	1,600	3,200	---	<130	---	---	---	---	---	---	30.56	17.52	---	13.04	---	---
S-6	04/14/2005	36,000	12,000	6,200	850	4,800	---	<50	---	---	---	---	---	---	30.56	22.49	---	8.07	---	---
S-6	07/28/2005	54,000	16,000	9,100	1,800	5,900	---	<130	---	---	---	---	---	---	30.56	19.38	---	11.18	---	---
S-6	10/05/2005	59,000	14,000	7,500	1,400	5,000	---	<50	---	---	---	---	---	---	30.56	18.32	---	12.24	---	---
S-6	02/09/2006	41,100	7,060	3,900	673	2,380	---	<0.500	---	---	---	---	---	---	30.56	17.11	---	13.45	---	---
S-6	05/15/2006	188,000	24,800	20,700	2,540	12,400	---	<25.0	---	---	---	---	---	---	30.56	19.80	---	10.76	---	---
S-6	08/23/2006	133,000	24,900	16,100	2,280	10,500	---	<0.500	---	---	---	---	---	---	30.56	20.45	---	10.11	---	---
S-6	11/15/2006	66,000	19,000	8,400	1,900	7,400	---	<400	---	---	---	---	---	---	30.56	20.41	---	10.15	---	---
S-6	01/30/2007	88,000	18,000	9,600	1,900	7,200	---	<100	---	---	---	---	---	---	30.56	20.47	---	10.09	---	---
S-6	05/29/2007	56,000 f	17,000	6,700	1,700	5,400	---	<20	---	---	---	---	---	---	30.56	20.40	---	10.16	---	---
S-6	08/15/2007	57,000 f,g	15,000	6,800	1,600	6,100	---	<100	---	---	---	---	---	---	30.56	20.49	---	10.07	---	---
S-6	11/28/2007	42,000 f	13,000	5,000	1,300	5,000	---	<100	---	---	---	---	---	---	30.56	20.65	---	9.91	---	---
S-6	02/08/2008	35,000 f	12,000	5,000	1,200	4,050	---	<100	---	---	---	---	<50	<100	30.56	20.31	---	10.25	---	---
S-6	05/08/2008	45,000 f	15,000	6,100	1,400	5,000	---	<100	---	---	---	---	<50	<100	30.56	20.63	---	9.93	---	---
S-6	08/14/2008	37,000	11,000	5,200	1,200	4,600	---	<100	---	---	---	---	<50	<100	30.56	20.65	---	9.91	---	---
S-6	11/11/2008	37,000 i	15,000 i	6,200 i	1,200 i	3,390 i	---	<10 i	---	---	---	---	<5.0 i	<10 i	30.56	20.79	---	9.77	---	---
S-6	11/11/2008	14,000 j	5,200 j	680 j	400 j	1,060 j	---	<50 j	---	---	---	---	<25 j	<50 j	30.56	20.79	---	9.77	---	---
S-6	01/05/2009	53,000	9,400	3,600	890	3,100	---	<100	---	---	---	---	<50	<100	30.56	21.66	---	8.90	---	---
S-6	04/09/2009	Unable to sample		---	---	---	---	---	---	---	---	---	---	---	30.56	---	---	---	---	---
S-6	04/21/2009	13,000	3,700	1,100	270	750	---	<100	---	---	---	---	<50	<100	30.56	20.20	---	10.36	---	---
S-6	07/23/2009	15,000	4,400	1,100	360	1,000	---	---	---	---	---	---	---	---	30.56	20.66	---	9.90	1.13	-73
S-6	10/01/2009	21,000	5,100	1,300	420	1,200	---	---	---	---	---	---	---	---	30.56	20.86	---	9.70	0.58	16
S-6	01/28/2010	8,700	2,600	250	200	400	---	---	---	---	---	---	---	---	30.56	20.36	---	10.20	---	---
S-6	05/20/2010	4,400	1,600	82	85	150	---	---	---	---	---	---	---	---	30.56	20.68	---	9.88	1.08	64
S-6	08/31/2010	19,000	4,700	1,300	560	1,600	---	---	---	---	---	---	---	---	30.56	20.78	---	9.78	1.55	-88
S-6	12/29/2010	15,000	3,900	1,500	520	1,800	---	---	---	---	---	---	---	---	30.56	19.92	---	10.64	2.35	123
S-6	02/01/2011	16,000	4,000	1,700	600	1,800	---	---	---	---	---	---	---	---	30.56	19.05	---	11.51	0.61	-143
S-6	04/25/2011	23,000	7,800	3,500	960	3,000	---	---	---	---	---	---	---	---	30.56	17.73	---	12.83	0.76	-112
S-6	07/28/2011	17,000	5,500	1,500	600	1,600	---	---	---	---	---	---	---	---	30.56	17.62	---	12.94	0.77	-26
S-6	10/28/2011	42,000	11,000	4,500	1,600	5,900	---	---	---	---	---	---	---	---	30.56	18.12	---	12.44	4.64	-9
S-6	05/07/2012	38,000	14,000	4,800	1,300	4,400	---	---	---	---	---	---	---	---	30.56	17.50	---	13.06	2.32	116
S-6	08/31/2012	96,000	6,700	2,500	1,900	6,200	---	---	---	---	---	---	---	---	30.56	18.42	---	12.14	0.62	146
S-6	12/11/2012	31,000	8,300	3,700	1,000	3,700	---	---	---	---	---	---	---	---	30.56	20.00	---	10.56	0.92/0.65	102/-16

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-6	01/24/2013	29,000	9,100	2,500	950	2,600	---	---	---	---	---	---	---	---	30.56	20.43	---	10.13	---	---
S-6	05/02/2013	10,000	1,800	1,100	430	1,100	---	---	---	---	---	---	---	---	30.56	22.98	---	7.58	---	---
S-6	08/09/2013	45,000	3,800	8,000	1,800	6,500	---	---	---	---	---	---	---	---	30.56	23.21	---	7.35	---	---
S-6	11/07/2013	33,000	3,600	3,800	1,000	3,700	---	---	---	---	---	---	---	---	30.56	25.24	---	5.32	---	---
S-6	01/31/2014	16,000	1,200	2,700	710	2,500	---	---	---	---	---	---	---	---	30.56	23.30	---	7.26	---	---
S-6	04/21/2014	15,000	1,100	3,100	650	2,300	---	---	---	---	---	---	---	---	30.56	22.98	---	7.58	---	---
S-6	**07/31/2014**	**40,000 l**	**4,200**	**7,300**	**1,300**	**5,400**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**30.56**	**22.49**	**---**	**8.07**	**---**	**---**
S-6	**11/21/2014**	**48,000**	**3,600**	**8,900**	**1,700**	**7,000**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**30.56**	**22.49**	**---**	**8.07**	**---**	**---**
S-8	12/22/1994	600	120	32	5.2	34	---	---	---	---	---	---	---	---	27.21	24.87	---	2.34	---	---
S-8	04/20/1995	460	180	23	5.2	21	---	---	---	---	---	---	---	---	27.21	23.90	---	3.31	---	---
S-8	10/04/1995	830	210	38	11	42	---	---	---	---	---	---	---	---	27.21	24.48	---	2.73	---	---
S-8	01/03/1996	350	61	12	2.5	12	---	---	---	---	---	---	---	---	27.21	24.62	---	2.59	---	---
S-8 (D)	01/03/1996	340	54	12	2.4	12	---	---	---	---	---	---	---	---	27.21	---	---	---	---	---
S-8	04/11/1996	570	140	37	12	47	<6.2	---	---	---	---	---	---	---	27.21	24.32	---	2.89	---	---
S-8	07/11/1996	980	98	32	9.1	160	<12	---	---	---	---	---	---	---	27.21	24.10	---	3.11	---	---
S-8	10/02/1996	280	62	13	3.3	25	15	---	---	---	---	---	---	---	27.21	25.38	---	1.83	---	---
S-8 (D)	10/02/1996	490	110	24	7.0	45	22	<2.0	---	---	---	---	---	---	27.21	---	---	---	---	---
S-8	01/22/1997	400	90	13	4.9	25	12	---	---	---	---	---	---	---	27.21	23.91	---	3.30	---	---
S-8	07/21/1997	2,900	380	110	26	260	85	---	---	---	---	---	---	---	27.21	23.62	---	3.59	---	---
S-8 (D)	07/21/1997	3,200	420	120	32	300	130	---	---	---	---	---	---	---	27.21	---	---	---	---	---
S-8	01/22/1998	3,800	790	140	42	330	160	---	---	---	---	---	---	---	27.21	23.52	---	3.69	---	---
S-8 (D)	01/22/1998	3,500	780	120	33	300	160	---	---	---	---	---	---	---	27.21	---	---	---	---	---
S-8	07/08/1998	3,600	1,800	<25	<25	<25	<125	---	---	---	---	---	---	---	27.21	21.52	---	5.69	---	---
S-8 (D)	07/08/1998	4,000	1,800	<25	<25	31	<125	---	---	---	---	---	---	---	27.21	---	---	---	---	---
S-8	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	27.21	22.01	---	5.20	---	---
S-8	01/28/1999	2,000	630	6.2	24	51	43	---	---	---	---	---	---	---	27.21	23.03	---	4.18	---	---
S-8	04/23/1999	1,050	408	<5.00	<5.00	6.65	<50.0	---	---	---	---	---	---	---	27.21	22.15	---	5.06	---	---
S-8	07/29/1999	955	344	<2.50	6.90	16.2	<25.0	---	---	---	---	---	---	---	27.21	21.95	---	5.26	---	---
S-8	11/01/1999	1,800	550	6.45	15.0	40.4	<50.0	---	---	---	---	---	---	---	27.21	22.55	---	4.66	---	---
S-8	01/07/2000	1,300	600	11	29	48	<13	---	---	---	---	---	---	---	27.21	22.87	---	4.34	---	---
S-8	04/11/2000	342	101	4.42	4.24	14.7	21.4	---	---	---	---	---	---	---	27.21	21.86	---	5.35	---	---
S-8	07/19/2000	579	228	6.37	6.45	25	<12.5	---	---	---	---	---	---	---	27.21	21.93	---	5.28	---	---
S-8	10/12/2000	947	340	8.64	3.26	38.3	<12.5	<2.00	---	---	---	---	---	---	27.21	22.92	---	4.29	---	---
S-8	01/09/2001	1,090	394	<10.0	<10.0	33.3	57.6	---	---	---	---	---	---	---	27.21	23.19	---	4.02	---	---
S-8	04/06/2001	671	182	12.5	16.4	47.1	42.5	---	---	---	---	---	---	---	27.21	22.46	---	4.75	---	---
S-8	07/25/2001	500	70	6.7	11	23	---	<5.0	---	---	---	---	---	---	27.21	22.50	---	4.71	---	---
S-8	11/01/2001	1,900	250	28	39	180	---	<5.0	---	---	---	---	---	---	27.21	22.44	---	4.77	---	---
S-8	01/17/2002	830 d	140 d	11 d	12 d	89 d	---	<5.0 d	---	---	---	---	---	---	27.21	21.82	---	5.39	---	---
S-8	05/08/2002	210 d	34 d	1.7 d	4.1 d	15 d	---	<5.0 d	---	---	---	---	---	---	27.21	21.35	---	5.86	---	---
S-8	07/18/2002	650	68	2.8	9.7	42	---	<5.0	---	---	---	---	---	---	35.85	21.53	---	14.32	---	---
S-8	10/15/2002	1,000	160	4.2	7.7	74	---	<0.50	---	---	---	---	---	---	35.85	21.97	---	13.88	---	---

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-8	01/02/2003	440	55	1.8	2.9	31	---	<0.50	---	---	---	---	---	---	35.85	21.95	---	13.90	---	---
S-8	04/15/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	21.73	---	14.12	---	---
S-8	07/14/2003	60	6.8	<0.50	0.98	4.9	---	<0.50	---	---	---	---	---	---	35.85	21.40	---	14.45	---	---
S-8	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	21.94	---	13.91	---	---
S-8	01/22/2004	210	19	0.52	3.6	17	---	<0.50	---	---	---	---	---	---	35.85	21.40	---	14.45	---	---
S-8	04/19/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	20.83	---	15.02	---	---
S-8	07/13/2004	420	77	0.82	14	31	---	<0.50	---	---	---	---	---	---	35.85	21.05	---	14.80	---	---
S-8	10/28/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	21.77	---	14.08	---	---
S-8	01/17/2005	490	85	0.89	13	28	---	<0.50	---	---	---	---	---	---	35.85	20.92	---	14.93	---	---
S-8	04/14/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	21.57	---	14.28	---	---
S-8	07/28/2005	64	12	<0.50	1.5	1.6	---	<0.50	---	---	---	---	---	---	35.85	21.62	---	14.23	---	---
S-8	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	21.11	---	14.74	---	---
S-8	02/09/2006	<50.0	2.79	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	---	---	35.85	20.18	---	15.67	---	---
S-8	05/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	20.53	---	15.32	---	---
S-8	08/23/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	---	---	35.85	21.49	---	14.36	---	---
S-8	11/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	22.05	---	13.80	---	---
S-8	01/30/2007	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	35.85	22.41	---	13.44	---	---
S-8	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	22.65	---	13.20	---	---
S-8	08/15/2007	65 f,g	7.4	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	---	---	35.85	22.88	---	12.97	---	---
S-8	11/28/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	23.20	---	12.65	---	---
S-8	02/08/2008	350 f	22	<1.0	4.8	2.6	---	1.2	---	---	---	---	<0.50	<1.0	35.85	22.72	---	13.13	---	---
S-8	05/08/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.85	22.91	---	12.94	---	---
S-8	08/14/2008	420	28	<1.0	6.3	1.4	---	<1.0	---	---	---	---	<0.50	<1.0	35.85	23.12	---	12.73	---	---
S-8	11/11/2008	330 i	37 i	<1.0 i	5.1 i	<1.0 i	---	<1.0 i	---	---	---	---	<0.50 i	<1.0 i	35.85	23.37	---	12.48	1.6	28
S-8	11/11/2008	480 j	29 j	<1.0 j	5.4 j	<1.0 j	---	---	---	---	---	---	---	---	35.85	23.37	---	12.48	2.2	103
S-8	12/18/2008	340	38	<1.0	5.4	<1.0	---	---	---	---	---	---	---	---	35.83	23.31	---	12.52	---	---
S-8	01/05/2009	170	15	<1.0	1.2	<1.0	---	---	---	---	---	---	---	---	35.83	23.28	---	12.55	---	---
S-8	01/15/2009	260	45	<1.0	3.2	<1.0	---	---	---	---	---	---	---	---	35.83	23.05	---	12.78	---	---
S-8	02/12/2009	88	7.2	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.34	---	12.49	---	---
S-8	03/12/2009	12,000	1,700	2,100	200	2,400	---	---	---	---	---	---	---	---	35.83	22.90	---	12.93	---	---
S-8	04/09/2009	170	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.10	---	12.73	---	594
S-8	07/23/2009	140	0.55	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.02	---	12.81	2.38	-54
S-8	10/01/2009	140	0.68	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.31	---	12.52	4.34	359
S-8	01/28/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	22.80	---	13.03	---	---
S-8	05/20/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.55	---	12.28	0.64	42
S-8	08/31/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.48	---	12.35	0.54	-72
S-8	12/29/2010	79	0.83	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.83	23.18	---	12.65	0.74	133
S-8	02/01/2011	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	22.57	---	13.26	1.68	104
S-8	04/25/2011	<50	1.1	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	21.26	---	14.57	1.78	12
S-8	07/28/2011	50	2.4	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	20.94	---	14.89	0.89	186
S-8	10/28/2011	<50	0.61	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	21.09	---	14.74	2.78	349
S-8	05/07/2012	<50	4.3	1.4	0.59	1.0	---	---	---	---	---	---	---	---	35.83	21.23	---	14.60	2.42	209

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-8	05/02/2013	53	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	24.65	---	11.18	---	---
S-8	04/21/2014	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.83	25.28	---	10.55	---	---
S-9	12/22/1994	2,600	400	150	42	310	---	---	---	---	---	---	---	---	26.06	24.37	---	1.69	---	---
S-9	04/20/1995	1,900	400	130	51	200	---	---	---	---	---	---	---	---	26.06	23.49	---	2.57	---	---
S-9	10/04/1995	3,200	590	260	68	280	---	---	---	---	---	---	---	---	26.06	24.01	---	2.05	---	---
S-9	01/03/1996	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	26.06	---	---	---	---	---
S-9	04/11/1996	2,100	440	1,500	42	210	<25	---	---	---	---	---	---	---	26.06	23.61	---	2.45	---	---
S-9	07/11/1996	5,200	940	450	120	520	<50	---	---	---	---	---	---	---	26.06	23.78	---	2.28	---	---
S-9 (D)	07/11/1996	4,800	890	430	110	500	<50	---	---	---	---	---	---	---	26.06	---	---	---	---	---
S-9	10/02/1996	3,000	680	220	56	270	<62	---	---	---	---	---	---	---	26.06	24.31	---	1.75	---	---
S-9	01/22/1997	1,500	230	71	36	130	<12	---	---	---	---	---	---	---	26.06	23.08	---	2.98	---	---
S-9	07/21/1997	3,400	590	57	19	210	96	---	---	---	---	---	---	---	26.06	22.83	---	3.23	---	---
S-9	01/22/1998	2,600	300	46	<10	270	62	---	---	---	---	---	---	---	26.06	21.96	---	4.10	---	---
S-9	07/08/1998	820	150	6.2	7.5	57	<10	---	---	---	---	---	---	---	26.06	20.85	---	5.21	---	---
S-9	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	21.39	---	4.67	---	---
S-9	01/28/1999	<50	1.0	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	26.06	22.32	---	3.74	---	---
S-9	04/23/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	21.41	---	4.65	---	---
S-9	07/29/1999	117	7.77	0.817	0.683	5.05	<5.00	---	---	---	---	---	---	---	26.06	21.25	---	4.81	---	---
S-9	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	21.92	---	4.14	---	---
S-9	01/07/2000	<50	1.2	<0.50	<0.50	<0.50	<2.5	---	---	---	---	---	---	---	26.06	22.11	---	3.95	---	---
S-9	04/11/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	21.14	---	4.92	---	---
S-9	07/19/2000	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	26.06	---	---	---	---	---
S-9	10/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	22.24	---	3.82	---	---
S-9	01/09/2001	<50.0	1.45	<0.500	<0.500	<0.500	<2.50	---	---	---	---	---	---	---	26.06	22.52	---	3.54	---	---
S-9	04/06/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	23.61	---	2.45	---	---
S-9	07/25/2001	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	26.06	---	---	---	---	---
S-9	08/13/2001	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	26.06	---	---	---	---	---
S-9	11/01/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	21.78	---	4.28	---	---
S-9	01/17/2002	<50 d	<0.50 d	<0.50 d	<0.50 d	<0.50 d	---	<5.0 d	---	---	---	---	---	---	26.06	21.15	---	4.91	---	---
S-9	05/08/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	26.06	20.56	---	5.50	---	---
S-9	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	---	---	34.70	20.88	---	13.82	---	---
S-9	10/15/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.41	---	13.29	---	---
S-9	01/02/2003	<50	<0.50	<0.50	<0.50	<0.50	---	<5.0	---	---	---	---	---	---	34.70	21.35	---	13.35	---	---
S-9	04/15/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.14	---	13.56	---	---
S-9	07/14/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.70	20.80	---	13.90	---	---
S-9	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.33	---	13.37	---	---
S-9	01/22/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.70	20.77	---	13.93	---	---
S-9	04/19/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	20.06	---	14.64	---	---
S-9	07/13/2004	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.70	20.44	---	14.26	---	---
S-9	10/28/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.02	---	13.68	---	---
S-9	01/17/2005	<50	<0.50	<0.50	<0.50	<1.0	---	<0.50	---	---	---	---	---	---	34.70	20.18	---	14.52	---	---

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-9	04/14/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.85	---	12.85	---	---
S-9	07/28/2005	360	190	1.8	1.1	3.9	---	<0.50	<5.0	<2.0	<2.0	<2.0	---	---	34.70	21.22	---	13.48	---	---
S-9	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	20.63	---	14.07	---	---
S-9	02/09/2006	<50.0	0.94	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	---	---	34.70	19.23	---	15.47	---	---
S-9	05/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	20.28	---	14.42	---	---
S-9	08/23/2006	7,000	1,740	55.6	193	278	---	<0.500	<10.0	<0.500	<0.500	<0.500	---	---	34.70	21.31	---	13.39	---	---
S-9	11/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	21.79	---	12.91	---	---
S-9	01/30/2007	12,000	2,200	250	480	980	---	<0.50	---	---	---	---	---	---	34.70	22.08	---	12.62	---	---
S-9	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	22.22	---	12.48	---	---
S-9	08/15/2007	9,800 f,g	2,400	100	410	602	---	<10	<100	<20	<20	<20	---	---	34.70	22.43	---	12.27	---	---
S-9	11/28/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	22.75	---	11.95	---	---
S-9	02/08/2008	69 f	2.2	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	34.70	22.31	---	12.39	---	---
S-9	05/08/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.70	22.49	---	12.21	---	---
S-9	08/14/2008	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	34.70	22.70	---	12.00	---	---
S-9	11/11/2008	<50 i	2.4 i	<1.0 i	<1.0 i	<1.0 i	---	<1.0 i	---	---	---	---	<0.50 i	<1.0 i	34.70	22.90	---	11.80	1.1	92
S-9	11/11/2008	550 j	74 j	12 j	22 j	55.3 j	---	---	---	---	---	---	---	---	34.70	22.90	---	11.80	3.6	98
S-9	12/18/2008	1,500	280	43	71	182	---	---	---	---	---	---	---	---	34.34	22.81	---	11.53	---	---
S-9	01/05/2009	1,000	230	24	45	64	---	---	---	---	---	---	---	---	34.34	22.75	---	11.59	---	---
S-9	01/15/2009	2,100	560	75	100	245	---	---	---	---	---	---	---	---	34.34	22.37	---	11.97	---	---
S-9	02/12/2009	500	120	19	26	50	---	---	---	---	---	---	---	---	34.34	22.61	---	11.73	---	---
S-9	03/12/2009	810	200	30	50	110	---	---	---	---	---	---	---	---	34.34	22.22	---	12.12	---	---
S-9	04/09/2009	2,300	450	60	110	260	---	---	---	---	---	---	---	---	34.34	22.12	---	12.22	0.65	79
S-9	05/18/2009	1,500	200	35	61	180	---	---	---	---	---	---	---	---	34.34	22.09	---	12.25	2.71	173
S-9	07/23/2009	1,700	430	49	110	190	---	---	---	---	---	---	---	---	34.34	22.48	---	11.86	0.21	346
S-9	10/01/2009	1,200	180	12	58	93	---	---	---	---	---	---	---	---	34.34	22.84	---	11.50	1.37	146
S-9	11/09/2009	1,400	260	21	67	81	---	---	---	---	---	---	---	---	34.34	22.63	---	11.71	0.42	---
S-9	12/01/2009	1,100	110	11	26	59	---	---	---	---	---	---	---	---	34.34	22.44	---	11.90	1.09	133
S-9	01/28/2010	860	130	9.3	38	79	---	---	---	---	---	---	---	---	34.34	22.35	---	11.99	1.95	---
S-9	05/20/2010	1,900	340	27	100	210	---	---	---	---	---	---	---	---	34.34	22.40	---	11.94	0.17	138
S-9	06/22/2010	1,400	240	30	65	130	---	---	---	---	---	---	---	---	34.34	22.64	---	11.70	2.16	577
S-9	08/31/2010	760	130	13	54	110	---	<1.0	<10	<2.0	<2.0	<2.0	---	---	34.34	22.92	---	11.42	1.53	415
S-9	12/29/2010	290	55	3.3	18	41	---	---	---	---	---	---	---	---	34.34	22.62	---	11.72	1.64	163
S-9	02/01/2011	640	99	7.8	38	72	---	---	---	---	---	---	---	---	34.34	21.88	---	12.46	1.34	0
S-9	04/25/2011	590	120	9.1	29	77	---	---	---	---	---	---	---	---	34.34	20.34	---	14.00	0.62	98
S-9	07/28/2011	1,700	280	47	88	230	---	<1.0	<10	<1.0	<1.0	<1.0	---	---	34.34	20.10	---	14.24	2.17	73
S-9	10/28/2011	1,900	370	32	110	260	---	---	---	---	---	---	---	---	34.34	20.54	---	13.80	2.18	122
S-9	05/07/2012	970	200	14	46	100	---	<2.5	<50	<2.5	<2.5	<2.5	---	---	34.34	20.49	---	13.85	0.91	78
S-9	12/11/2012	610	160	22	32	95	---	---	---	---	---	---	---	---	34.34	22.28	---	12.06	1.28/1.53	93/76
S-9	05/02/2013	1,400	230	53	65	160	---	<2.5	<50	<2.5	<2.5	<2.5	---	---	34.34	24.36	---	9.98	---	---
S-9	11/07/2013	1,200	150	15	32	84	---	---	---	---	---	---	---	---	34.34	24.92	---	9.42	---	---
S-9	04/21/2014	1,100	120	25	33	83	---	<1.3	<25	<1.3	<1.3	<1.3	---	---	34.34	24.90	---	9.44	---	---
S-9	**11/21/2014**	**1,600**	**250**	**15**	**64**	**89**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**34.34**	**24.55**	**---**	**9.79**	**---**	**---**

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-10	12/22/1994	420	27	8.0	18	45	---	---	---	---	---	---	---	---	28.04	25.84	---	2.20	---	---
S-10	04/20/1995	820	49	3.7	97	52	---	---	---	---	---	---	---	---	28.04	24.92	---	3.12	---	---
S-10	10/04/1995	240	6.5	1.1	16	12	---	---	---	---	---	---	---	---	28.04	25.47	---	2.57	---	---
S-10	01/03/1996	1,100	27	4.9	110	70	---	---	---	---	---	---	---	---	28.04	25.60	---	2.44	---	---
S-10	04/11/1996	530	19	1.6	82	52	<5.0	---	---	---	---	---	---	---	28.04	25.27	---	2.77	---	---
S-10	07/11/1996	570	16	3.2	53	53	<2.5	---	---	---	---	---	---	---	28.04	25.46	---	2.58	---	---
S-10	10/02/1996	270	8.2	0.77	24	23	3.3	---	---	---	---	---	---	---	28.04	25.81	---	2.23	---	---
S-10	01/22/1997	160	4.8	0.73	16	11	<2.5	---	---	---	---	---	---	---	28.04	24.74	---	3.30	---	---
S-10	07/21/1997	530	5.7	0.70	29	69	<2.5	---	---	---	---	---	---	---	28.04	24.50	---	3.54	---	---
S-10	01/22/1998	1,500	15	<5.0	88	130	<25	---	---	---	---	---	---	---	28.04	24.44	---	3.60	---	---
S-10	07/08/1998	530	4.8	1.1	47	51	<2.5	---	---	---	---	---	---	---	28.04	22.36	---	5.68	---	---
S-10	10/26/1998	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	22.81	---	5.23	---	---
S-10	01/28/1999	630	4.6	0.98	<0.50	59	<2.5	---	---	---	---	---	---	---	28.04	23.82	---	4.22	---	---
S-10	04/23/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	22.96	---	5.08	---	---
S-10	07/29/1999	728	3.4	<1.00	41.8	38.0	<10.0	---	---	---	---	---	---	---	28.04	22.63	---	5.41	---	---
S-10	11/01/1999	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	23.02	---	5.02	---	---
S-10	01/07/2000	870	8.5	1.3	110	110	<2.5	---	---	---	---	---	---	---	28.04	23.33	---	4.71	---	---
S-10	04/11/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	22.64	---	5.40	---	---
S-10	07/19/2000	612	3.75	<0.500	41.6	43.6	<2.50	---	---	---	---	---	---	---	28.04	23.04	---	5.00	---	---
S-10	10/12/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	23.92	---	4.12	---	---
S-10	01/09/2001	647	7.62	1.01	66.2	42.4	<2.50	---	---	---	---	---	---	---	28.04	24.13	---	3.91	---	---
S-10	04/06/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	25.37	---	2.67	---	---
S-10	07/25/2001	340	1.5	<0.50	42	19	---	<5.0	---	---	---	---	---	---	28.04	25.35	---	2.69	---	---
S-10	11/01/2001	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	23.22	---	4.82	---	---
S-10	01/17/2002	1,100 d	3.5 d	<0.50 d	55 d	46 d	---	<5.0 d	---	---	---	---	---	---	28.04	22.72	---	5.32	---	---
S-10	05/08/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	28.04	22.35	---	5.69	---	---
S-10	07/18/2002	750	1.8	<0.50	42	26	---	<5.0	---	---	---	---	---	---	36.35	22.05	---	14.30	---	---
S-10	10/15/2002	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.51	---	13.84	---	---
S-10	01/02/2003	440	1.8	<0.50	14	24	---	<5.0	---	---	---	---	---	---	36.35	22.50	---	13.85	---	---
S-10	04/15/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.32	---	14.03	---	---
S-10	07/14/2003	210	0.86	<0.50	13	12	---	<0.50	---	---	---	---	---	---	36.35	21.99	---	14.36	---	---
S-10	10/20/2003	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.53	---	13.82	---	---
S-10	01/22/2004	280	0.88	<0.50	10	11	---	<0.50	---	---	---	---	---	---	36.35	22.02	---	14.33	---	---
S-10	04/19/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	21.43	---	14.92	---	---
S-10	07/13/2004	770	1.5	<0.50	70	42	---	<0.50	---	---	---	---	---	---	36.35	21.68	---	14.67	---	---
S-10	10/28/2004	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.37	---	13.98	---	---
S-10	01/17/2005	1,100	1.5	<0.50	73	51	---	<0.50	---	---	---	---	---	---	36.35	21.45	---	14.90	---	---
S-10	04/14/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.18	---	14.17	---	---
S-10	07/28/2005	260	<0.50	<0.50	19	9.7	---	<0.50	<5.0	<2.0	<2.0	<2.0	---	---	36.35	22.25	---	14.10	---	---
S-10	10/05/2005	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	21.70	---	14.65	---	---
S-10	02/09/2006	630	<0.500	<0.500	13.8	13.8	---	<0.500	---	---	---	---	---	---	36.35	20.37	---	15.98	---	---

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-10	05/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	21.31	---	15.04	---	---
S-10	08/23/2006	<50.0	<0.500	<0.500	14.5	3.4	---	<0.500	<10.0	<0.500	<0.500	<0.500	---	---	36.35	22.12	---	14.23	---	---
S-10	11/15/2006	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	22.68	---	13.67	---	---
S-10	01/30/2007	120	<0.50	<0.50	7.0	3.3	---	<0.50	---	---	---	---	---	---	36.35	23.09	---	13.26	---	---
S-10	05/29/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	23.20	---	13.15	---	---
S-10	08/15/2007	64 f,g	0.15 h	<1.0	1.4	0.72 h	---	<1.0	<10	<2.0	<2.0	<2.0	---	---	36.35	23.48	---	12.87	---	---
S-10	11/28/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	23.82	---	12.53	---	---
S-10	02/08/2008	61 f	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	36.35	23.31	---	13.04	---	---
S-10	05/08/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	23.55	---	12.80	---	---
S-10	08/14/2008	58	<0.50	<1.0	2.7	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	36.35	23.75	---	12.60	---	---
S-10	11/11/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	23.08	---	13.27	---	---
S-10	12/18/2008	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	36.35	24.00	---	12.35	---	---
S-10	01/05/2009	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	36.35	23.87	---	12.48	---	---
S-10	01/15/2009	<50	<0.50	<1.0	1.1	<1.0	---	---	---	---	---	---	---	---	36.35	23.66	---	12.69	---	---
S-10	02/12/2009	56	<0.50	<1.0	3.4	<1.0	---	---	---	---	---	---	---	---	36.35	23.96	---	12.39	---	---
S-10	03/12/2009	53	<0.50	<1.0	4.9	<1.0	---	---	---	---	---	---	---	---	36.35	23.44	---	12.91	---	---
S-10	04/09/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	36.35	23.26	---	13.09	---	---
S-10	07/23/2009	66	<0.50	<1.0	5.7	<1.0	---	---	---	---	---	---	---	---	36.35	23.56	---	12.79	0.06	112
S-10	10/01/2009	76	<0.50	<1.0	4.6	<1.0	---	---	---	---	---	---	---	---	36.35	23.80	---	12.55	1.26	206
S-10	01/28/2010	100	<0.50	<1.0	3.6	<1.0	---	---	---	---	---	---	---	---	36.35	23.30	---	13.05	---	---
S-10	05/20/2010	52	<0.50	<1.0	1.9	<1.0	---	---	---	---	---	---	---	---	36.35	24.04	---	12.31	0.68	59
S-10	08/31/2010	<50	0.69	<1.0	1.4	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	---	---	36.35	24.24	---	12.11	0.51	-3
S-10	12/29/2010	95	<0.50	<1.0	3.4	1.4	---	---	---	---	---	---	---	---	36.35	23.89	---	12.46	0.43	87
S-10	02/01/2011	69	<0.50	<0.50	2.2	<1.0	---	---	---	---	---	---	---	---	36.35	23.25	---	13.10	2.08	117
S-10	04/25/2011	55	0.51	<0.50	2.9	<1.0	---	---	---	---	---	---	---	---	36.35	21.87	---	14.48	1.32	21
S-10	07/28/2011	<50	<0.50	<1.0	0.92	<1.0	---	<1.0	<10	<1.0	<1.0	<1.0	---	---	36.35	21.39	---	14.96	0.32	227
S-10	10/28/2011	52	<0.50	<0.50	2.7	<1.0	---	---	---	---	---	---	---	---	36.35	21.68	---	14.67	2.68	327
S-10	05/07/2012	50	0.84	<0.50	1.5	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	36.35	22.00	---	14.35	2.51	220
S-10	05/02/2013	100	<0.50	<0.50	0.77	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	36.35	25.53	---	10.82	---	---
S-10	04/21/2014	180	<0.50	<0.50	0.71	<1.0	---	<0.50	<10	<0.50	<0.50	<0.50	---	---	36.35	26.20	---	10.15	---	---
S-12	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	36.44	24.58	---	11.86	---	---
S-12	02/08/2008	55 f	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	36.44	24.32	---	12.12	---	---
S-12	05/08/2008	<50 f	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	36.44	24.51	---	11.93	---	---
S-12	08/14/2008	<50	1.0	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	36.44	24.63	---	11.81	---	---
S-12	11/11/2008	<50 i	0.95 i	<1.0 i	<1.0 i	<1.0 i	---	<1.0 i	---	---	---	---	<0.50 i	<1.0 i	36.44	24.85	---	11.59	0.2	37
S-12	11/11/2008	65 j	8.1 j	2.2 j	4.8 j	1.5 j	---	---	---	---	---	---	---	---	36.44	24.85	---	11.59	0.2	45
S-12	12/18/2008	<50	8.3	<1.0	1.8	<1.0	---	---	---	---	---	---	---	---	36.44	24.81	---	11.63	---	---
S-12	01/05/2009	95	16	<1.0	3.2	<1.0	---	---	---	---	---	---	---	---	36.44	24.75	---	11.69	---	---
S-12	01/15/2009	140	36	<1.0	12	<1.0	---	---	---	---	---	---	---	---	36.44	24.54	---	11.90	---	---
S-12	02/12/2009	<50	5.0	<1.0	1.6	<1.0	---	---	---	---	---	---	---	---	36.44	24.81	---	11.63	---	---
S-12	03/12/2009	<50	4.8	<1.0	1.5	<1.0	---	---	---	---	---	---	---	---	36.44	24.41	---	12.03	---	---

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-12	04/09/2009	59	6.0	<1.0	1.6	<1.0	---	---	---	---	---	---	---	---	36.44	24.23	---	12.21	0.50	-3
S-12	07/23/2009	130	29	<1.0	13	<1.0	---	---	---	---	---	---	---	---	36.44	24.50	---	11.94	0.07	142
S-12	10/01/2009	130	25	<1.0	15	<1.0	---	---	---	---	---	---	---	---	36.44	24.76	---	11.68	0.74	135
S-12	01/28/2010	110	14	<1.0	19	<1.0	---	---	---	---	---	---	---	---	36.44	24.28	---	12.16	---	---
S-12	05/20/2010	75	8.5	<1.0	7.0	<1.0	---	---	---	---	---	---	---	---	36.44	24.71	---	11.73	0.14	740
S-12	08/31/2010	<50	0.56	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	36.44	25.08	---	11.36	1.18	180
S-12	12/29/2010	<50	0.98	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	36.44	24.60	---	11.84	1.27	121
S-12	02/01/2011	<50	1.8	<0.50	2.8	<1.0	---	---	---	---	---	---	---	---	36.44	23.94	---	12.50	2.06	-2
S-12	04/25/2011	<50	0.82	<0.50	1.7	<1.0	---	---	---	---	---	---	---	---	36.44	22.53	---	13.91	0.28	196
S-12	07/28/2011	<50	0.96	<0.50	2.8	<1.0	---	---	---	---	---	---	---	---	36.44	22.05	---	14.39	3.01	163
S-12	10/28/2011	99	15	<0.50	14	<1.0	---	---	---	---	---	---	---	---	36.44	22.50	---	13.94	3.67	91
S-12	05/07/2012	180	25	<0.50	19	1.0	---	---	---	---	---	---	---	---	36.44	22.50	---	13.94	0.88	66
S-12	05/02/2013	190	1.2	0.64	0.71	3.8	---	---	---	---	---	---	---	---	36.44	26.48	---	9.96	---	---
S-12	04/21/2014	1,100	5.0	3.3	9.5	38	---	---	---	---	---	---	---	---	36.44	27.08	---	9.36	---	---
S-13	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	35.16	23.33	---	11.83	---	---
S-13	02/08/2008	14,000 f	1,900	1,300	280	3,000	---	<10	---	---	---	---	<5.0	<10	35.16	23.01	---	12.15	---	---
S-13	05/08/2008	18,000 f	2,800	3,400	550	3,500	---	<10	---	---	---	---	<5.0	<10	35.16	23.31	---	11.85	---	---
S-13	08/14/2008	16,000	2,400	3,100	580	3,100	---	<20	---	---	---	---	<10	<20	35.16	23.31	---	11.85	---	---
S-13	11/11/2008	16,000 i	2,400 i	2,800 i	270 i	2,500 i	---	<50 i	---	---	---	---	<25 i	<50 i	35.16	23.60	---	11.56	0.8	-48
S-13	11/11/2008	4,400 j	560 j	630 j	88 j	530 j	---	---	---	---	---	---	---	---	35.16	23.60	---	11.56	1.2	-60
S-13	12/18/2008	3,900	530	560	76	510	---	---	---	---	---	---	---	---	35.05	23.61	---	11.44	---	---
S-13	01/05/2009	8,200	700	670	67	1,000	---	---	---	---	---	---	---	---	35.05	23.54	---	11.51	---	---
S-13	01/15/2009	5,400	610	610	48	950	---	---	---	---	---	---	---	---	35.05	23.10	---	11.95	---	---
S-13	02/12/2009	6,300	800	1,000	110	870	---	---	---	---	---	---	---	---	35.05	22.36	---	12.69	---	---
S-13	03/12/2009	14,000	1,700	2,300	190	2,400	---	---	---	---	---	---	---	---	35.05	23.20	---	11.85	---	---
S-13	04/09/2009	35,000	510	7,800	1,000	4,300	---	---	---	---	---	---	---	---	35.05	23.02	---	12.03	25.9	433
S-13	05/18/2009	35,000	820	7,000	1,100	6,600	---	---	---	---	---	---	---	---	35.05	23.07	---	11.98	5.21	83
S-13	07/23/2009	18,000	1,800	3,000	480	2,500	---	---	---	---	---	---	---	---	35.05	23.51	---	11.54	1.23	148
S-13	10/01/2009	2,000	330	87	33	5.2	---	---	---	---	---	---	---	---	35.05	23.61	---	11.44	1.23	413
S-13	11/09/2009	15,000	1,100	1,500	300	1,800	---	---	---	---	---	---	---	---	35.05	23.41	---	11.64	0.71	---
S-13	12/01/2009	1,600	210	190	34	36	---	---	---	---	---	---	---	---	35.05	23.15	---	11.90	16.3	231
S-13	01/28/2010	5,900	370	930	100	680	---	---	---	---	---	---	---	---	35.05	22.94	---	12.11	2.18	---
S-13	05/20/2010	400	35	120	9.5	52	---	---	---	---	---	---	---	---	35.05	23.36	---	11.69	0.31	211
S-13	06/22/2010	16,000	570	3,000	260	2,000	---	---	---	---	---	---	---	---	35.05	23.20	---	11.85	1.10	412
S-13	08/31/2010	3,000	140	490	83	540	---	---	---	---	---	---	---	---	35.05	24.00	---	11.05	0.90	400
S-13	12/29/2010	8,700	600	1,700	260	1,700	---	---	---	---	---	---	---	---	35.05	23.48	---	11.57	0.69	231
S-13	02/01/2011	2,100	170	390	75	410	---	---	---	---	---	---	---	---	35.05	22.71	---	12.34	1.10	248
S-13	04/25/2011	6,000	600	1,800	270	1,300	---	---	---	---	---	---	---	---	35.05	21.15	---	13.90	0.19	69
S-13	07/28/2011	3,700	320	430	160	790	---	---	---	---	---	---	---	---	35.05	20.64	---	14.41	2.65	44
S-13	10/28/2011	8,100	600	830	380	1,700	---	---	---	---	---	---	---	---	35.05	21.47	---	13.58	3.67	1
S-13	05/07/2012	5,100	540	670	320	1,100	---	---	---	---	---	---	---	---	35.05	21.35	---	13.70	0.60	-176

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-13	12/11/2012	5,900	420	580	260	950	---	---	---	---	---	---	---	---	35.05	22.91	---	12.14	1.07/0.80	-70/-63
S-13	05/02/2013	1,300	130	95	49	85	---	---	---	---	---	---	---	---	35.05	25.24	---	9.81	---	---
S-13	11/07/2013	---	---	---	---	---	---	---	---	---	---	---	---	---	35.05	k	k	k	---	---
S-13	03/14/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	35.05	26.22	0.25	9.03	---	---
S-13	04/21/2014	---	---	---	---	---	---	---	---	---	---	---	---	---	35.05	26.09	0.39	9.27	---	---
S-13	**07/31/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.05**	**25.25**	**---**	**9.80**	**---**	**---**
S-13	**09/22/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.05**	**25.31**	**---**	**9.74**	**---**	**---**
S-13	**10/03/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.05**	**25.35**	**---**	**9.70**	**---**	**---**
S-13	**10/10/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.05**	**25.33**	**---**	**9.72**	**---**	**---**
S-13	**10/17/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.05**	**25.31**	**---**	**9.74**	**---**	**---**
S-13	**10/24/2014**	**Well inaccessible**		**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.05**	**---**	**---**	**---**	**---**	**---**
S-13	**11/21/2014**	**7,000**	**330**	**270**	**120**	**590**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.05**	**25.35**	**---**	**9.70**	**---**	**---**
S-13	**11/21/2014**	**7,000**	**330**	**270**	**120**	**590**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.05**	**18.33**	**---**	**16.72**	**---**	**---**
S-14	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	34.94	22.68	---	12.26	---	---
S-14	02/08/2008	5,300 f	380	300	34	970	---	<10	---	---	---	---	<5.0	<10	34.94	22.82	---	12.12	---	---
S-14	05/08/2008	4,300 f	750	270	30	520	---	<10	---	---	---	---	<5.0	<10	34.94	22.41	---	12.53	---	---
S-14	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-14R	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.19	22.91	---	12.28	---	---
S-14R	11/11/2008	8,500 i	680 i	270 i	<25 i	1,110 i	---	---	---	---	---	---	---	---	35.19	23.13	---	12.06	0.60	115
S-14R	11/11/2008	4,300 j	270 j	190 j	43 j	470 j	---	---	---	---	---	---	---	---	35.19	23.13	---	12.06	1.5	116
S-14R	12/18/2008	7,800	530	640	79	1,010	---	---	---	---	---	---	---	---	34.95	22.80	---	12.15	---	---
S-14R	01/05/2009	2,100	89	86	19	140	---	---	---	---	---	---	---	---	34.95	22.80	---	12.15	---	---
S-14R	01/15/2009	4,800	430	540	83	730	---	---	---	---	---	---	---	---	34.95	22.57	---	12.38	---	---
S-14R	02/12/2009	1,000	40	29	7.3	55	---	---	---	---	---	---	---	---	34.95	22.89	---	12.06	---	---
S-14R	03/12/2009	350	22	18	3.3	29	---	---	---	---	---	---	---	---	34.95	22.39	---	12.56	---	---
S-14R	04/09/2009	2,300	230	240	47	250	---	---	---	---	---	---	---	---	34.95	22.35	---	12.60	0.30	430
S-14R	05/18/2009	750	51	48	17	67	---	---	---	---	---	---	---	---	34.95	22.20	---	12.75	5.63	93
S-14R	07/23/2009	600	81	57	19	47	---	---	---	---	---	---	---	---	34.95	22.56	---	12.39	0.05	246
S-14R	10/01/2009	230	12	10	5.3	23	---	---	---	---	---	---	---	---	34.95	22.90	---	12.05	2.22	201
S-14R	11/09/2009	330	47	21	11	39	---	---	---	---	---	---	---	---	34.95	22.68	---	12.27	0.75	---
S-14R	12/01/2009	420	38	27	12	39	---	---	---	---	---	---	---	---	34.95	22.62	---	12.33	0.45	110
S-14R	01/28/2010	270	45	27	11	32	---	---	---	---	---	---	---	---	34.95	22.38	---	12.57	3.75	---
S-14R	05/20/2010	330	17	10	2.7	13	---	---	---	---	---	---	---	---	34.95	22.72	---	12.23	0.96	102
S-14R	08/31/2010	130	5.8	3.5	1.4	6.1	---	---	---	---	---	---	---	---	34.95	23.12	---	11.83	1.55	-13
S-14R	12/29/2010	480	56	30	13	52	---	---	---	---	---	---	---	---	34.95	22.75	---	12.20	0.48	375
S-14R	02/01/2011	570	56	32	20	59	---	---	---	---	---	---	---	---	34.95	22.10	---	12.85	0.58	143
S-14R	04/25/2011	860	100	59	41	97	---	---	---	---	---	---	---	---	34.95	20.80	---	14.15	0.81	-37
S-14R	07/28/2011	970	100	80	51	110	---	---	---	---	---	---	---	---	34.95	20.36	---	14.59	0.56	151
S-14R	10/28/2011	420	47	38	25	67	---	---	---	---	---	---	---	---	34.95	20.68	---	14.27	3.97	321
S-14R	05/07/2012	630	68	62	40	120	---	---	---	---	---	---	---	---	34.95	20.77	---	14.18	2.47	238

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-14R	05/02/2013	3,200	200	130	95	200	---	---	---	---	---	---	---	---	34.95	24.49	---	10.46	---	---
S-14R	04/21/2014	3,700	190	160	99	290	---	---	---	---	---	---	---	---	34.95	24.99	---	9.96	---	---
S-15	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	35.34	23.00	---	12.34	---	---
S-15	02/08/2008	55,000 f	6,700	13,000	1,100	9,800	---	<10	---	---	---	---	<5.0	<10	35.34	22.71	---	12.63	---	---
S-15	05/08/2008	53,000 f	6,300	13,000	1,500	7,500	---	<200	---	---	---	---	<100	<200	35.34	22.91	---	12.43	---	---
S-15	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-16	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	36.08	23.88	---	12.20	---	---
S-16	02/08/2008	6,000 f	670	730	88	1,290	---	<5.0	---	---	---	---	<2.5	<5.0	36.08	23.52	---	12.56	---	---
S-16	05/08/2008	3,200 f	670	320	18	580	---	<10	---	---	---	---	<5.0	<10	36.08	23.69	---	12.39	---	---
S-16	Well destroyed		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-17	06/19/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.49	23.30	---	12.19	---	---
S-17	06/25/2008	21,000	1,300	1,300	160	2,850	---	<5.0	---	---	---	---	<2.5	<5.0	35.49	23.33	---	12.16	---	---
S-17	08/14/2008	14,000	1,700	1,700	310	2,250	---	<10	---	---	---	---	<5.0	<10	35.49	23.50	---	11.99	---	---
S-17	11/11/2008	7,200 i	1,600 i	820 i	140 i	760 i	---	<5.0 i	---	---	---	---	<2.5 i	<5.0 i	35.49	23.70	---	11.79	---	---
S-17	11/11/2008	32,000 j	2,500 j	3,100 j	820 j	4,000 j	---	<25 j	---	---	---	---	<12 j	<25 j	35.49	23.70	---	11.79	---	---
S-17	01/05/2009	15,000	790	700	150	1,200	---	<10	---	---	---	---	<5.0	<10	35.50	23.66	---	11.84	---	---
S-17	01/15/2009	2,300	220	170	19	300	---	---	---	---	---	---	---	---	35.50	23.37	---	12.13	---	---
S-17	02/12/2009	4,700	750	200	37	23	---	---	---	---	---	---	---	---	35.50	23.66	---	11.84	---	---
S-17	03/12/2009	3,300	640	370	81	290	---	---	---	---	---	---	---	---	35.50	23.24	---	12.26	---	---
S-17	04/09/2009	1,300	200	110	37	100	---	---	---	---	---	---	---	---	35.50	23.20	---	12.30	0.69	429
S-17	05/18/2009	630	97	44	17	25	---	---	---	---	---	---	---	---	35.50	23.21	---	12.29	5.93	442
S-17	07/23/2009	3,900	480	410	160	480	---	---	---	---	---	---	---	---	35.50	23.70	---	11.80	0.15	34
S-17	10/01/2009	1,300	32	24	3.1	72	---	---	---	---	---	---	---	---	35.50	23.64	---	11.86	1.30	204
S-17	11/09/2009	5,300	260	330	56	500	---	---	---	---	---	---	---	---	35.50	23.52	---	11.98	0.18	---
S-17	12/01/2009	3,300	190	210	52	240	---	---	---	---	---	---	---	---	35.50	23.41	---	12.09	0.95	450
S-17	01/28/2010	3,500	260	250	85	310	---	---	---	---	---	---	---	---	35.50	23.21	---	12.29	1.93	---
S-17	05/20/2010	370	18	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.50	23.65	---	11.85	1.31	544
S-17	08/31/2010	1,900	120	110	52	260	---	---	---	---	---	---	---	---	35.50	23.92	---	11.58	1.32	370
S-17	12/29/2010	2,600	200	150	91	280	---	---	---	---	---	---	---	---	35.50	23.60	---	11.90	1.37	131
S-17	02/01/2011	950	100	72	47	130	---	---	---	---	---	---	---	---	35.50	22.91	---	12.59	1.40	136
S-17	04/25/2011	2,000	150	71	77	210	---	---	---	---	---	---	---	---	35.50	21.44	---	14.06	0.23	82
S-17	07/28/2011	3,400	270	98	170	370	---	---	---	---	---	---	---	---	35.50	21.06	---	14.44	1.45	70
S-17	10/28/2011	270	58	5.3	23	28	---	---	---	---	---	---	---	---	35.50	21.51	---	13.99	1.19	221
S-17	05/07/2012	980	110	3.6	66	100	---	---	---	---	---	---	---	---	35.50	21.50	---	14.00	0.62	84
S-17	05/02/2013	570	62	20	19	49	---	---	---	---	---	---	---	---	35.50	25.49	---	10.01	---	---
S-17	04/21/2014	2,500	140	120	98	310	---	---	---	---	---	---	---	---	35.50	25.91	---	9.59	---	---
S-18	06/19/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.04	22.94	---	12.10	---	---
S-18	06/25/2008	58,000	2,200	5,600	880	10,200	---	<10	---	---	---	---	<5.0	<10	35.04	22.92	---	12.12	---	---

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-18	08/14/2008	25,000	2,500	4,500	860	5,800	---	<50	---	---	---	---	<25	<50	35.04	23.08	---	11.96	---	---
S-18	11/11/2008	24,000 i	2,400 i	3,300 i	820 i	3,800 i	---	<25 i	---	---	---	---	<12 i	<25 i	35.04	23.30	---	11.74	---	---
S-18	11/11/2008	43,000 j	3,900 j	5,500 j	1,300 j	6,500 j	---	<50 j	---	---	---	---	<25 j	<50 j	35.04	23.30	---	11.74	---	---
S-18	01/05/2009	20,000	830	1,000	290	1,400	---	<50	---	---	---	---	<25	<50	35.03	23.16	---	11.87	---	---
S-18	01/15/2009	8,200	690	790	150	1,230	---	---	---	---	---	---	---	---	35.03	22.97	---	12.06	---	---
S-18	02/12/2009	13,000	1,200	1,400	330	940	---	---	---	---	---	---	---	---	35.03	23.29	---	11.74	---	---
S-18	03/12/2009	52,000	5,300	9,000	1,600	10,000	---	---	---	---	---	---	---	---	35.03	22.85	---	12.18	---	---
S-18	04/09/2009	Insufficient water		---	---	---	---	---	---	---	---	---	---	---	35.03	22.79	---	12.24	---	---
S-18	05/18/2009	6,700	320	1,100	200	1,000	---	---	---	---	---	---	---	---	35.03	22.81	---	12.22	6.51	377
S-18	07/23/2009	8,900	500	890	290	1,600	---	---	---	---	---	---	---	---	35.03	22.91	---	12.12	0.20	---
S-18	10/01/2009	1,800	49	5.5	5.3	<5.0	---	---	---	---	---	---	---	---	35.03	23.65	---	11.38	6.25	557
S-18	11/09/2009	1,100	79	8.9	5.3	1.1	---	---	---	---	---	---	---	---	35.03	23.19	---	11.84	0.26	---
S-18	12/01/2009	570	50	7.5	2.7	1.2	---	---	---	---	---	---	---	---	35.03	23.12	---	11.91	4.07	460
S-18	01/28/2010	1,200	170	91	18	68	---	---	---	---	---	---	---	---	35.03	22.86	---	12.17	1.90	---
S-18	05/20/2010	3,900	500	690	79	240	---	---	---	---	---	---	---	---	35.03	23.12	---	11.91	1.77	169
S-18	06/22/2010	13,000	1,700	2,800	200	1,000	---	---	---	---	---	---	---	---	35.03	23.10	---	11.93	0.58	499
S-18	08/31/2010	6,600	970	1,100	230	1,000	---	---	---	---	---	---	---	---	35.03	23.55	---	11.48	1.23	258
S-18	12/29/2010	8,500	1,000	750	410	1,800	---	---	---	---	---	---	---	---	35.03	23.23	---	11.80	0.79	70
S-18	02/01/2011	2,100	210	190	87	180	---	---	---	---	---	---	---	---	35.03	22.52	---	12.51	1.13	220
S-18	04/25/2011	13,000	2,100	2,000	470	2,300	---	---	---	---	---	---	---	---	35.03	21.00	---	14.03	0.52	85
S-18	07/28/2011	8,200	1,200	1,000	290	1,200	---	---	---	---	---	---	---	---	35.03	20.56	---	14.47	1.57	27
S-18	10/28/2011	9,000	1,200	480	430	1,900	---	---	---	---	---	---	---	---	35.03	21.11	---	13.92	1.45	147
S-18	05/07/2012	4,700	710	310	310	870	---	---	---	---	---	---	---	---	35.03	21.20	---	13.83	0.55	-68
S-18	05/02/2013	5,000	720	280	220	480	---	---	---	---	---	---	---	---	35.03	24.95	---	10.08	---	---
S-18	04/21/2014	1,400	240	190	70	230	---	---	---	---	---	---	---	---	35.03	25.61	---	9.42	---	---
S-19	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.78	22.73	---	12.05	---	---
S-19	11/11/2008	7,100 i	500 i	600 i	25 i	1,010 i	---	---	---	---	---	---	---	---	34.78	22.87	---	11.91	1.0	62
S-19	11/11/2008	2,300 j	110 j	160 j	43 j	280 j	---	---	---	---	---	---	---	---	34.78	22.87	---	11.91	1.3	71
S-19	12/18/2008	2,900	190	300	41	420	---	---	---	---	---	---	---	---	34.57	22.60	---	11.97	---	---
S-19	01/05/2009	3,400	230	250	50	380	---	---	---	---	---	---	---	---	34.57	22.56	---	12.01	---	---
S-19	01/15/2009	3,100	340	540	70	440	---	---	---	---	---	---	---	---	34.57	22.31	---	12.26	---	---
S-19	02/12/2009	1,300	130	180	37	190	---	---	---	---	---	---	---	---	34.57	22.58	---	11.99	---	---
S-19	03/12/2009	880	110	150	30	160	---	---	---	---	---	---	---	---	34.57	22.44	---	12.13	---	---
S-19	04/09/2009	1,300	140	190	32	190	---	---	---	---	---	---	---	---	34.57	22.02	---	12.55	0.57	106
S-19	05/18/2009	780	69	87	17	100	---	---	---	---	---	---	---	---	34.57	22.04	---	12.53	6.47	75
S-19	07/23/2009	400	77	59	15	38	---	---	---	---	---	---	---	---	34.57	22.40	---	12.17	0.06	31
S-19	10/01/2009	1,500	160	170	33	120	---	---	---	---	---	---	---	---	34.57	22.66	---	11.91	0.52	301
S-19	11/09/2009	1,600	140	160	41	160	---	---	---	---	---	---	---	---	34.57	22.44	---	12.13	0.26	---
S-19	12/01/2009	1,600	150	180	45	170	---	---	---	---	---	---	---	---	34.57	22.62	---	11.95	0.79	161
S-19	01/28/2010	2,600	230	280	71	300	---	---	---	---	---	---	---	---	34.57	22.29	---	12.28	1.71	---
S-19	05/20/2010	850	110	55	11	4.6	---	---	---	---	---	---	---	---	34.57	22.49	---	12.08	1.77	118

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-19	08/31/2010	580	79	92	22	50	---	---	---	---	---	---	---	---	34.57	22.86	---	11.71	1.02	297
S-19	12/29/2010	920	120	120	54	150	---	---	---	---	---	---	---	---	34.57	22.48	---	12.09	1.12	150
S-19	02/01/2011	1,800	210	270	100	320	---	---	---	---	---	---	---	---	34.57	21.78	---	12.79	1.08	21
S-19	04/25/2011	2,100	290	360	140	470	---	---	---	---	---	---	---	---	34.57	20.42	---	14.15	0.25	115
S-19	07/28/2011	2,400	240	380	140	450	---	---	---	---	---	---	---	---	34.57	20.16	---	14.41	1.17	80
S-19	10/28/2011	3,600	210	420	190	750	---	---	---	---	---	---	---	---	34.57	20.41	---	14.16	1.73	160
S-19	05/07/2012	3,400	220	480	210	880	---	---	---	---	---	---	---	---	34.57	20.51	---	14.06	2.54	244
S-19	12/11/2012	1,700	110	240	100	440	---	---	---	---	---	---	---	---	34.57	22.05	---	12.52	0.89/2.21	81/52
S-19	05/02/2013	1,500	88	89	55	160	---	---	---	---	---	---	---	---	34.57	24.15	---	10.42	---	---
S-19	11/07/2013	170,000	1,200	7,300	3,800	22,000	---	---	---	---	---	---	---	---	34.57	k	k	k	---	---
S-19	04/21/2014	32,000	580	1,400	940	4,300	---	---	---	---	---	---	---	---	34.57	24.95	---	9.62	---	---
S-19	**07/31/2014**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**34.57**	**24.22**	**0.20**	**10.51**	**---**	**---**
S-19	**11/21/2014**	**25,000**	**420**	**880**	**550**	**2,500**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**34.57**	**24.40**	**---**	**10.17**	**---**	**---**
S-20	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	34.50	22.80	---	11.70	---	---
S-20	11/11/2008	13,000 i	1,300 i	1,600 i	80 i	1,920 i	---	---	---	---	---	---	---	---	34.50	22.90	---	11.60	0.8	-39
S-20	11/11/2008	16,000 j	1,100 j	1,800 j	220 j	1,930 j	---	---	---	---	---	---	---	---	34.50	22.90	---	11.60	2.6	-64
S-20	01/05/2009	17,000	1,500	1,700	320	1,900	---	---	---	---	---	---	---	---	34.50	22.78	---	11.72	---	---
S-20	02/12/2009	11,000	1,300	1,400	230	1,600	---	---	---	---	---	---	---	---	34.50	22.80	---	11.70	2.6	-64
S-20	03/12/2009	19,000	2,700	3,200	390	3,100	---	---	---	---	---	---	---	---	34.50	22.40	---	12.10	---	---
S-20	04/09/2009	8,200	80	480	220	490	---	---	---	---	---	---	---	---	34.50	22.90	---	11.60	13.80	578
S-20	05/18/2009	21,000	970	1,500	630	4,800	---	---	---	---	---	---	---	---	34.50	22.42	---	12.08	4.58	197
S-20	07/23/2009	41,000	4,900	2,900	990	7,300	---	---	---	---	---	---	---	---	34.50	22.73	---	11.77	0.27	419
S-20	10/01/2009	1,800	140	39	33	39	---	---	---	---	---	---	---	---	34.50	23.00	---	11.50	0.85	533
S-20	11/09/2009	21,000	1,600	740	300	2,500	---	---	---	---	---	---	---	---	34.50	22.72	---	11.78	1.67	---
S-20	12/01/2009	12,000	1,100	450	160	1,200	---	---	---	---	---	---	---	---	34.50	22.61	---	11.89	1.38	347
S-20	01/28/2010	20,000	2,000	1,600	260	2,000	---	---	---	---	---	---	---	---	34.50	22.51	---	11.99	4.40	---
S-20	05/20/2010	4,300	1,100	110	26	61	---	---	---	---	---	---	---	---	34.50	22.90	---	11.60	8.96	555
S-20	06/22/2010	7,100	1,300	550	120	550	---	---	---	---	---	---	---	---	34.50	23.19	---	11.31	11.64	637
S-20	08/31/2010	9,600	1,800	1,400	230	580	---	---	---	---	---	---	---	---	34.50	23.13	---	11.37	0.94	529
S-20	12/29/2010	19,000	2,000	3,100	860	3,200	---	---	---	---	---	---	---	---	34.50	22.72	---	11.78	0.92	193
S-20	02/01/2011	26,000	3,900	7,100	1,300	5,800	---	---	---	---	---	---	---	---	34.50	22.04	---	12.46	1.03	390
S-20	04/25/2011	41,000	6,600	11,000	2,000	9,800	---	---	---	---	---	---	---	---	34.50	20.60	---	13.90	0.43	156
S-20	07/28/2011	34,000	4,200	5,300	1,400	6,300	---	---	---	---	---	---	---	---	34.50	20.30	---	14.20	1.25	-15
S-20	10/28/2011	17,000	1,500	1,900	1,000	3,400	---	---	---	---	---	---	---	---	34.50	20.78	---	13.72	1.28	431
S-20	05/07/2012	9,900	760	1,200	790	2,000	---	---	---	---	---	---	---	---	34.50	20.54	---	13.96	1.92	-106
S-20	12/11/2012	9,700	630	1,000	720	1,500	---	---	---	---	---	---	---	---	34.50	22.29	---	12.21	0.82/1.67	-11/-43
S-20	05/02/2013	4,500	380	220	240	300	---	---	---	---	---	---	---	---	34.50	24.50	---	10.00	---	---
S-20	11/07/2013	4,000	420	290	60	330	---	---	---	---	---	---	---	---	34.50	25.24	---	9.26	---	---
S-20	04/21/2014	3,800	480	350	50	350	---	---	---	---	---	---	---	---	34.50	25.15	---	9.35	---	---
S-20	**11/21/2014**	**4,800**	**560**	**340**	**98**	**430**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**34.50**	**24.54**	**---**	**9.96**	**---**	**---**

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-21A	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.81	23.73	---	12.08	---	---
S-21A	11/11/2008	96,000 i	6,100 i	11,000 i	1,700 i	10,500 i	---	---	---	---	---	---	---	---	35.81	23.86	---	11.95	1.6	-42
S-21A	11/11/2008	87,000 j	6,300 j	13,000 j	1,700 j	10,300 j	---	---	---	---	---	---	---	---	35.81	23.86	---	11.95	1.8	-51
S-21A	12/18/2008	17,000	3,700	1,200	170	47	---	---	---	---	---	---	---	---	35.80	23.91	---	11.89	---	---
S-21A	01/05/2009	28,000	3,100	2,900	450	1,100	---	---	---	---	---	---	---	---	35.80	23.78	---	12.02	---	---
S-21A	01/15/2009	9,700	2,100	290	45	<25	---	---	---	---	---	---	---	---	35.80	23.53	---	12.27	---	---
S-21A	02/12/2009	19,000	3,100	2,500	330	500	---	---	---	---	---	---	---	---	35.80	23.83	---	11.97	---	---
S-21A	03/12/2009	31,000	2,600	3,800	810	3,700	---	---	---	---	---	---	---	---	35.80	23.35	---	12.45	---	---
S-21A	04/09/2009	7,800	700	750	130	<25	---	---	---	---	---	---	---	---	35.80	24.00	---	11.80	0.91	304
S-21A	05/18/2009	15,000	1,800	2,200	390	1,900	---	---	---	---	---	---	---	---	35.80	23.46	---	12.34	2.37	529
S-21A	07/23/2009	51,000	4,800	7,100	1,100	7,000	---	---	---	---	---	---	---	---	35.80	23.85	---	11.95	0.14	-3
S-21A	10/01/2009	18,000	2,300	2,200	310	2,400	---	---	---	---	---	---	---	---	35.80	24.06	---	11.74	7.92	575
S-21A	11/09/2009	41,000	3,500	5,800	600	4,800	---	---	---	---	---	---	---	---	35.80	23.73	---	12.07	0.34	---
S-21A	12/01/2009	43,000	3,100	6,700	640	4,900	---	---	---	---	---	---	---	---	35.80	23.60	---	12.20	2.55	350
S-21A	01/28/2010	65,000	3,900	9,900	970	6,600	---	---	---	---	---	---	---	---	35.80	23.54	---	12.26	1.43	---
S-21A	05/20/2010	6,000	670	760	110	150	---	---	---	---	---	---	---	---	35.80	23.92	---	11.88	1.37	541
S-21A	06/22/2010	16,000	690	2,000	370	2,300	---	---	---	---	---	---	---	---	35.80	23.87	---	11.93	2.33	439
S-21A	08/31/2010	5,000	230	420	190	990	---	---	---	---	---	---	---	---	35.80	24.13	---	11.67	0.73	392
S-21A	12/29/2010	5,100	500	430	230	810	---	---	---	---	---	---	---	---	35.80	23.84	---	11.96	0.95	464
S-21A	02/01/2011	9,200	840	750	370	1,300	---	---	---	---	---	---	---	---	35.80	23.18	---	12.62	0.84	110
S-21A	04/25/2011	22,000	3,800	4,000	960	4,800	---	---	---	---	---	---	---	---	35.80	21.71	---	14.09	0.36	336
S-21A	07/28/2011	27,000	3,400	3,600	1,000	4,300	---	---	---	---	---	---	---	---	35.80	21.48	---	14.32	1.02	223
S-21A	10/28/2011	20,000	2,400	3,000	840	3,600	---	---	---	---	---	---	---	---	35.80	21.65	---	14.15	2.06	213
S-21A	05/07/2012	12,000	2,200	1,900	510	2,100	---	---	---	---	---	---	---	---	35.80	21.90	---	13.90	1.01	107
S-21A	12/11/2012	13,000	3,300	2,200	610	1,300	---	---	---	---	---	---	---	---	35.80	22.60	---	13.20	1.35/1.49	82/80
S-21A	05/02/2013	6,800	1,000	470	270	480	---	---	---	---	---	---	---	---	35.80	25.48	---	10.32	---	---
S-21A	11/07/2013	32,000	4,100	3,000	940	2,900	---	---	---	---	---	---	---	---	35.80	26.28	---	9.52	---	---
S-21A	04/21/2014	Insufficient water		---	---	---	---	---	---	---	---	---	---	---	35.80	26.29	---	9.51	---	---
S-21A	**11/21/2014**	**37,000**	**6,000**	**3,900**	**1,100**	**3,500**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.80**	**25.81**	**---**	**9.99**	**---**	**---**
S-21B	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.79	23.68	---	12.11	---	---
S-21B	11/11/2008	3,200 i	49 i	300 i	93 i	510 i	---	---	---	---	---	---	---	---	35.79	23.80	---	11.99	0.4	-108
S-21B	11/11/2008	7,500 j	67 j	470 j	150 j	960 j	---	---	---	---	---	---	---	---	35.79	23.80	---	11.99	5.6	-135
S-21B	12/18/2008	5,300	36	310	120	770	---	---	---	---	---	---	---	---	35.76	23.72	---	12.04	---	---
S-21B	01/05/2009	5,400	35	200	93	600	---	---	---	---	---	---	---	---	35.76	23.70	---	12.06	---	---
S-21B	01/15/2009	3,300	30	150	78	470	---	---	---	---	---	---	---	---	35.76	23.43	---	12.33	---	---
S-21B	02/12/2009	2,800	12	100	69	450	---	---	---	---	---	---	---	---	35.76	23.81	---	11.95	---	---
S-21B	03/12/2009	2,300	9.4	72	50	320	---	---	---	---	---	---	---	---	35.76	23.32	---	12.44	---	---
S-21B	04/09/2009	890	14	55	19	140	---	---	---	---	---	---	---	---	35.76	23.20	---	12.56	0.56	453
S-21B	05/18/2009	390	6.8	14	12	27	---	---	---	---	---	---	---	---	35.76	23.24	---	12.52	1.62	458
S-21B	06/17/2009	---	---	---	---	---	---	---	---	---	---	---	---	---	35.76	23.40	---	12.36	---	---
S-21B	07/23/2009	920	5.0	17	28	120	---	---	---	---	---	---	---	---	35.76	23.52	---	12.24	0.26	37

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-21B	10/01/2009	820	2.6	10	17	89	---	---	---	---	---	---	---	---	35.76	23.95	---	11.81	0.96	353
S-21B	01/28/2010	810	11	6.2	10	51	---	---	---	---	---	---	---	---	35.76	23.30	---	12.46	---	---
S-21B	05/20/2010	120	1.4	2.6	2.0	2.7	---	---	---	---	---	---	---	---	35.76	23.46	---	12.30	1.63	206
S-21B	08/31/2010	500	0.81	3.4	6.9	32	---	---	---	---	---	---	---	---	35.76	24.04	---	11.72	0.72	45
S-21B	12/29/2010	310	<0.50	1.9	4.5	21	---	---	---	---	---	---	---	---	35.76	23.59	---	12.17	0.40	191
S-21B	02/01/2011	270	<0.50	2.0	4.0	16	---	---	---	---	---	---	---	---	35.76	23.08	---	12.68	0.51	10
S-21B	04/25/2011	250	<0.50	1.9	4.6	16	---	---	---	---	---	---	---	---	35.76	21.86	---	13.90	1.43	72
S-21B	07/28/2011	270	<0.50	0.84	3.0	11	---	---	---	---	---	---	---	---	35.76	21.32	---	14.44	2.86	127
S-21B	10/28/2011	220	<0.50	0.53	2.3	9.2	---	---	---	---	---	---	---	---	35.76	21.52	---	14.24	0.96	153
S-21B	05/07/2012	170	<0.50	0.62	1.5	7.6	---	---	---	---	---	---	---	---	35.76	22.04	---	13.72	0.75	100
S-21B	05/02/2013	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.76	25.59	---	10.17	---	---
S-21B	04/21/2014	52	1.7	2.4	0.80	4.7	---	---	---	---	---	---	---	---	35.76	26.14	---	9.62	---	---
S-22A	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.08	22.91	---	12.17	---	---
S-22A	11/11/2008	84,000 i	8,500 i	11,000 i	2,200 i	13,900 i	---	---	---	---	---	---	---	---	35.08	23.15	---	11.93	1.0	117
S-22A	11/11/2008	85,000 j	7,600 j	10,000 j	2,500 j	12,400 j	---	---	---	---	---	---	---	---	35.08	23.15	---	11.93	1.6	100
S-22A	12/18/2008	42,000	6,300	6,600	1,200	4,400	---	---	---	---	---	---	---	---	35.06	23.03	---	12.03	---	---
S-22A	01/05/2009	56,000	4,500	5,300	1,200	6,400	---	---	---	---	---	---	---	---	35.06	23.03	---	12.03	---	---
S-22A	01/15/2009	25,000	5,900	4,400	740	1,570	---	---	---	---	---	---	---	---	35.06	22.84	---	12.22	---	---
S-22A	02/12/2009	43,000	6,700	6,600	1,200	5,000	---	---	---	---	---	---	---	---	35.06	23.15	---	11.91	---	---
S-22A	03/12/2009	35,000	4,600	4,600	980	4,600	---	---	---	---	---	---	---	---	35.06	22.65	---	12.41	---	---
S-22A	04/09/2009	22,000	120	1,900	680	3,400	---	---	---	---	---	---	---	---	35.06	22.88	---	12.18	8.41	556
S-22A	05/18/2009	25,000	4,700	1,300	590	3,700	---	---	---	---	---	---	---	---	35.06	22.83	---	12.23	2.46	539
S-22A	07/23/2009	40,000	5,100	4,800	700	4,900	---	---	---	---	---	---	---	---	35.06	23.01	---	12.05	0.18	167
S-22A	10/01/2009	12,000	1,400	600	88	500	---	---	---	---	---	---	---	---	35.06	23.06	---	12.00	4.08	523
S-22A	11/09/2009	18,000	2,700	2,000	190	1,300	---	---	---	---	---	---	---	---	35.06	23.14	---	11.92	1.74	---
S-22A	12/01/2009	24,000	2,300	2,300	270	2,000	---	---	---	---	---	---	---	---	35.06	23.10	---	11.96	1.06	393
S-22A	01/28/2010	44,000	3,600	5,000	620	4,300	---	---	---	---	---	---	---	---	35.06	22.92	---	12.14	1.40	---
S-22A	05/20/2010	3,100	38	<10	<10	<10	---	---	---	---	---	---	---	---	35.06	23.22	---	11.84	0.48	423
S-22A	06/22/2010	2,400	110	15	4.3	6.6	---	---	---	---	---	---	---	---	35.06	23.51	---	11.55	6.10	542
S-22A	08/31/2010	5,000	690	600	78	350	---	---	---	---	---	---	---	---	35.06	23.52	---	11.54	1.03	553
S-22A	12/29/2010	13,000	1,300	1,800	490	2,100	---	---	---	---	---	---	---	---	35.06	23.17	---	11.89	0.70	476
S-22A	02/01/2011	13,000	1,800	3,100	640	2,800	---	---	---	---	---	---	---	---	35.06	22.45	---	12.61	0.89	453
S-22A	04/25/2011	23,000	2,600	5,500	1,200	6,200	---	---	---	---	---	---	---	---	35.06	21.37	---	13.69	0.40	506
S-22A	07/28/2011	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	35.06	---	---	---	---	---
S-22A	10/28/2011	31,000	1,800	4,700	1,600	8,100	---	---	---	---	---	---	---	---	35.06	20.98	---	14.08	1.33	342
S-22A	05/07/2012	40,000	2,000	7,200	2,000	12,000	---	---	---	---	---	---	---	---	35.06	20.96	---	14.10	2.50	230
S-22A	12/11/2012	54,000	1,800	8,900	2,400	14,000	---	---	---	---	---	---	---	---	35.06	23.42	---	11.64	0.99/1.96	-14/-21
S-22A	05/02/2013	53,000	1,800	6,800	2,200	11,000	---	---	---	---	---	---	---	---	35.06	24.71	---	10.35	---	---
S-22A	11/07/2013	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	35.06	---	---	---	---	---
S-22A	04/21/2014	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	35.06	---	---	---	---	---
S-22A	**11/21/2014**	**Well inaccessible**		**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**35.06**	**---**	**---**	**---**	**---**	**---**

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-22B	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.15	23.06	---	12.09	---	---
S-22B	11/11/2008	<50 i	<0.50 i	<1.0 i	<1.0 i	1.2 i	---	---	---	---	---	---	---	---	35.15	23.20	---	11.95	0.9	92
S-22B	11/11/2008	360 j	3.3 j	12 j	5.8 j	38 j	---	---	---	---	---	---	---	---	35.15	23.20	---	11.95	1.6	90
S-22B	12/18/2008	150	2.9	6.1	2.9	17.5	---	---	---	---	---	---	---	---	35.24	23.26	---	11.98	---	---
S-22B	01/05/2009	110	1.9	5.0	2.6	11	---	---	---	---	---	---	---	---	35.24	28.12	---	7.12	---	---
S-22B	01/15/2009	59	1.3	1.9	1.6	<1.0	---	---	---	---	---	---	---	---	35.24	22.90	---	12.34	---	---
S-22B	02/12/2009	290	11	6.8	7.9	19	---	---	---	---	---	---	---	---	35.24	23.02	---	12.22	---	---
S-22B	03/12/2009	390	4.4	4.6	3.8	12	---	---	---	---	---	---	---	---	35.24	22.86	---	12.38	---	---
S-22B	04/09/2009	280	5.3	2.5	4.0	6.8	---	---	---	---	---	---	---	---	35.24	22.62	---	12.62	2.24	164
S-22B	05/18/2009	170	3.7	2.9	2.4	8.6	---	---	---	---	---	---	---	---	35.24	22.62	---	12.62	1.42	-171
S-22B	07/23/2009	160	8.9	5.7	3.8	12	---	---	---	---	---	---	---	---	35.24	22.65	---	12.59	0.15	28
S-22B	10/01/2009	300	2.4	1.0	1.2	<1.0	---	---	---	---	---	---	---	---	35.24	23.18	---	12.06	2.62	173
S-22B	01/28/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.24	22.73	---	12.51	---	---
S-22B	05/20/2010	230	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.24	22.88	---	12.36	6.14	584
S-22B	08/31/2010	<50	0.57	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.24	23.51	---	11.73	0.92	377
S-22B	12/29/2010	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.24	23.04	---	12.20	1.07	391
S-22B	02/01/2011	<50	0.55	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.24	22.70	---	12.54	1.07	-3
S-22B	04/25/2011	<50	<0.50	0.62	<0.50	1.1	---	---	---	---	---	---	---	---	35.24	21.38	---	13.86	1.37	416
S-22B	07/28/2011	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	35.24	---	---	---	---	---
S-22B	10/28/2011	<50	<0.50	<1.0	<1.0	<1.0	---	---	---	---	---	---	---	---	35.24	20.62	---	14.62	4.83	-12
S-22B	05/07/2012	<50	1.4	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.24	21.08	---	14.16	2.84	127
S-22B	05/02/2013	<50	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	35.24	24.68	---	10.56	---	---
S-22B	04/21/2014	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	35.24	---	---	---	---	---
S-23	11/07/2008	---	---	---	---	---	---	---	---	---	---	---	---	---	35.77	23.28	---	12.49	---	---
S-23	11/11/2008	8,800 i	640 i	610 i	82 i	1,260 i	---	---	---	---	---	---	---	---	35.77	23.58	---	12.19	---	---
S-23	11/11/2008	6,400 j	520 j	640 j	34 j	760 j	---	---	---	---	---	---	---	---	35.77	23.58	---	12.19	---	---
S-23	01/05/2009	830	63	98	14	58	---	---	---	---	---	---	---	---	35.75	23.51	---	12.24	---	---
S-23	02/12/2009	3,400	160	320	55	430	---	---	---	---	---	---	---	---	35.75	23.62	---	12.13	---	---
S-23	03/12/2009	4,600	210	460	71	610	---	---	---	---	---	---	---	---	35.75	23.03	---	12.72	---	---
S-23	04/09/2009	2,700	180	95	33	<5.0	---	---	---	---	---	---	---	---	35.75	22.98	---	12.77	1.24	567
S-23	05/18/2009	3,000	350	440	79	300	---	---	---	---	---	---	---	---	35.75	23.18	---	12.57	19.77	503
S-23	07/23/2009	2,900	180	400	67	340	---	---	---	---	---	---	---	---	35.75	23.48	---	12.27	0.21	133
S-23	10/01/2009	790	40	24	5.4	<1.0	---	---	---	---	---	---	---	---	35.75	23.82	---	11.93	8.64	428
S-23	11/09/2009	3,200	84	330	90	400	---	---	---	---	---	---	---	---	35.75	23.51	---	12.24	0.28	---
S-23	12/01/2009	1,800	47	180	50	190	---	---	---	---	---	---	---	---	35.75	23.31	---	12.44	2.49	472
S-23	01/28/2010	3,000	100	450	110	650	---	---	---	---	---	---	---	---	35.75	23.25	---	12.50	1.74	---
S-23	05/20/2010	900	8.2	<5.0	<5.0	<5.0	---	---	---	---	---	---	---	---	35.75	23.80	---	11.95	3.76	607
S-23	06/22/2010	640	11	22	9.0	11	---	---	---	---	---	---	---	---	35.75	24.40	---	11.35	12.96	572
S-23	08/31/2010	710	14	45	34	110	---	---	---	---	---	---	---	---	35.75	23.95	---	11.80	1.25	322
S-23	12/29/2010	1,300	45	82	56	240	---	---	---	---	---	---	---	---	35.75	23.61	---	12.14	1.39	313

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)
S-23	02/01/2011	1,300	51	110	72	270	---	---	---	---	---	---	---	---	35.75	22.92	---	12.83	1.30	107
S-23	04/25/2011	1,300	53	110	81	400	---	---	---	---	---	---	---	---	35.75	21.62	---	14.13	0.96	321
S-23	07/28/2011	1,400	43	79	74	320	---	---	---	---	---	---	---	---	35.75	21.28	---	14.47	0.92	209
S-23	10/28/2011	1,600	43	83	92	370	---	---	---	---	---	---	---	---	35.75	21.50	---	14.25	1.82	161
S-23	05/07/2012	870	50	40	66	220	---	---	---	---	---	---	---	---	35.75	21.59	---	14.16	2.20	254
S-23	05/02/2013	540	24	15	5.6	25	---	---	---	---	---	---	---	---	35.75	25.04	---	10.71	---	---
S-23	04/21/2014	1,700	110	47	8.4	95	---	---	---	---	---	---	---	---	35.75	25.67	---	10.08	---	---
AS-1	12/17/2007	---	---	---	---	---	---	---	---	---	---	---	---	---	35.33	22.91	---	12.42	---	---
AS-1	02/08/2008	130 f	1.1	3.4	<1.0	5.4	---	<1.0	---	---	---	---	<0.50	<1.0	35.33	22.62	---	12.71	---	---
AS-1	05/08/2008	<50 f	<0.50	<1.0	<1.0	<1.0	---	<1.0	---	---	---	---	<0.50	<1.0	35.33	27.78	---	7.55	---	---
OW-1	04/09/2009	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OW-1	05/18/2009	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to July 25, 2001, analyzed by EPA Method 8015 unless otherwise noted.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to July 25, 2001, analyzed by EPA Method 8020.
MTBE = Methyl tertiary-butyl ether analyzed by method 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
EDC = 1,2-Dichloroethane analyzed by EPA Method 8260B.
EDB = 1,2-Dibromoethane analyzed by EPA Method 8260B.
TOC = Top of casing elevation, in feet relative to mean sea level
SPH = Separate-phase hydrocarbon
GW = Groundwater
DO = Dissolved oxygen (pre-purge/post purge reading)
ORP = Oxygen redox potential (pre-purge/post purge reading)
µg/L = Micrograms per liter
ft = Feet
MSL = Mean sea level
mg/L = Milligrams per liter
mV = Millivolts
<x = Not detected at reporting limit x
--- = Not analyzed or available
(D) = Duplicate sample

1 = Included in xylenes analysis
2 = Analyzed outside of EPA recommended holding time
3 = Depth to water measured from TOC; elevation unknown.

TABLE 3

GROUNDWATER DATA
FORMER SHELL SERVICE STATION
461 8TH STREET, OAKLAND, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDC (µg/L)	EDB (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	SPH Thickness (ft)	GW Elevation (ft MSL)	DO (mg/L)	ORP (mV)

l = Grab sampled
= Casing broken; TOC unknown.
= Analyzed by EPA Method 8015B (M)
= The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
= Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
= Pre-purge sample
= Post-purge sample
= SPH present; well purged prior to gauging with interface probe
= Concentration reported is partially due to the presence of discrete peak of toluene.

When SPHs are present, groundwater elevation is adjusted using the relation: Corrected groundwater elevation = TOC - Depth to Water + (0.8 x Hydrocarbon Thickness).
Beginning July 18, 2002, well elevations measured from TOC
Site wells surveyed March 5, 2002 by Virgil Chavez Land Surveying
Site wells surveyed December 18, 2007 by Virgil Chavez Land Surveying
Wells S-14R and S-19 through S-23 surveyed on November 11, 2008 by Virgil Chavez Land Surveying
Well S-5 surveyed on November 11, 2008 by Virgil Chavez Land Surveying
Well S-5 surveyed on October 8, 2009 by Virgil Chavez Land Surveying

APPENDIX C

BORING LOGS,
FROM PES 2014 INVESTIGATION

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 headspace soil 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.

5Y 5/2 - Soil color according to Munsell Soil Color Charts (2009 Revised Edition)

feet MSL - feet above Mean Sea 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

PES Environmental, Inc.
Engineering & Environmental Services

Unified Soil Classification System Chart
461 8th Street
Oakland, CA

PLATE
B-0

PES Environmental, Inc.

Engineering & Environmental Services

LOG OF SOIL BORING PSB1

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				FILL
				BROWN SANDY GRAVELLY CLAY (CL) 10YR 3/3, dry, medium plasticity, fine-grained sand, gravel is angular to subrounded up to 20mm in diameter, (20% gravel, 20% sand, 60% fines)
				DARK BROWN SAND (SP) 7.5YR 3/2, moist, fine-grained sand, (0% gravel, 95% sand, 5% fines)
0.0		5		YELLOWISH BROWN SILTY SAND (SP) 10YR 5/6, moist, fine- to medium-grained sand, (0% gravel, 90% sand, 10% fines)
				REDDISH BROWN SANDY CLAY (CL) 5YR 4/4, moist, moderately tough, low plasticity, fine-grained sand, (0% gravel, 40% sand, 60% fines) Soil Sample ID: PSB1-8.0
0.0		10		BROWN SILTY SAND (SM) 7.5 YR 4/4, moist, fine-grained sand, (0% gravel, 80% sand, 20% fines)
				DARK GRAYISH BROWN SANDY CLAY (CL) 10YR 4/2, moist, stiff to very stiff, low plasticity, fine-grained sand, iron staining throughout, (0% gravel, 35% sand, 65% fines) Soil Sample ID: PSB1-15.0
0.0		15		BROWN SANDY CLAY (CL) 7.5YR 4/3, moist, stiff to very stiff, low plasticity, fine-grained sand, iron staining throughout, (0% gravel, 35% sand, 65% fines)
0.0		20		BROWN SAND (SP) 7.5YR 4/3, moist, medium dense to very dense, fine- to medium-grained sand, (0% gravel, 95% sand, 5% fines)
		25		NO RECOVERY Unable to recover sleeves for logging. Water encountered at 26.0 feet bgs.
		30		End boring at 30 feet bgs. Grab groundwater sample PSB1-W collected from boring. Boring backfilled with neat cement grout.

PROJECT	Signature Land Advisors	REVIEWED BY	DRAFT
LOCATION	459 8th Street, Oakland, CA	DIAMETER OF HOLE	2 inches
JOB NUMBER	935.038.01	TOTAL DEPTH OF HOLE	30 feet
LOGGED BY	GMC/AAV	DATE STARTED	6/25/14

PLATE

B-1

PES Environmental, Inc.

Engineering & Environmental Services

LOG OF SOIL BORING PSB2

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				FILL
				BROWN SILTY SAND (SM) 7.5YR 4/3, dry, loose, fine-grained sand, (0% gravel, 80% sand, 20% fines)
0.0		5		STRONG BROWN SAND WITH SILT (SM) 7.5YR 4/6, dry to moist, medium dense, fine-grained sand, some iron staining, (0% gravel, 85% sand, 15% fines)
0.0				STRONG BROWN SAND (SP) 7.5YR 4/6, moist, loose, fine-grained sand, (0% gravel, 95% sand, 5% fines) Soil Sample ID: PSB2-8.0
6.0		10		STRONG BROWN SAND (SP) 7.5YR 4/6, moist, dense, fine-grained sand, (0% gravel, 95% sand, 5% fines)
4.0		15		STRONG BROWN SANDY CLAY (CL) 7.5YR 4/6, moist, stiff, low plasticity, (0% gravel, 25% sand, 75% fines) Soil Sample ID: PSB2-15.0
				STRONG BROWN SAND (SP) 7.5YR 4/6, moist, dense, fine-grained sand, (0% gravel, 95% sand, 5% fines)
4.5		20		BROWN SAND (SP) 10YR 4/3, moist, medium dense, fine-grained sand, (0% gravel, 90% sand, 10% fines)
				DARK GREENISH GRAY SAND (SP) GLEY1 4/10Y, moist, loose, fine-grained sand, (0% gravel, 90% sand, 10% fines) Wet and a strong hydrocarbon odor at 23.0 feet bgs ▽
1.8		25		BROWN SAND (SP) 10YR 4/3, wet, loose, fine-grained sand, (0% gravel, 90% sand, 10% fines)
		30		End boring at 30 feet bgs. Grab groundwater sample PSB2-W collected from boring. Boring backfilled with neat cement grout.

PROJECT	Signature Land Advisors	REVIEWED BY	DRAFT
LOCATION	459 8th Street, Oakland, CA	DIAMETER OF HOLE	2 inches
JOB NUMBER	935.038.01	TOTAL DEPTH OF HOLE	30 feet
LOGGED BY	GMC/AAV	DATE STARTED	6/25/14

PLATE

B-2

PES Environmental, Inc.

Engineering & Environmental Services

LOG OF SOIL BORING PSB3

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				FILL
				DARK BROWN SANDY SILT (ML) 7.5YR 3/2, dry, loose, very fine- to fine-grained sand, moderately sorted, (0% gravel, 20% sand, 80% fines) Yellowish brown (10YR 5/4) at 6.5 feet bgs
1.0		5		
				DARK YELLOWISH BROWN SILTY SAND (SM) 10YR 4/6, dry to moist, dense, fine-grained sand, iron staining - mottled appearance, (0% gravel, 80% sand, 20% fines)
9.0				Soil Sample ID: PSB3-8.0
		10		
				DARK YELLOWISH BROWN CLAYEY SAND (SC) 10YR 4/6, moist, medium dense, fine-grained sand, some iron staining, (0% gravel, 80% sand, 20% fines)
1.0		15		Soil Sample ID: PSB3-15.0
60.4		20		
				DARK GREENISH GRAY SAND (SP) GLEY 4/10Y, moist, fine- to medium-grained sand, (0% gravel, 95% sand, 5% fines) Water encountered at 25.0 feet bgs
		25		▽
1342				DARK GREENISH GRAY SAND (SP) GLEY 4/10Y, moist to wet, fine- to medium-grained sand, strong hydrocarbon odor, (0% gravel, 95% sand, 5% fines) Darker in color (GLEY1 3/N) from 26.5 to 27.0 bgs
				DARK YELLOWISH BROWN CLAYEY SAND (SC) 10YR 4/6, wet, medium dense, fine-grained sand, some iron staining, (0% gravel, 80% sand, 20% fines)
		30		End boring at 30 feet bgs. Grab groundwater sample PSB3-W collected from boring. Boring backfilled with neat cement grout.

PROJECT	Signature Land Advisors	REVIEWED BY	DRAFT
LOCATION	459 8th Street, Oakland, CA	DIAMETER OF HOLE	2 inches
JOB NUMBER	935.038.01	TOTAL DEPTH OF HOLE	30 feet
LOGGED BY	GMC/AAV	DATE STARTED	6/25/14

PLATE

B-3

PES Environmental, Inc.

Engineering & Environmental Services

LOG OF SOIL BORING PSB4

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				FILL
				Soil Sample ID: PSB4-5.0
0.0		5		
				DARK YELLOWISH BROWN CLAYEY SAND (SC) 10YR 4/6, dry, dense, fine-grained sand, iron staining - mottled appearance, (0% gravel, 75% sand, 25% fines)
				Moist at 10.0 feet bgs
1.8		10		Soil Sample ID: PSB4-10.0
				DARK YELLOWISH BROWN CLAYEY SAND (SC) 10YR 4/6, moist, dense, fine-grained sand, iron staining - mottled appearance, (0% gravel, 65% sand, 35% fines)
		15		
0.7				End boring at 16 feet bgs. Boring backfilled with neat cement grout.
		20		
		25		
		30		

PROJECT	Signature Land Advisors	REVIEWED BY	DRAFT
LOCATION	459 8th Street, Oakland, CA	DIAMETER OF HOLE	2 inches
JOB NUMBER	935.038.01	TOTAL DEPTH OF HOLE	16 feet
LOGGED BY	GMC/AAV	DATE STARTED	6/25/14

PLATE

B-4

PES Environmental, Inc.

Engineering & Environmental Services

LOG OF SOIL BORING PSB5

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				FILL
0.3		5		DARK YELLOWISH BROWN SAND WITH CLAY (SP) 10YR 4/4, moist, medium dense, fine-grained sand, some iron staining Soil Sample ID: PSB5-5.0
				DARK YELLOWISH BROWN CLAYEY SAND (SC) 10YR 4/4, moist, stiff, low plasticity, fine-grained sand, some iron staining, (0% gravel, 40% sand, 60% fines)
				DARK YELLOWISH BROWN SAND WITH CLAY (SP) 10YR 4/4, moist, medium dense, fine-grained sand, some iron staining Soil Sample ID: PSB5-10.0
1.2		10		
		15		DARK YELLOWISH BROWN CLAYEY SAND (SC) 10YR 4/4, moist, stiff, low plasticity, fine-grained sand, some iron staining, (0% gravel, 40% sand, 60% fines)
0.7				End boring at 16 feet bgs. Boring backfilled with neat cement grout.
		20		
		25		
		30		

PROJECT	Signature Land Advisors	REVIEWED BY	DRAFT
LOCATION	459 8th Street, Oakland, CA	DIAMETER OF HOLE	2 inches
JOB NUMBER	935.038.01	TOTAL DEPTH OF HOLE	16 feet
LOGGED BY	GMC/AAV	DATE STARTED	6/25/14

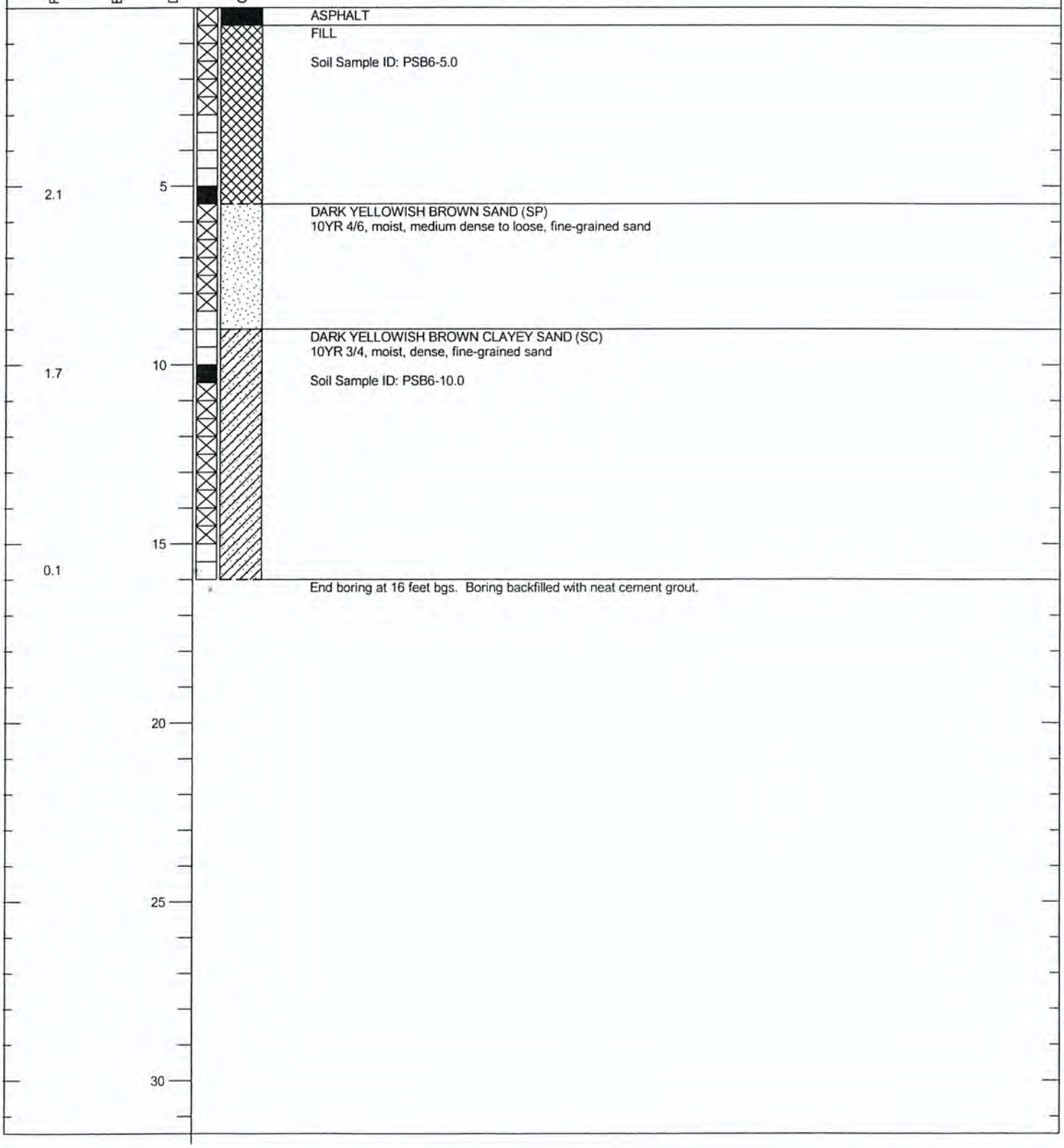
PLATE

B-5

PES Environmental, Inc.

Engineering & Environmental Services

LOG OF SOIL BORING PSB6



PROJECT	Signature Land Advisors	REVIEWED BY	DRAFT
LOCATION	459 8th Street, Oakland, CA	DIAMETER OF HOLE	2 inches
JOB NUMBER	935.038.01	TOTAL DEPTH OF HOLE	16 feet
LOGGED BY	GMC/AAV	DATE STARTED	6/25/14

PLATE

B-6

PES Environmental, Inc.

Engineering & Environmental Services

LOG OF SOIL BORING PSB7

PID (ppm)	Blows/6-in.	DEPTH (FT)	GRAPHICS	MATERIALS DESCRIPTION
				ASPHALT
				FILL
2.3		5		DARK YELLOWISH BROWN SAND (SP) 10YR 4/4, moist, medium dense to loose, fine-grained sand Soil Sample ID: PSB7-5.0
				DARK YELLOWISH BROWN CLAYEY SAND (SC) 10YR 4/4, moist, dense, fine-grained sand, light iron staining Soil Sample ID: PSB7-10.0
3.4		10		
		15		
4.1				End boring at 16 feet bgs. Boring backfilled with neat cement grout.
		20		
		25		
		30		

PROJECT	Signature Land Advisors	REVIEWED BY	DRAFT
LOCATION	459 8th Street, Oakland, CA	DIAMETER OF HOLE	2 inches
JOB NUMBER	935.038.01	TOTAL DEPTH OF HOLE	16 feet
LOGGED BY	GMC/AAV	DATE STARTED	6/25/14

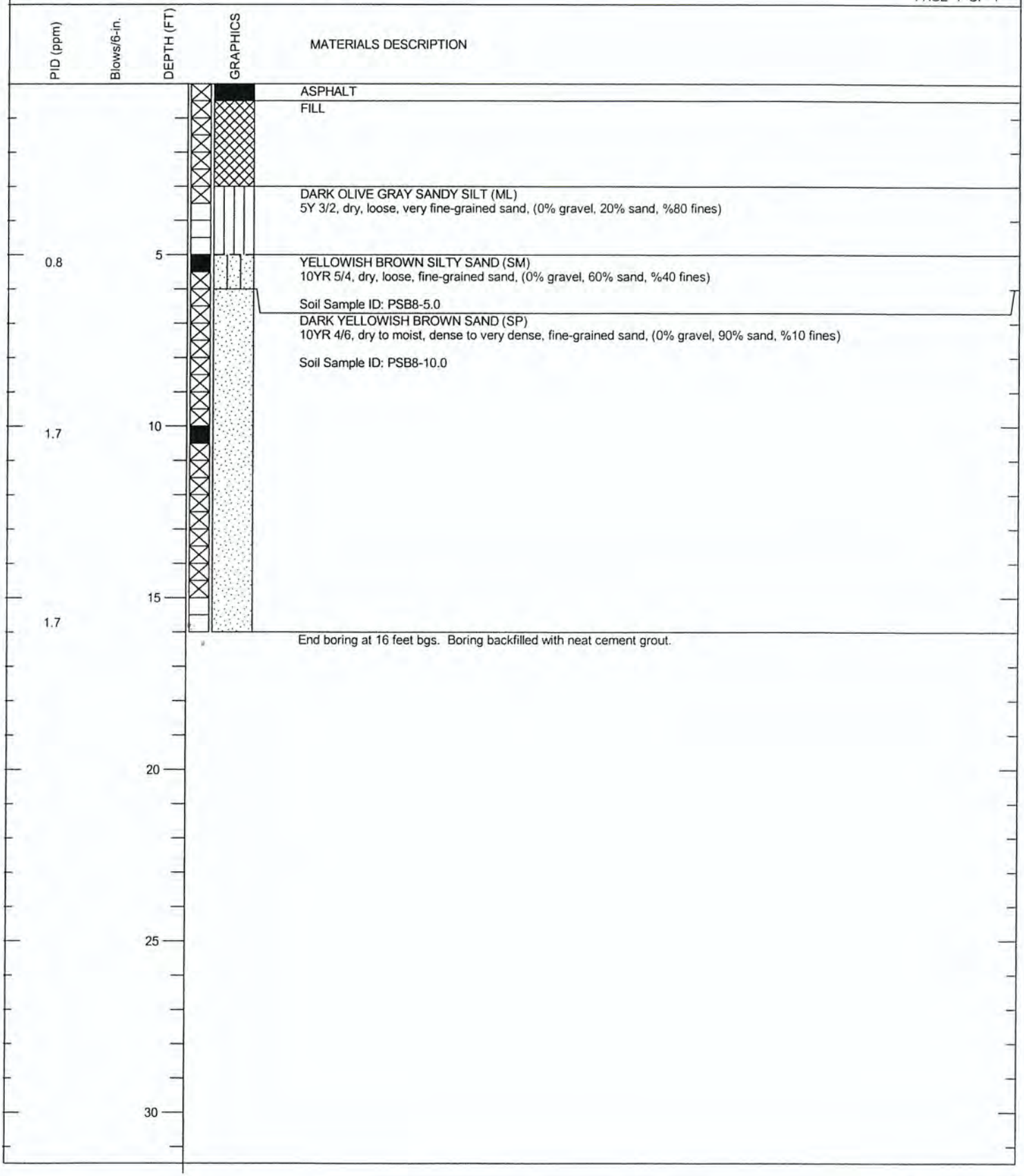
PLATE

B-7

PES Environmental, Inc.

Engineering & Environmental Services

LOG OF SOIL BORING PSB8



PROJECT	Signature Land Advisors	REVIEWED BY	DRAFT
LOCATION	459 8th Street, Oakland, CA	DIAMETER OF HOLE	2 inches
JOB NUMBER	935.038.01	TOTAL DEPTH OF HOLE	16 feet
LOGGED BY	GMC/AAV	DATE STARTED	6/25/14

PLATE

B-8

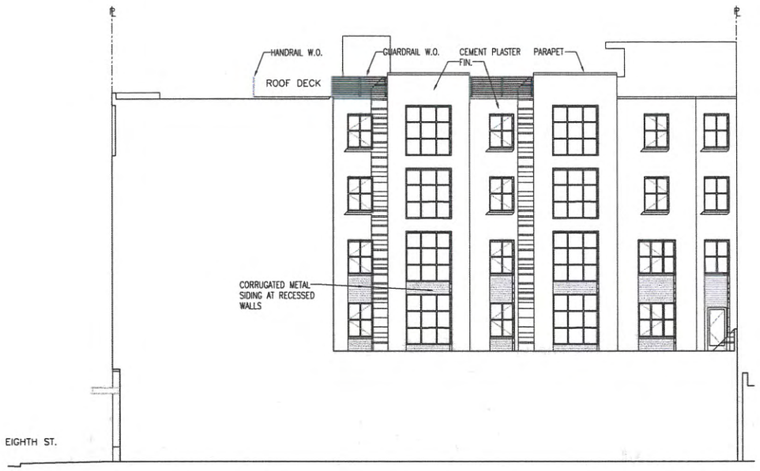
APPENDIX D

SITE REDEVELOPMENT DRAWINGS

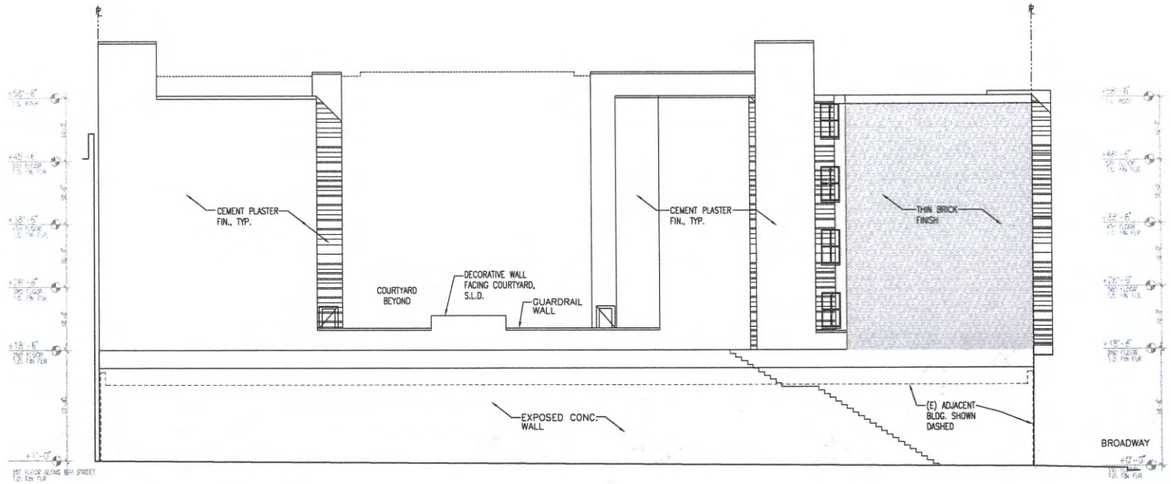
OLD OAKLAND - VIEW FROM CORNER OF BROADWAY & 8TH STREET

AF EVANS DEVELOPMENT, INC.

WRT | SOLOMON E.T.C.



WEST-FACING COURTYARD ELEVATION



SOUTH ELEVATION

BROADWAY ELEVATION

8TH STREET ELEVATION

OLD OAKLAND - ELEVATIONS

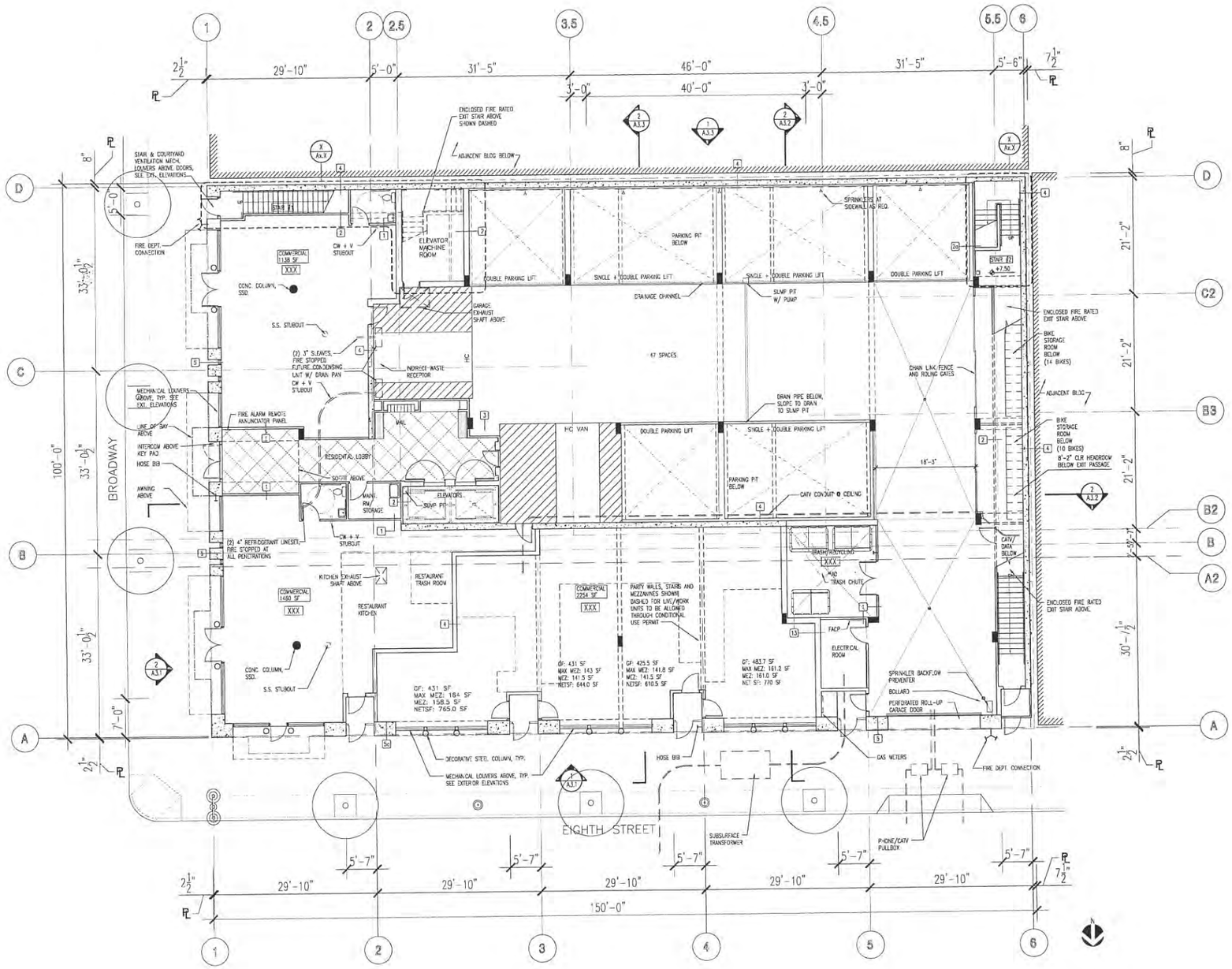
AF EVANS DEVELOPMENT, INC.

WRT | SOLOMON ★ E.T.C.

OLD OAKLAND HOUSING

A.F.EVANS DEVELOPMENT,INC.
WRT|SOLOMON E.T.C.

PLANNING SUBMISSION
AUGUST 4, 2006



LEGEND:

- 2-HR WALL
- 3-HR WALL
- CONCRETE WALL
- DROPPED SOFFIT

SOLOMON ★ E.T.C.

Architecture and Urban Design

1328 Mission Street, fourth floor
San Francisco, CA 94103
tel: 415 575-4722
fax: 415 436-9837
www.solomonetc-wrt.com

Wallace Roberts & Todd, Inc.

Consultants

Old Oakland Housing

721-741 Broadway @ 8th Street
Oakland, CA 94607

Project Sponsor

AF Evans Development, Inc.
1000 Broadway, Suite 300
Oakland, CA 94607

Key Plan

PLANNING SUBMISSION

Stamp

LICENSED ARCHITECT — CHARLES SOLOMON — No. C 8367 — REN. 12/99 — STATE OF CALIFORNIA

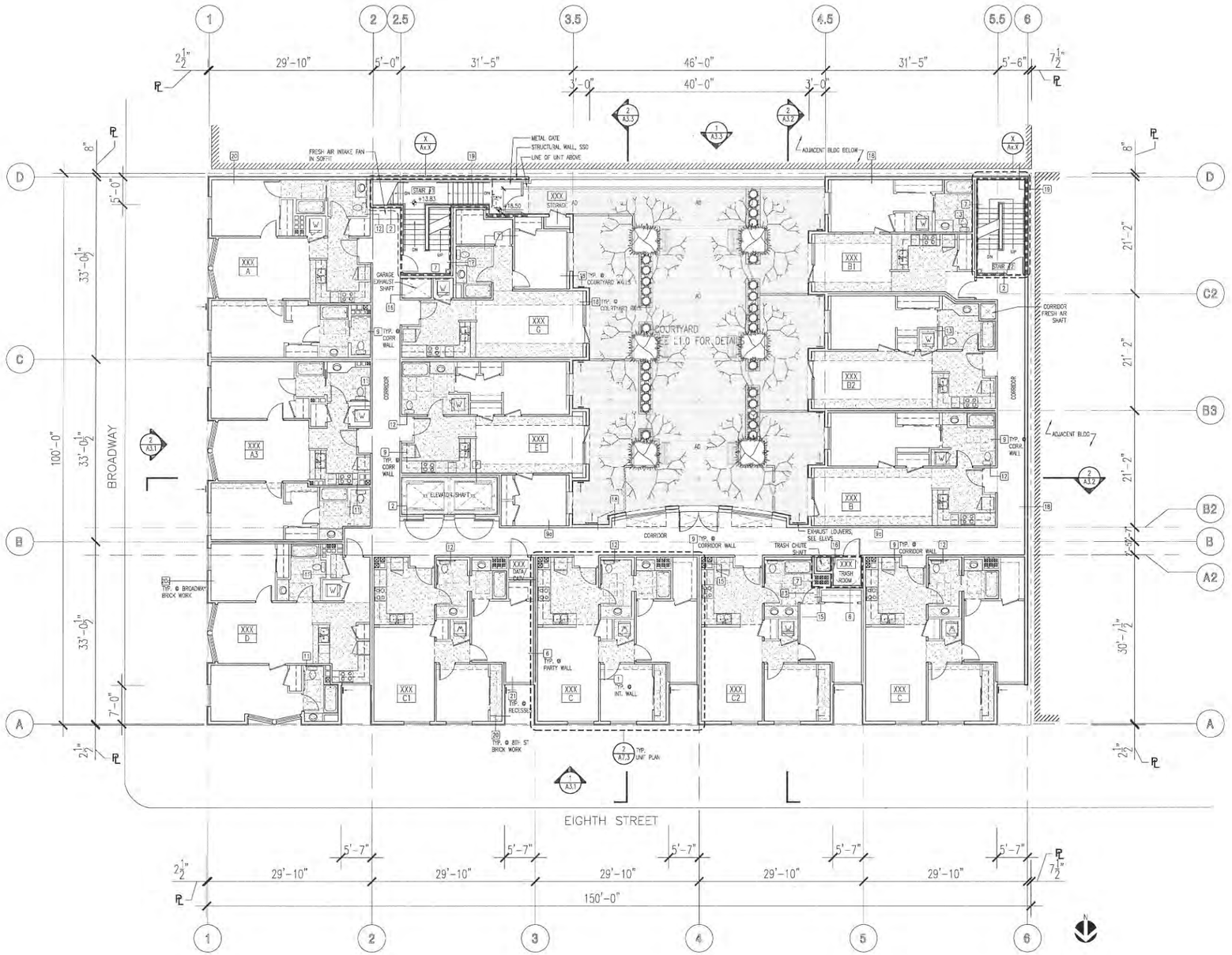
Job Number	4391-02/00
Drawn By	HS
Checked By	-
Date	August 4, 2006
Scale	1/8"=1'0"

Title

Ground Floor Plan

Sheet

A1.0



WRT | SOLOMON ★ E.T.C.

Architecture and Urban Design

1328 Mission Street, fourth floor
San Francisco, CA 94103
tel: 415 575-4722
fax: 415 436-9837
www.solomonetc-wrt.com

Wallace Roberts & Todd, Inc.

Consultants

Old Oakland Housing
721-741 Broadway @ 8th Street
Oakland, CA 94607

Project Sponsor

AF Evans Development, Inc.
1000 Broadway, Suite 300
Oakland, CA 94607

Key Plan

PLANNING SUBMISSION

Stamp

LICENSED ARCHITECT DANIEL SOLOMON No. C 6367 REN. 12/99 STATE OF CALIFORNIA

Job Number	4391-02/00
Drawn By	HS
Checked By	-
Date	August 4, 2006
Scale	1/8"=1'0"

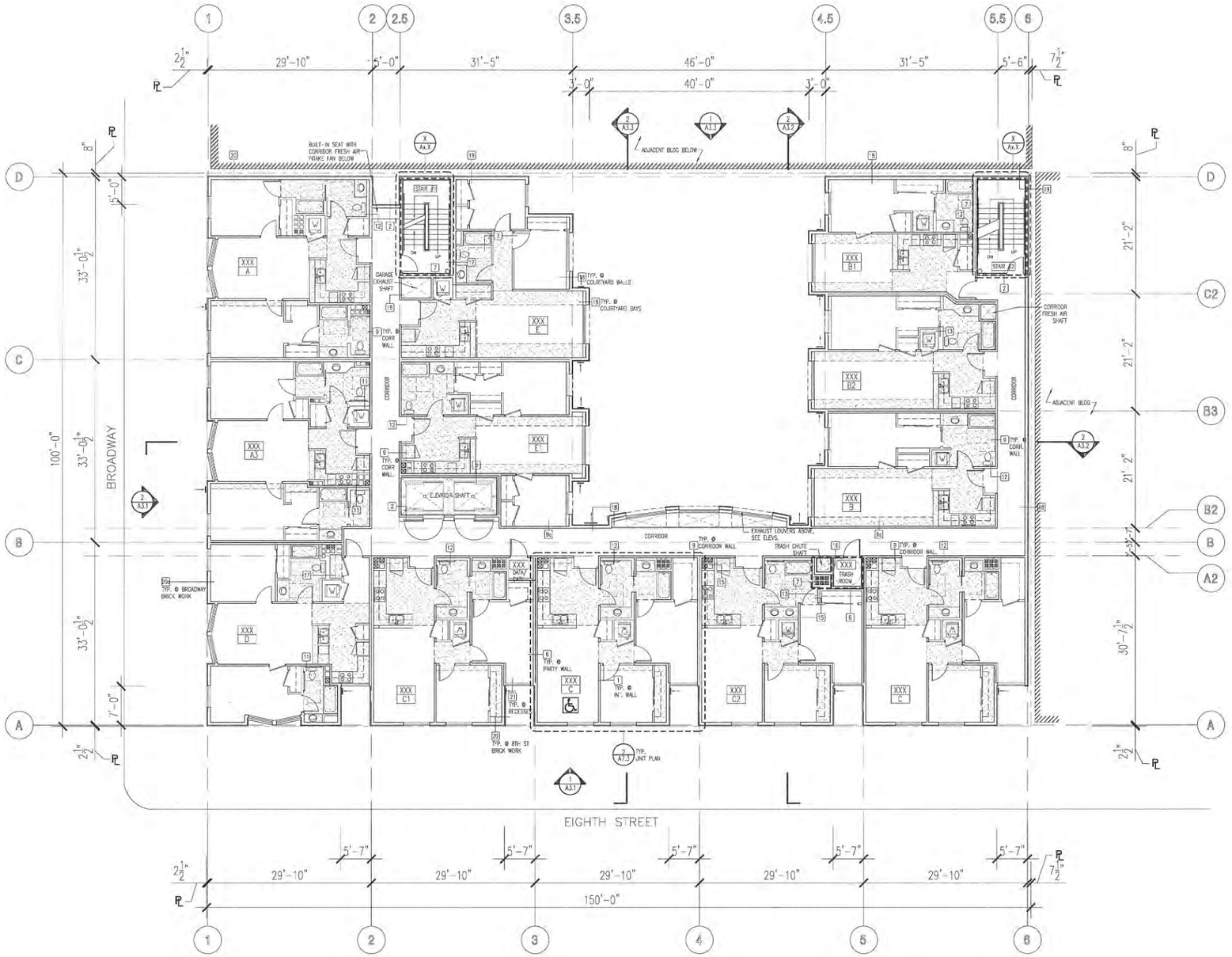
Title

Second Floor Plan

Sheet

A1.2

Preliminary; Not for Construction



WRT | SOLOMON ★ E.T.C.

Architecture and Urban Design

1328 Mission Street, fourth floor
San Francisco, CA 94103
tel: 415 575-4722
fax: 415 436-9837
www.solomonetc-wrt.com

Wallace Roberts & Todd, Inc.

Consultants

Old Oakland Housing

721-741 Broadway @ 8th Street
Oakland, CA 94607

Project Sponsor

AF Evans Development, Inc.
1000 Broadway, Suite 300
Oakland, CA 94607

Key Plan

PLANNING SUBMISSION

Stamp

LICENSED ARCHITECT DANIEL SOLOMON No. C 6367 REN. 12/31 STATE OF CALIFORNIA

Job Number	4391-02/00
Drawn By	HS
Checked By	-
Date	August 4, 2006
Scale	1/8"=1'0"

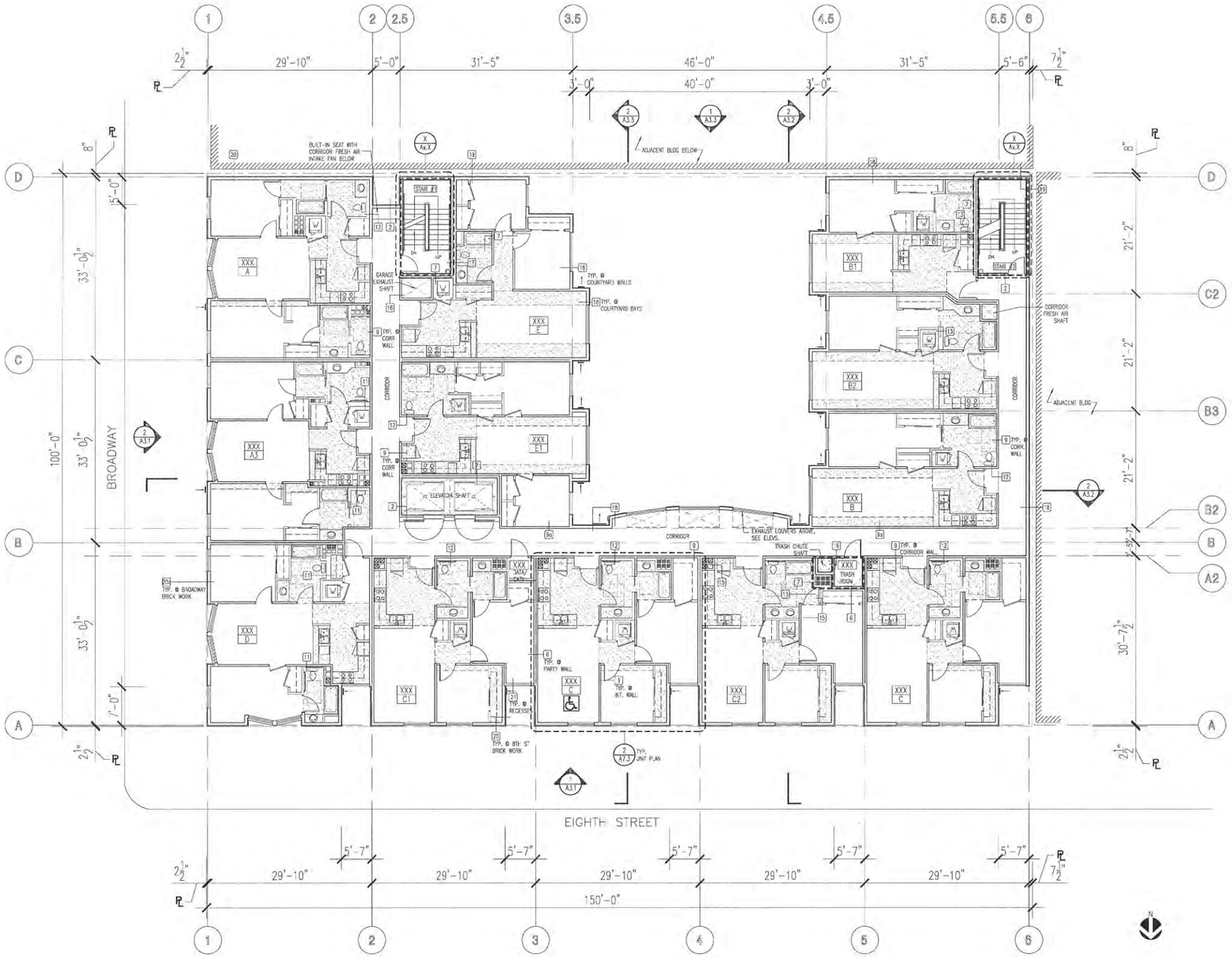
Title

Third Floor Plan

Sheet

A1.3

Preliminary:
Not for Construction



SOLOMON ★ E.T.C.

Architecture and Urban Design

1328 Mission Street, fourth floor
San Francisco, CA 94103
tel: 415 575-4722
fax: 415 436-9837
www.solomonetc-wrt.com

Wallace Roberts & Todd, Inc.

Consultants

Old Oakland Housing

721-741 Broadway @ 8th Street
Oakland, CA 94607

Project Sponsor

AF Evans Development, Inc.
1000 Broadway, Suite 300
Oakland, CA 94607

Key Plan

PLANNING SUBMISSION

Stamp

LICENSED ARCHITECT DANIEL SOLOMON No. C 8367 REN. 12/31 STATE OF CALIFORNIA

Job Number	4391-02/00
Drawn By	HS
Checked By	-
Date	August 4, 2006
Scale	1/8"=1'0"

Title

Fourth Floor Plan

Sheet

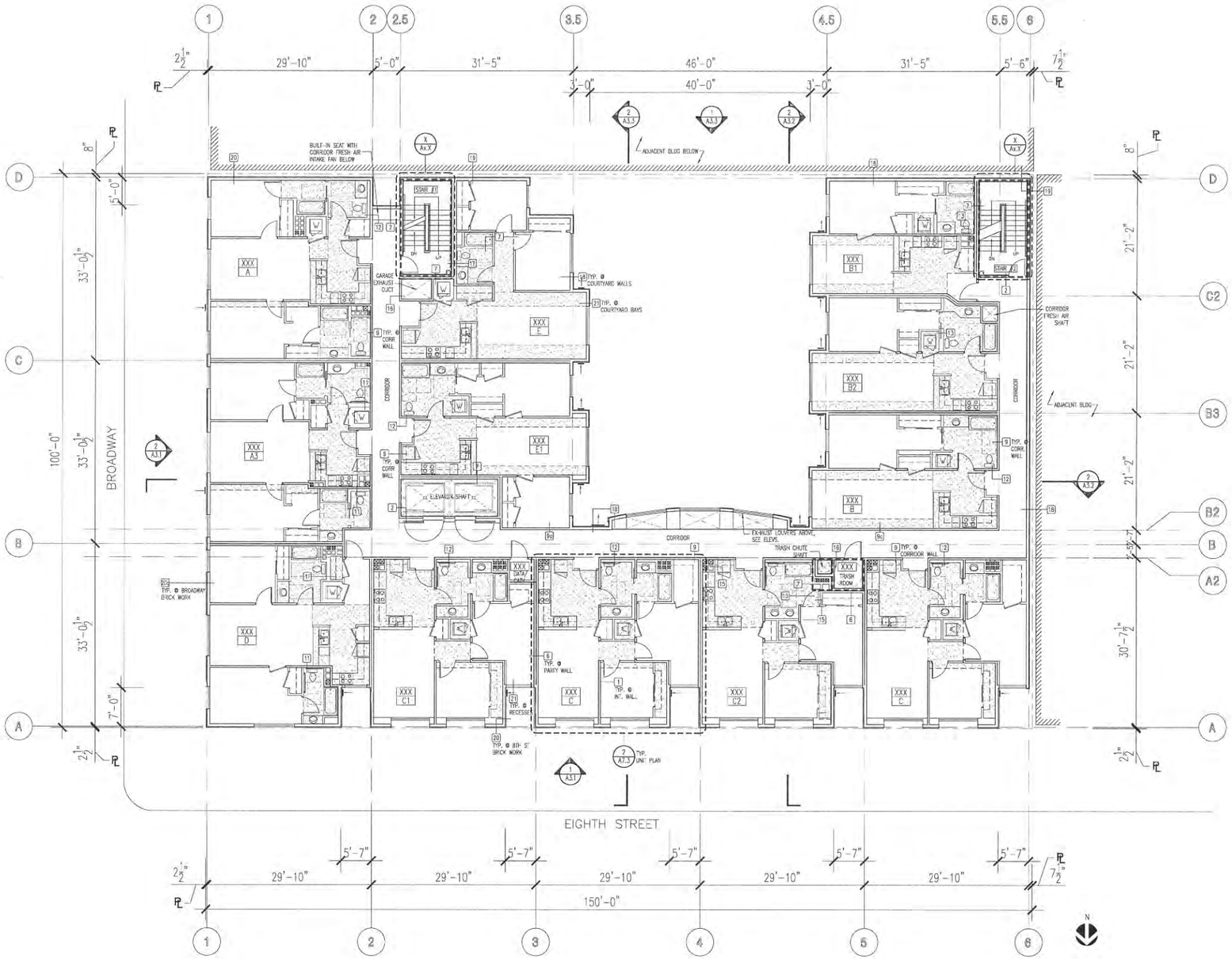
A1.4

Preliminary
Not for Construction

LEGEND:

2-HR WALL

DROPPED SOFFIT



WRT | SOLOMON ★ E.T.C.

Architecture and Urban Design

1328 Mission Street, fourth floor
San Francisco, CA 94103
tel: 415 575-4722
fax: 415 436-9837
www.solomonetc-wrt.com

Wallace Roberts & Todd, Inc.

Consultants

Old Oakland Housing

721-741 Broadway @ 8th Street
Oakland, CA 94607

Project Sponsor

AF Evans Development, Inc.
1000 Broadway, Suite 300
Oakland, CA 94607

Key Plan

PLANNING SUBMISSION

Stamp

LICENSED ARCHITECT DANIEL SOLOMON No. C 6307 REN. 12/99 STATE OF CALIFORNIA

Job Number	4391-02/00
Drawn By	HS
Checked By	-
Date	August 4, 2006
Scale	1/8"=1'0"

Title

Fifth Floor Plan

Sheet

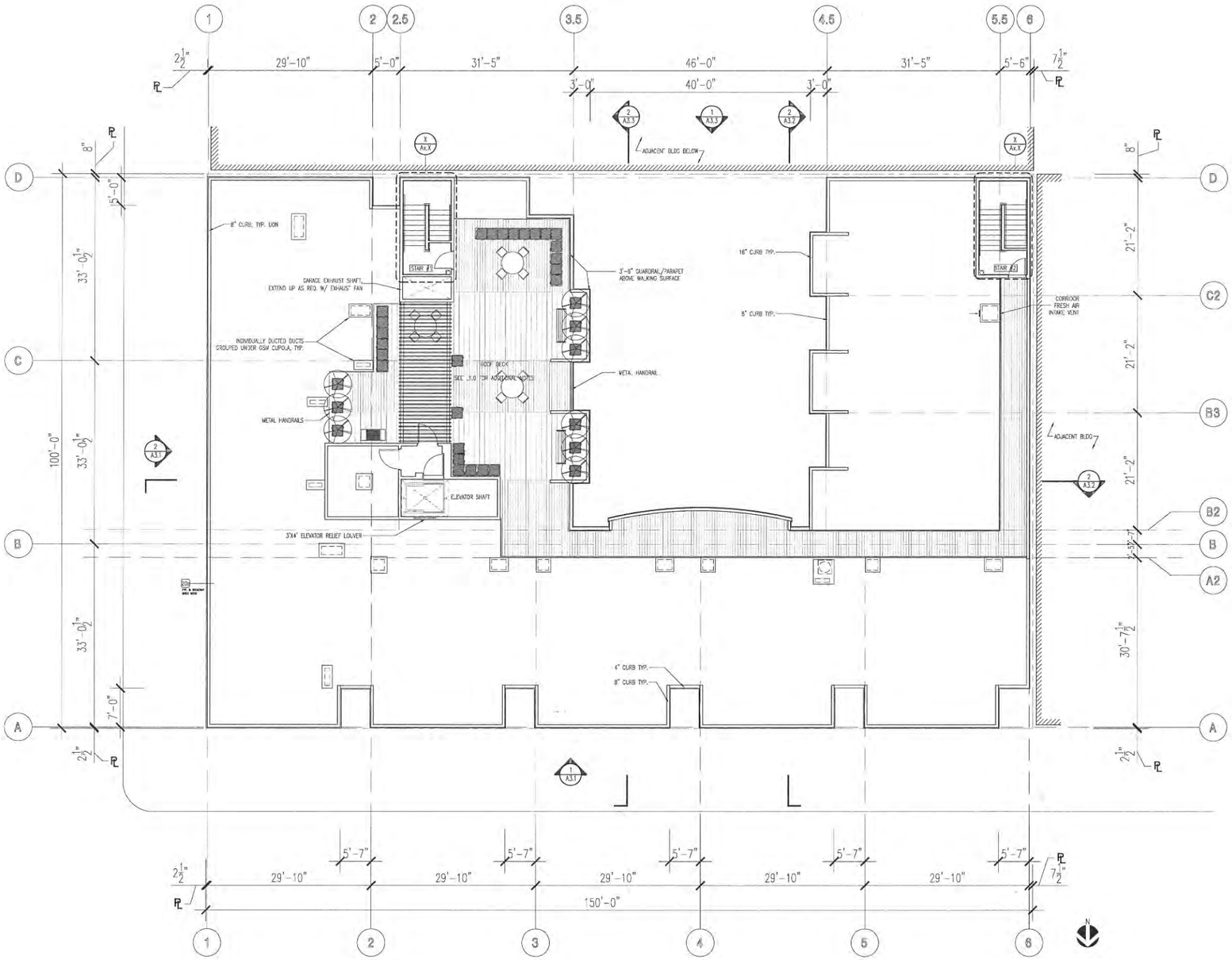
A1.5

Preliminary:
Not for Construction

LEGEND:

2-HR WALL

ROOF DECK/ OPEN SPACE



SOLOMON ★ E.T.C.

Architecture and Urban Design

1328 Mission Street, fourth floor
San Francisco, CA 94103
tel: 415 575-4722
fax: 415 436-9837
www.solomonetc-wrt.com

Wallace Roberts & Todd, Inc.

Consultants

Old Oakland Housing

721-741 Broadway @ 8th Street
Oakland, CA 94607

Project Sponsor

AF Evans Development, Inc.
1000 Broadway, Suite 300
Oakland, CA 94607

Key Plan

PLANNING SUBMISSION

Stamp

LICENSED ARCHITECT — DANIEL SOLOMON — No. C 6367 — REN. 12/99 — STATE OF CALIFORNIA

Job Number	4391-02/00
Drawn By	HS
Checked By	-
Date	August 4, 2006
Scale	1/8"=1'0"

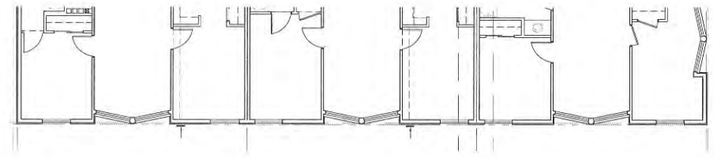
Title

Roof Level Plan

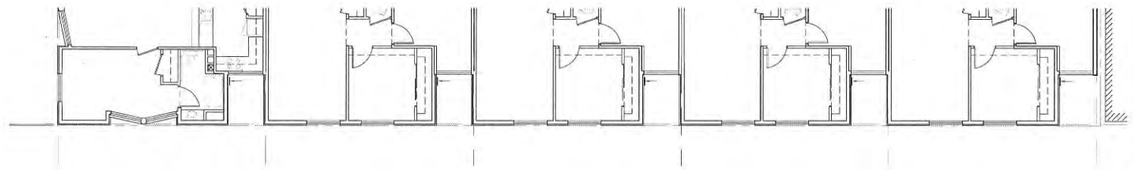
Sheet

A1.6

Preliminary; Not for Construction



BROADWAY ELEVATION / UPPER LEVEL PLAN (2)
SCALE: 1" = 8'-0"



8TH STREET ELEVATION / UPPER LEVEL PLAN (1)
SCALE: 1" = 8'-0"

WRT | SOLOMON ★ E.T.C.

Architecture and Urban Design

1328 Mission Street, fourth floor
San Francisco, CA 94103
tel: 415 575-4722
fax: 415 436-9837
www.solomonetc-wrt.com

Wallace Roberts & Todd, Inc.

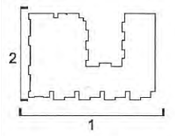
Consultants

Old Oakland Housing
721-741 Broadway @ 8th Street
Oakland, CA 94607

Project Sponsor

AF Evans Development, Inc.
1000 Broadway, Suite 300
Oakland, CA 94607

Key Plan



PLANNING SUBMISSION

Stamp

LICENSED ARCHITECT
DANIEL SOLOMON
No. C 6367
REN. 12/99
STATE OF CALIFORNIA

Job Number	4391-02/00
Drawn By	AS, HS
Checked By	-
Date	August 4, 2006
Scale	1/8"=1'0"

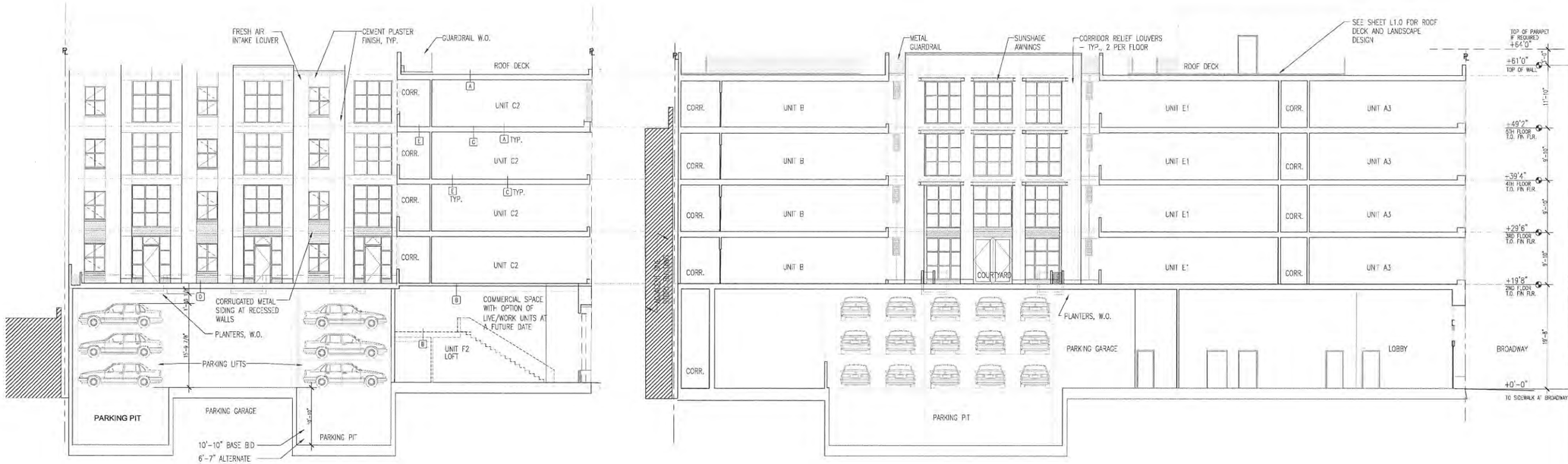
Title

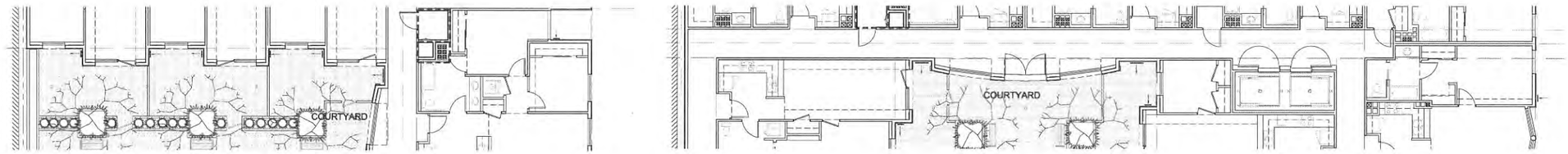
Elevations

Sheet

A3.1

Preliminary
Not for Construction





EAST FACING COURTYARD SECTION / ELEVATION & PODIUM LEVEL PLAN (2)
SCALE: 1" = 8'-0"

SOUTH COURTYARD SECTION/ELEVATION & PODIUM LEVEL PLAN (1)
SCALE: 1" = 8'-0"

WRT | SOLOMON ★ E.T.C.
Architecture and Urban Design
1328 Mission Street, fourth floor
San Francisco, CA 94103
tel: 415 575-4722
fax: 415 436-9837
www.solomonetc-wrt.com

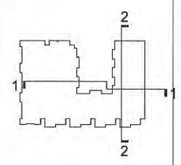
Wallace Roberts & Todd, Inc.

Consultants

Old Oakland Housing
721-741 Broadway @ 8th Street
Oakland, CA 94607

Project Sponsor
AF Evans Development, Inc.
1000 Broadway, Suite 300
Oakland, CA 94607

Key Plan



PLANNING SUBMISSION

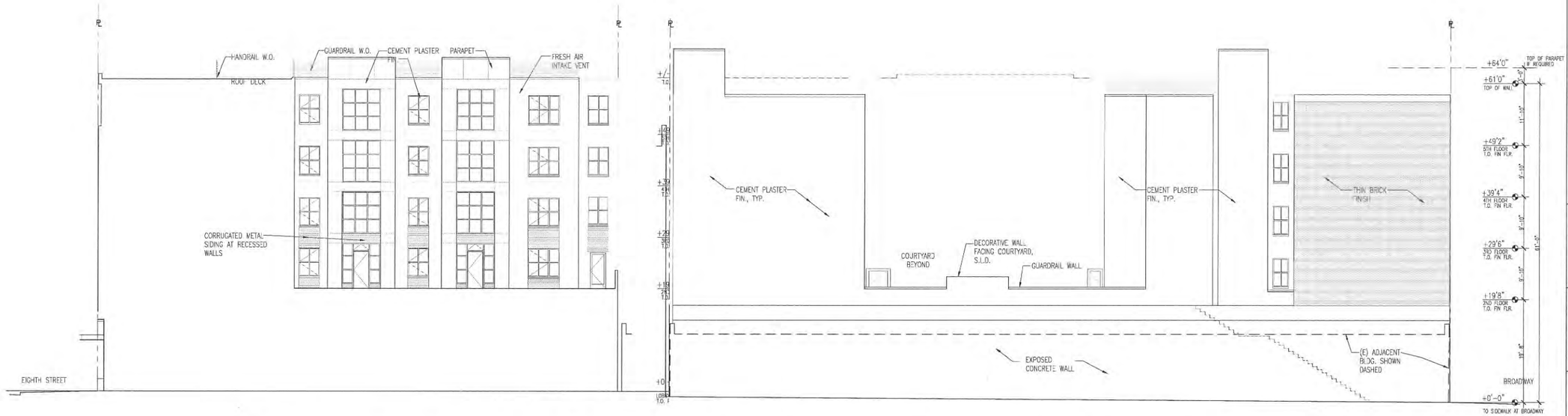
Stamp
LICENSED ARCHITECT DANIEL SOLOMON No. C 6367 REN. 12/99 STATE OF CALIFORNIA

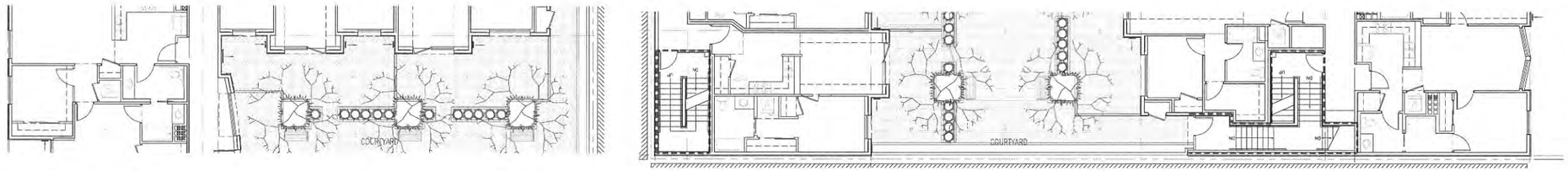
Job Number	4391-02/00
Drawn By	
Checked By	-
Date	August 4, 2006
Scale	1/8"=1'0"

Title
Sections / Elevations

Sheet
A3.2

Preliminary; Not for Construction





WEST FACING COURTYARD ELEVATION / PODIUM LEVEL PLAN (2)
SCALE: 1" = 8'-0"

SOUTH ELEVATION / PODIUM LEVEL PLAN (1)
SCALE: 1" = 8'-0"

WRT | SOLOMON ★ E.T.C.

Architecture and Urban Design

1328 Mission Street, fourth floor
San Francisco, CA 94103
tel: 415 575-4722
fax: 415 436-9837
www.solomonetc-wrt.com

Wallace Roberts & Todd, Inc.

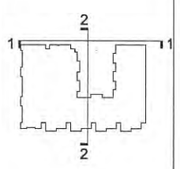
Consultants

Old Oakland Housing
721-741 Broadway @ 8th Street
Oakland, CA 94607

Project Sponsor

AF Evans Development, Inc.
1000 Broadway, Suite 300
Oakland, CA 94607

Key Plan



PLANNING SUBMISSION

Stamp

LICENSED ARCHITECT DANIEL SOLOMON No. C 8067 REN. 12/95 STATE OF CALIFORNIA

Job Number	4361-02/00
Drawn By	
Checked By	-
Date	August 4, 2006
Scale	1/8"=1'0"

Title

Elevations

Sheet

A3.3

Preliminary; Not for Construction

WALL SECTION @ BAY AT BROADWAY
SCALE: 3/8" = 1'-0" — 3

WALL SECTION, TYPICAL AT BROADWAY (8TH STREET SIM.)
SCALE: 3/8" = 1'-0" — 2

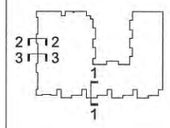
WALL SECTION @ RECESS AT 8TH STREET
SCALE: 3/8" = 1'-0" — 1

WRT | SOLOMON ★ E.T.C.
Architecture and Urban Design
1328 Mission Street, fourth floor
San Francisco, CA 94103
tel: 415 575-4722
fax: 415 436-9837
www.solomonetc-wrt.com
Wallace Roberts & Todd, Inc.
Consultants

Old Oakland Housing
721-741 Broadway @ 8th Street
Oakland, CA 94607

Project Sponsor
AF Evans Development, Inc.
1000 Broadway, Suite 300
Oakland, CA 94607

Key Plan



PLANNING SUBMISSION

Stamp

Job Number	4391-02/00
Drawn By	
Checked By	AS
Date	August 4, 2006
Scale	3/8"=1'0"

Title
Wall Sections

Sheet
A3.4

Preliminary
Not for Construction

APPENDIX E

SITE-SPECIFIC HEALTH AND SAFETY PLAN

PES Environmental, Inc.
Engineering & Environmental Services

HEALTH AND SAFETY PLAN
FOR EARTHWORK REDEVELOPMENT ACTIVITIES
459 8th STREET
OAKLAND, CALIFORNIA

AUGUST 17, 2015

By:

Gavin M. Creps
Staff Engineer

Christopher J. Baldassari, P.G.
Senior Geologist

935.038.01.005

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued)

TABLE OF CONTENTS
(Continued)

1.0 INTRODUCTION

This Health and Safety Plan (HASP), has been prepared by PES Environmental, Inc. (PES) and describes the minimum health and safety requirements associated with earth work redevelopment activities that will be conducted at 459 8th Street in Oakland, California (the site or subject property). .

In addition to the procedures and requirements described in this HASP, all onsite personnel shall follow applicable procedures and requirements specified by Federal, State, and local authorities, and as applicable, to include those requirements specified in Title 8 of the California Code of Regulations, Section 5192 "Hazardous Waste Operations and Emergency Response" (T8-CCR, Section 5192). This HASP has been prepared to address the basic requirements of the overall safety and health program, with attention to aspects of site-specific activities. Any modifications made to this HASP because of encountered field conditions must be approved by the site Safety Officer (SSO) and/or Project Manager (PM). A copy of this HASP will be available at the site during all work activities.

The primary objectives of the HASP are to protect the well-being of field personnel and the community surrounding the site, and to provide onsite personnel an understanding of the potential chemical and general physical hazards that exist or may arise while field tasks are being performed at the site. Additionally, the information contained herein will define the safety precautions necessary to respond to hazardous materials issues, should they occur.

To accomplish the objectives, contractors, subcontractors, and their staff shall acknowledge and adhere to the policies and procedures established herein. Accordingly, all personnel assigned to this project shall read this HASP and sign the Agreement and Acknowledgment Statement (Appendix A) to certify that they have read, understood, and agreed to abide by its provisions.

General site information is summarized below:

Client Name: Signature Land Advisors
2335 Broadway Street Suite 200, Oakland California

Location: 459 8th Street, Oakland, California

1.1 Field Tasks

Field tasks covered under this HASP may include one or more of the following activities:

- **Demolition** – activities associated with removal of the surface asphalt or concrete pavement;
- **Subsurface Construction or Repair** – any activity occurring beneath the grade level of existing pavements;

- **Utility Line Work** – any subterranean inspection, excavation, or repair of electrical, telephone, water, sanitary sewer or storm drains occurring within or outside of existing vaults (conducted prior to excavation);

- **Subsurface Injection Gallery** – any work associated with removal of the subsurface injection gallery present at the Site;

- **Groundwater and Soil Vapor Monitoring Well Removals** - any work associated with removal of monitoring wells present at the Site;

- **Groundwater Extraction or Construction De-watering** – any activity involving collection and removal of shallow groundwater during or after construction; or

- **Other** – other subgrade activities not expressly listed above.

Many of the activities described above will include use of subcontractors (e.g., drilling contractors, geophysical surveyors, groundwater sampling contractor, etc.).

Future activities that are not described above and require additional health and safety precautions beyond this HASP will be included in an addendum to the HASP (refer to Appendix B).

1.2 Site Background

1.2.1 Property Location and Description

The 459 8th Street site is located at the northeast corner of 8th Street and Broadway Street in the City of Oakland, Alameda County, California. The present-day site address is 459 8th Street; however, historical site addresses include: 451 to 471 (odd numbers only) 8th Street and 721 to 741 (odd numbers only) Broadway Street. The site is bounded to the east by Broadway Street and to the north by 8th Street. It is bounded on south and west by zero-lot line properties with buildings. Site access is provided via two driveways on Broadway Street and one driveway on 8th Street

1.2.2 Chemicals of Potential Concern

Based on available historical documentation, the primary chemicals of potential concern (COPCs) are described herein. The Site's history includes use for commercial laundry/cleaning services and a gasoline service station. Based on these historical uses, the potential exists for various chemicals (oils and solvents) to have been used and potentially released at the subject property. Chemical hazards associated with the COPCs and remediation chemicals are discussed in Section 3.1.

COPCs which may be present due to historical use or proximity are summarized below:

- Volatile organic compounds (VOCs);
- Total petroleum hydrocarbons (TPH) quantified as gasoline (TPHg), diesel (TPHd) and TPH quantified as motor oil (TPHmo); and
- Metals, including lead.

However, soil sampling and analysis (as described in the Soil Management Plan [SMP]) conducted in the areas of soil excavation associated with subsurface parking features did not identify the presence of COPCs at or above concentrations of concern.

1.3 Amendments

Any changes in the scope of this project and/or site conditions must be amended in writing on the Site Safety Plan Amendment Sheet (Appendix B) and approved by the SSO, or applicable individual.

2.0 KEY PERSONNEL AND RESPONSIBILITIES

The following management structure will be instituted for the purpose of successfully and safely completing this project. All contractors and subcontractors will act in accordance with applicable Federal, State, regional, and local regulations during all phases of the project. Health and safety training requirements for onsite project personnel are described in Section 4.0.

2.1 Site Safety Officer and Project Manager

A Project Manager (PM) and Site Safety Officer (SSO) will be designated by the Owner (Signature) or Contractor implementing the HASP. The PM and SSO are responsible for assuring that adequate training and safety briefing(s) for the project are provided to the project team. The PM or SSO will provide a copy of this HASP to each member of the project field team. The PM is responsible for preparation and review of this HASP for accuracy and incorporating new information or guidelines which aid the SSO in further definition and control of the potential health and safety hazards associated with the project.

2.2.1 Site Safety Officer Responsibilities

The SSO has onsite responsibility for ensuring that all PES team members comply with the HASP. The SSO will be present during site operations. Immediately prior to initiating field activities, the SSO will conduct a tailgate briefing session for site personnel and subcontractors to discuss the HASP and the procedures contained herein. Subcontractors will be responsible for complying with the minimum requirements specified in this HASP. It is the

SSO's responsibility to inform field personnel of chemical and physical hazards, as he or she becomes aware of them. The SSO has the authority to monitor and correct health and safety problems as noticed onsite to include "Stop Work".

The SSO's responsibilities include:

- Ensuring compliance with this HASP;
- Providing site safety briefings for team members;
- Approving the selection of the types of personal protective equipment (PPE) to be used onsite for specific tasks and monitoring the compliance of field personnel for the routine and proper use of the PPE that has been designated for each task;
- Inspecting all PPE for team members prior to onsite use;
- Coordinating upgrading or downgrading PPE, as necessary, due to changes in exposure levels, monitoring results, weather, and other site conditions;
- Updating equipment or procedures to be used based on new information gathered during the site investigation and reporting to the PM all equipment malfunctions or deficiencies;
- Assisting and evaluating the effectiveness of decontamination procedures for PPE, sampling equipment and containers;
- Reporting to the PM any unsafe conditions or practices and all facts pertaining to incidents which result in injury or exposure to toxic materials;
- Ensuring that all project-related personnel have signed the personnel Agreement and Acknowledgment Statement contained in this HASP (Appendix A);
- Reporting any signs of fatigue, work-related stress, or chemical exposures to the PM immediately, or as soon as possible;
- Reporting any accidents or violations of the HASP to the PM immediately, or as soon as possible;
- Dismissing field personnel from the site if their actions or negligence endangers themselves, co-workers, or the public, and reporting the same to the PM immediately, or as soon as possible;
- Knowing emergency procedures, evacuation routes and the telephone numbers of the ambulance, local hospital, poison control center, fire and police departments;

- Supplying phone numbers, location and route to the nearest medical facility, and arranging for emergency transportation if necessary;
- Ensuring a first aid kit is available in work areas and that it is fully stocked;
- Assisting the PM in documenting compliance with the HASP by completing the standard forms;
- Enforcing the "buddy" system as appropriate for site activities;
- Observing field team members for signs of exposure, stress, or other conditions related to preexisting physical conditions or site work activities; and
- Stopping operations that threaten the health and safety of the field team, and effecting evacuation of the site, if necessary.

2.2.2 Project Manager Responsibilities

The PM is responsible for implementing the project and obtaining any necessary personnel or resources for the completion of the project. Specific duties include:

- Coordinating the activities of employees, contractors, and subcontractors, including their acknowledgement of this HASP, and ensuring that all employees and subcontractors have signed the Agreement and Acknowledgment Statement (Appendix A);
- Selecting field personnel for the work that is to be undertaken onsite;
- Ensuring that the tasks assigned are being completed as planned and are kept on schedule;
- Providing authority and resources to ensure that the SSO is able to implement and manage safety procedures;
- Ensuring that all persons allowed to enter the site (i.e., regulators, contractors, State officials, visitors) are made aware of the potential hazards associated with the substances known or suspected to be onsite, and are knowledgeable as to the location of the onsite copy of the specific HASP;
- Ensuring that the SSO is aware of all of the provisions of this HASP and is instructing all personnel onsite about the safety practices and emergency procedures defined in the HASP; and
- Ensuring that the SSO is adequately monitoring site safety.

3.0 HAZARD EVALUATION

The potential hazards to personnel working at the site have been principally identified as: chemical exposures and physical hazards. Physical hazards include those associated with working in the vicinity of: (1) drilling rigs; (2) well development trucks; and (3) other heavy equipment (such as trucks).

3.1 Chemical Hazards

Potential effects of any chemical exposure are dependent on several factors such as: toxicity of substance, time frame of exposure, concentration of substance producing the exposure, general health of person exposed, and individual use of hazard reduction methods.

While the presence or absence of COPCs is unknown, the following COPCs, if present, would act as health risk drivers and are described below. Based on available information, one or more of the potential contaminants identified at this site may be present and include VOCs (benzene & ethylbenzene), TPHg, TPHd, TPHmo, and/or metals including lead. This plan concentrates on the measures necessary to prevent unnecessary exposure to these potential contaminants. Detailed properties of these chemicals, as excerpted from the National Institute of Occupational Safety and Health (NIOSH) Pocket Guide to Chemical Hazards website (http://www.cdc.gov/niosh/npg/) are presented in Appendix C. Hazard evaluation guidelines are presented in Appendix D.

3.2 General and Physical Hazards

Potential physical hazards at these sites are described below:

- Physical contact with heavy equipment (e.g., drilling rigs, trucks, etc.);
- Physical contact with motor vehicles;
- Noise hazards from operating or working near heavy equipment;
- Mechanical hazards related to operation of soil and groundwater sampling equipment, and drilling equipment;
- Buried utility lines (e.g., gas, electricity, and water) and energized overhead and underground power lines;
- Heat stress and cold stress;
- Sunburn;

- Slips/trips/falls due to unstable surfaces, or uneven terrain;
- Lifting heaving objects;
- Fire hazards;
- Biological hazards such as:
  - Bees, wasps, ticks, insects, and snakes;
  - Airborne diseases (e.g., Hantavirus associated with rodent excrement or bird flu associated with bird excrement);
  - Poisonous plants (e.g., poison oak); and
- Hazards inherent to operating a passenger vehicle.

4.0 HAZARD MITIGATION

4.1 Site Security

Areas on site where hazardous substances are suspected to exist will be secured through demarcation tape and warning signs. Access to the work area will be restricted, and all personnel (regardless of status) requesting entry to the work area will be required to report to the SSO. All visitors will be briefed on site-specific safety and health issues.

Additional site control measures are presented in Section 7.0.

4.2 General Hazards Reduction

The potential for unknown hazards cannot be eliminated. The following table outlines potential site hazards and the corresponding general procedures for hazard reduction:

POTENTIAL HAZARDS	PROCEDURES FOR HAZARD REDUCTION
1. Ingestion of hazardous materials can occur by accidental swallowing of contaminated soils, liquids and/or transfer of the contaminated particles onto ingestible substances (such as food).	Eating, smoking, drinking and application of cosmetics is prohibited onsite. This minimizes the possibility of exposure to hazardous materials potentially encountered onsite via ingestion.
2. Physical hazards in general such as: **a) Slippery surfaces.**	Use of approved skid-proof boots shall be required.
b) Noise.	Approved ear plugs/muffs shall be made available for noisy work operations such as pounding.
c) Contaminated surfaces.	Contact with contaminated surfaces, or surfaces suspected of being contaminated, should be avoided. This includes walking through, kneeling or placing equipment in puddles, mud, or discolored surfaces.
d) Thermal Stress exposure.	***Heat stress:*** Provide plenty of liquids to replace loss of body fluids. Appropriate liquids should consist of juices, juice products, and water. Establish a work schedule that will provide sufficient rest periods for cooling down. As the temperature increases, more frequent and longer rest periods are required. ***Cold Stress:*** Establish a work schedule that will provide sufficient rest periods for warming-up. As the temperature drops, more frequent and longer rest periods are required. Provide adequate thermal protective clothing.
e) Head/eye protection.	**ANSI a**pproved hard hats and safety glasses and will be worn at all times while onsite, and/or when head or eye hazards are present.
f) Other hazards.	Avoid standing near the edge of excavations. - Look for falling objects, slipping and tripping hazards (i.e., plastic sheeting used to hold excavated soil can be slippery). - Secure the site with fences and post warning signs to prevent the exposure of unauthorized, unprotected people to site hazards. - Do not park or leave equipment near the edge of an excavation.

4.3 Noise Control

Most work site noise will originate from heavy equipment. Noise exposures will be controlled to levels below the permissible noise exposure levels, which are equivalent to an 8-hour time weighted average (TWA) level of 85 decibels (dBA or 140 dB impact/pulse). As a result, equipment operators and observers will be required to use hearing protection when exposed to levels at or above 85 decibels. Noise hazard areas (areas experiencing greater than the 8-hour TWA of 85 dBA) must be appropriately marked and hearing protection for noise attenuation worn when in the area.

Reduction of exposures may be implemented by use of engineering controls or adequate hearing protection. Engineering controls will include isolation of the noise source by their enclosure and reduction of noise transmission by application of noise absorbing materials.

Use of portable earbuds or "Walkman-type" radios is prohibited for use as a hearing protection device. A copy of the OSHA Occupational Noise Standard, 29 CFR 1910.95 (and/or Cal/OSHA equivalent regulation) will be available and copies will be made available to employees upon request.

4.4 Heat Stress Prevention

Heat stress is the adverse stress to the body due to exposure to excess heat. It can greatly diminish the ability of the body to function properly. Heat stress starts the night before work; hydrate, avoid alcohol, and get a good night's sleep. Check that medications do not increase the potential for heat stress. **Encourage the work team to hydrate and drink at least one quart of water per person per hour (and provide enough water on site to allow for such); drink often and before you are thirsty and approximately every 15 minutes. Shade is mandatory at temperatures above 80°F, but should also be made available if a worker requests such regardless of the temperature.** The shade should provide space for at least 25% of the on-Site workers (use of an air conditioned vehicle is acceptable). Take frequent breaks in shade (minimum of 5 minutes each), cover up with a wide brimmed hat, and wear light colored clothing; the use of PPE can increase the risk of heat stress (illness). The entire work crew must be trained on heat stress prevention. If someone is new to the site, make sure they are provided a few days to acclimatize to the weather conditions. Know you exact location in case you need to summon emergency response.

For high heat (temperatures above 95°F), a mandatory buddy system must be used and workers must be encouraged to hydrate and take shade breaks (minimum of 5 minutes).

Additionally, all personnel involved in work activities will become acquainted with the symptoms of heat stress and the necessary response actions for treatment. See the Heat Stress quick card included as Attachment 4. Because the incidence of heat stress depends on a variety of factors, all workers will be monitored. Hazards associated with heat stress include the following:

- Heat Rash – may result from continuous exposure to heat or to humid air;

- Heat Cramps – caused by heavy sweating causing cold clammy skin. Usually associated with inadequate electrolyte replacement. Heat cramps can cause muscle spasms, pain in the hands, feet and abdomen;

- Heat Exhaustion – occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Heat exhaustion can cause pale, cool, moist skin, heavy sweating, dizziness, and nausea and fainting; and

- Heat Stroke – the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels (usually above 106 degrees F). Immediate action must be taken to prevent serious injury and death. Competent medical help must be obtained. Heat stroke can cause red, hot unusually dry skin. Symptoms include lack of or reduced perspiration nausea, dizziness, confusion, and strong rapid pulse and coma. Do not try to treat on-site, give liquids or other treatments.

During the day-to-day fieldwork, the SSO, PM, and workers must be alert for the signs and symptoms of heat related incidents. Heat related conditions are hazards that exist when individuals are required to work in warm temperatures while wearing protective equipment. The SSO will monitor the ambient air temperature and humidity utilizing local information sources.

Employees working in protective clothing will be observed for the following signs and symptoms of heat stress, dizziness and nausea, profuse sweating, skin color change, vision problems, delirium, fainting, weakness, fatigue, cramping, and hot red, dry skin.

Employees who exhibit heat-related symptoms will be monitored on-site by the SSO or other competent person. Monitoring heat related symptoms will consist of measuring the heart rate and body temperature to prevent the onset of heat stress illness. Heart rate will be measured by the redial pulse of the wrist for thirty seconds as early as possible in the resting period. Body core temperature can be measured by means of an “ear” thermometer.

The heart rate at the beginning of the rest period should not exceed 100 beats per minute. If the heart rate is in excess of the above guideline, the next work period will be shortened by one-third, while the length of the rest period stays the same. If the heart rate is in excess of 110 beats per minute at the beginning of the next rest period, the following work cycle will be further shortened by one-third. An employee with a body core temperature in excess of 99.5 degrees F will not be allowed to return to work after the rest period until the core temperature returns to 99 degrees or below.

Breaks in a shaded area will be taken if any worker exhibits or believes necessary to mitigate the symptoms of heat stress such as excessive sweating, muscle spasms, thirst, dizziness, rapid/weak pulse, flushed skin, loss of consciousness, or convulsions. The breaks will last until symptoms are relieved and/or the pulse of the worker is less than 110 beats per minute. Workers experiencing heat stress will be required, if conscious, to consume at least one quart of electrolyte fluid or cool water every hour while resting in a shaded area.

The individual should not return to work until symptoms are no longer recognizable. If the symptoms appear critical (the worker is confused or not alert), persist or get worse, immediate medical attention will be sought. For severe heat stress, workers will be examined by a health-care professional as soon as possible.

4.5 Cold Stress Prevention

Exposure to cold weather can lead to frost bite and/or hypothermia. The signs and symptoms of excessive exposure to cold are listed below:

When weather conditions are cold, wet, and windy, the following precautions will be instituted:

- Field personnel should wear layered clothing. Mittens, heavy socks, hats, jackets/vests, long underwear, glove liners or other suitable clothing should be worn when air temperatures fall below 40°F. Chemical protective clothing will be worn over the warm garments when protective clothing is required by the field operations;
- At temperatures below 30°F, temperature insulating suits and gloves should be considered;
- Protective outerwear should be used to prevent wetting of work shoes and feet, when appropriate;
- Additional clothing worn in layers allows gradual removal as work activities generate metabolic heat;
- At temperatures below 35°F, raingear should be worn if an employee could become wet on the job;
- At temperatures below 35°F, employees shall be provided with warm (65°F or above) break areas. If appropriate, space heaters will be provided to warm hand and feet;
- Hot liquids such as soups and warm drinks should be consumed during break periods. Caffeine beverages should be limited due to attendant diuretic and circulatory effects;
- A buddy system shall be practiced at all times. An employee that is observed shivering or showing signs of frostbite shall leave the cold area immediately;

- Work should be arranged to avoid sitting or standing for long periods; and
- All employees, who work in cold areas should be trained in the following subjects:
  - Proper first aid treatment for cold stress;
  - Proper clothing practices;
  - Proper eating and drinking habits;
  - Recognition of impending adverse health effects due to cold; and
  - Safe work practices.

See Section 6.2 for cold stress monitoring.

4.6 Sunburn Prevention

Sunburn is caused by overexposure to ultraviolet light (sunshine). The symptoms of exposure are not usually apparent until two to four hours after the exposure ceases. Depending upon the severity of the exposure, the symptoms can range from reddening of the skin, accompanied by mild discomfort, to painful deep burns and blisters. Although light-haired, fair-skinned, blue-eyed personnel are at the greatest risk of sunburn, all complexion types can develop sunburn.

The physical hazard of sunburn can be controlled by: (1) providing a shady rest area; (2) wearing appropriate clothing (long panty and tee shirts, i.e. no tank tops); (3) wearing sunscreen with an appropriate protection factor, as appropriate; and (4) working in shifts.

4.7 Heavy Equipment Operation and Traffic Hazard Control

The potential physical (non-chemical) hazards associated with heavy machinery operation can be mitigated by maintaining adequate clearance around operating equipment. While working at the site, the field personnel must be aware of equipment movement and general traffic, including excavation and heavy machinery operations.

Potential traffic hazards will be avoided by maintaining adequate clearance around moving equipment and vehicles and implementing safe speed practices. Where appropriate, a traffic control subcontractor will be used to provide traffic control (e.g., lane closures, placement of no parking signs) if work is to be conducted within or adjacent to city streets.

4.8 Slip/Trip/Fall Hazard Control

Prevention of slips/trips and fall hazards can be reduced to a minimum if employees use caution when working on slick, uneven or unsteady surfaces. The risk of injury will be minimized by implementing proper site control measures such as daily safety meetings, proper footwear and by keeping the work area free of obstructions.

4.9 Lifting Hazard Control

Field operations often require that heavy physical labor tasks be performed. All employees will be instructed by the SSO and contractor in proper lifting techniques through safety meetings and demonstration. Additionally, employees will be instructed to not attempt to lift objects heavier than 60 pounds without mechanical assistance or the assistance of a fellow worker.

4.10 Tool and Equipment Hazard Control

Improper tool handling and inadequate tool maintenance will increase risk of injury during their use. Management of these hazards requires rigorous maintenance of tools and equipment. The contractor is responsible for effective training of employees in the proper use of the tools. Hand tools that are damaged shall be tagged and removed from the work area. Equipment in need of maintenance or repair shall be tagged and removed from operation until repairs or replacement is accomplished. Only tools with an immediate need of use shall be present on site. Unused tools shall be assembled at a collection point and removed from underfoot and immediate use.

4.11 Fire Hazard Control

Caution will be used to prevent sparks or open flames within areas containing vegetation. If welding or cutting is to be implemented, ensure that hot sparks or slag do not come in contact with flammable or combustible materials. An approved A or B fire extinguisher, sufficient in size, will be immediately available (usually 25 feet) when performing welding or cutting. All heavy equipment (drill rigs, loaders, backhoes, dozers, etc.) shall have a minimum of one mounted 5-pound AB fire extinguisher. A minimum of one AB fire extinguisher shall be at each investigation or remediation site. Only approved containers will be used for storing flammable and combustible liquids. Oily rags and waste will be placed in appropriate containers. Fire protection equipment will be used for firefighting only. The proper use and location of fire extinguishers will be known by all employees. Gasoline or other flammable liquids will not be used for cleaning and degreasing. All fire hazards will be reported to the site superintendent immediately. Fire and emergency access lanes will be kept clear at all times in order to facilitate equipment entry and exit.

4.12 Electrical Hazard Control

Potential electrical hazards can be avoided by: (1) locating buried utilities in areas where subsurface work is performed; (2) making sure all equipment is properly grounded; (3) keeping equipment a safe distance away from overhead lines; (4) using ground-fault circuit breakers; and (4) taking appropriate action in the event a storm approaches (e.g., take shelter in building or vehicle; stay away from drill rig, isolated trees and standing water; stay low to ground). Underground Service Alert will be contacted a minimum of three (3) days prior to the onset of subsurface work to clear utilities.

4.13 Chemical Hazard Control

The chemical hazards listed herein will be mitigated by a combination of engineering controls and use of appropriate PPE, as needed. Monitoring requirements under this HASP are described in Section 6.0. Following initial field screening of a work area, at the discretion of the PM and SSO, the appropriate health and safety protocols for site-specific COPCs may be implemented.

5.0 PERSONAL PROTECTIVE EQUIPMENT

5.1 Personal Protection Equipment and Levels of Protection

PPE will be utilized at the site when engineering and/or work practices have been determined either impracticable or fail to protect workers. Tables 1 and 2 below described the standard PPE for non-hazardous and hazardous work zones.

Table 1
Standard PPE for Non-Hazardous Work Zones

Activity	Head/Face/Ear	Foot	Hands	Respirator	Clothing
General Site labor	Hard hat; safety glasses Hearing protection	Steel toed boots w/ puncture resistant insoles.	Leather/Nitrile gloves as needed	None*	Shirt w/sleeves. Long pants. High visibility-reflectorized vest
Supervision of work	Hard hat (Class B or E) Safety glasses Hearing protection	Steel toed boots w/ puncture resistant insoles.	Leather/Nitrile gloves as needed	None*	Shirt w/sleeves. Long pants. High visibility-reflectorized vest
Site Visitors	Hard hat (Class B or E) Safety glasses Hearing protection**	Steel toed boots w/ puncture resistant insoles.	None	None*	Shirt w/sleeves. Long pants. High visibility-reflectorized vest

Note:

* Voluntary use of dust masks is authorized for nuisance dusts and exposures known to be below PEL levels. Dust masks should be disposed daily and should be an N-95 type, or better .

** Hearing protection with adequate noise reduction rating (if consistently exposed to greater than 85 decibels steady-state or 140 decibels impulse). Workers should use clean hands to insert earplugs. Ample supplies of disposable earplugs will be available onsite.

Table 2
Standard PPE for Hazardous Work Zones

Activity	Head/Face/Ear	Foot	Hands	Respirator	Clothing
General Site labor	Hard hat; safety glasses and/or goggles and face shield Hearing protection	Chemical resistant steel toed boots w/ puncture resistant insoles.	Chemical resistant gloves / gauntlets as needed	As determined by SSO and air monitoring.	Chemical impervious. High visibility-reflectorized vest
Supervision of work	Hard hat Safety glasses and/or goggles and face shield Hearing protection	Chemical resistant steel toed boots w/ puncture resistant insoles.	Chemical resistant gloves / gauntlets as needed	As determined by SSO and air monitoring.	Chemical impervious. High visibility-reflectorized vest
Site Visitors	Hard hat Safety glasses/goggles Hearing protection	Chemical resistant steel toed boots w/ puncture resistant insoles.	Chemical resistant gloves / gauntlets as needed	As determined by SSO and air monitoring.	Chemical impervious. High visibility-reflectorized vest

Each worker will be responsible for maintaining his or her own PPE.

5.2 Level D

Level D is the minimum acceptable PPE level for employees and subcontractors for the site in areas where intrusive activities, soil handling, and/or groundwater handling activities are not being conducted. Level D personal protection is required in the area where respiratory protection is not a requirement. An area may be designated as Level D when:

- Airborne hazardous contaminants are not present and the potential for a release of such is low;
- Work operations preclude the splashing of hazardous/toxic materials on body surfaces; and

Level D includes:

- Coveralls or normal work uniform, as prescribed by weather;
- Boots/shoes with steel shank and approved toe protection meeting American National Standards Institute (ANSI) Z41 PT99 requirements;
- ANSI-approved industrial safety glasses or goggles and hearing protection; and
- Hard hat meeting ANSI Z89.1-1986 requirements.

5.3 Modified Level D

Modified Level D will be the minimum acceptable level of protection in areas where intrusive and/or sampling activities will be conducted. Modified Level D provides minimal dermal protection, including skin protection from potentially-impacted soils or groundwater. Respiratory protection is optional unless air-monitoring data indicates otherwise.

Modified Level D includes:

- Coveralls or normal work uniform;
- Polyethylene-coated Tyvek® suits for activities involving casual contact with potentially contaminated soils and/or groundwater. Activities involving bodily contact with groundwater in areas of known elevated concentrations of chemicals may require the use of Tyvek 9400 suits, at the discretion of the SOS;
- Butyl or Nitrile gloves when handling contaminated soils. If contact with soil or groundwater contaminated with chlorinated hydrocarbons (including Dioxins/Furans) occurs, Silver shield inner gloves with Nitrile outer gloves may be required, at the discretion of the SSO;

- Boots/shoes with steel shank and approved toe protection meeting ANSI Z41 PT99;
- ANSI- approved industrial safety glasses or goggles; face shield, in addition to glasses or goggles, if splash hazards are present;
- Hearing protection;
- Chemical resistant polyvinyl chloride (PVC) or neoprene boots when working in groundwater and/or soils moistened by groundwater; and
- Hard hat meeting ANSI Z89.1-1986 requirements.

5.4 Level C

Based on known conditions at the site, level C personal protection is not expected; however, level C personal protection would be required in areas where respiratory protection of a lesser degree than the criteria established for Levels A or B is required, and the probability of skin contamination by toxic materials is unlikely. An area may be designated as Level C when:

- Monitored levels of air contamination do not exceed the protection factors afforded by Air-Purifying Respirators (APR);
- Air contaminants have good warning properties;
- Contaminants are not known to be absorbed through, or toxic to, skin surface; and
- A reliable history of prior site entries exists without indications of acute or chronic health effects.

Level C includes:

- All PPE included in Modified Level D; and
- Respirator protection, as described herein.

5.5 Levels A and B

Based on known conditions at the site, level A and B personal protection is not expected; however, level A personal protection would be required in areas where the highest levels of contamination exist and is designated as the area where maximum respiratory, skin, and eye protection are required. Level B personal protection is required in the area where maximum respiratory protection is required; however, there is a low probability of dermal toxicity. Level B work is not approved under this HASP.

Work in Levels A and B PPE is not approved under this HASP.

5.6 Personal Protection Selection Matrix

Based on site conditions, the PPE shown below is anticipated for the following work scopes:

Work Scope	Anticipated PPE
Mobilization	Level D
Pre-field activities (non-intrusive)	Level D
Soil sampling	Modified Level D
Groundwater sampling	Modified Level D
Groundwater sampling	Modified Level D
Demobilization	Level D

If site conditions warrant, the SSO or PM will upgrade the PPE levels shown above, as appropriate.

6.0 EXPOSURE MONITORING AND ACTION LEVELS

In accordance with 29 CFR 1910.120 (h), exposure air monitoring will be used to identify and quantify airborne levels of hazardous substances and health hazards to determine the appropriate level of employee protection needed onsite.

6.1 Heat Stress and Stroke Monitoring

Heat stress is the adverse stress to the body due to exposure to excess heat. It can greatly diminish the ability of the body to function properly. Therefore, all personnel involved in work activities will become acquainted with the symptoms of heat stress and the necessary response actions for treatment. Because the incidence of heat stress depends on a variety of factors, all workers will be monitored. Hazards associated with heat stress include the following:

- Heat Rash – may result from continuous exposure to heat or to humid air;
- Heat Cramps – caused by heavy sweating causing cold clammy skin. Usually associated with inadequate electrolyte replacement. Heat cramps can cause muscle spasms, pain in the hands, feet and abdomen;
- Heat Exhaustion – occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Heat exhaustion can cause pale, cool, moist skin, heavy sweating, dizziness, and nausea and fainting; and

- Heat Stroke – the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels (usually above 106 degrees F). Immediate action must be taken to prevent serious injury and death. Competent medical help must be obtained. Heat stroke can cause red, hot unusually dry skin. Symptoms include lack of or reduced perspiration nausea, dizziness, confusion, and strong rapid pulse and coma. Do not try to treat on-site, give liquids or other treatments.

During the day-to-day fieldwork, the SSO, PM, and workers must be alert for the signs and symptoms of heat related incidents. Heat related conditions are hazards that exist when individuals are required to work in warm temperatures while wearing protective equipment. The SSO will monitor the ambient air temperature and humidity utilizing local information sources.

Employees working in protective clothing will be observed for the following signs and symptoms of heat stress, dizziness and nausea, profuse sweating, skin color change, vision problems, delirium, fainting, weakness, fatigue, cramping, and hot red, dry skin.

Employees who exhibit heat-related symptoms will be monitored on-site by the SSO or other competent person. Monitoring heat related symptoms will consist of measuring the heart rate and body temperature to prevent the onset of heat stress illness. Heart rate will be measured by the redial pulse of the wrist for thirty seconds as early as possible in the resting period. Body core temperature can be measured by means of an "ear" thermometer.

The heart rate at the beginning of the rest period should not exceed 100 beats per minute. If the heart rate is in excess of the above guideline, the next work period will be shortened by one-third, while the length of the rest period stays the same. If the heart rate is in excess of 110 beats per minute at the beginning of the next rest period, the following work cycle will be further shortened by one-third. An employee with a body core temperature in excess of 99.5 degrees F will not be allowed to return to work after the rest period until the core temperature returns to 99 degrees or below.

Breaks in a shaded area will be taken if any worker exhibits or believes necessary to mitigate the symptoms of heat stress such as excessive sweating, muscle spasms, thirst, dizziness, rapid/weak pulse, flushed skin, loss of consciousness, or convulsions. The breaks will last until symptoms are relieved and/or the pulse of the worker is less than 110 beats per minute. Workers experiencing heat stress will be required, if conscious, to consume two to four pints of electrolyte fluid or cool water every hour while resting in a shaded area.

The individual should not return to work until symptoms are no longer recognizable. If the symptoms appear critical, persist or get worse, immediate medical attention will be sought. For severe heat stress, workers will be examined by a health-care professional as soon as possible.

6.2 Cold Stress Monitoring

Cold Stress is the adverse stress to the body due to exposure to excess cold. Cold stress symptoms and monitoring tips are presented below.

Condition	Signs and Symptoms
Hypothermia – A condition when a person's body loses heat faster than it can be produced.	Vague, slow, slurred speech, impaired judgment, forgetfulness, memory lapses, drowsiness, inability to use the hands.
Frostbite – A condition where a part of the body is frozen.	Loss of the sensation of touch, pressure, and pain in the affected part of the body. This may occur without awareness of any numbness. Just before freezing, the skin becomes bright red and at freezing, small patches of white appear on the skin.

If any of these signs or symptoms are identified in site personnel, the SSO will immediately remove the worker from the cold, contact the emergency numbers (911) shown in Section 8.0.

7.0 SITE CONTROL, ENGINEERING CONTROLS, AND WORK PRACTICES

The SSO will be in charge of onsite activities and will be responsible for general work practices and site control. The SSO will be responsible for establishing work zones and for maintaining site access, communication, and security.

Communication between field team members will consist of verbal communications either directly, or through mobile phones. Site access should be limited during intrusive activities and after working hours. In addition, signs should be posted indicating the presence of hazards onsite and that unauthorized individuals should keep out. (if applicable)

7.1 Access Control

Controlled access to hazardous waste work areas is required to protect personnel working on the site as well as to limit the potential for transporting contaminants off site. Depending on the size of the work site, hazards and contaminants present, and complexity of the work, access control may range from verbally cautioning non-authorized personnel to stay away from the work area, to a program including site security, signs, or formal sign in and sign out procedures. Some general work practices for access control are noted below:

For small-scale site investigations or activities that are short-term projects (i.e. days, not weeks or months), identify a work area to the work crew and keep persons not associated with the jobsite out of the work area. If the site is in an area where non-authorized persons are likely to be encountered, traffic cones, caution tape, and signs identifying the area as a controlled access area may be used.

For more extensive projects where work may be done for weeks or longer, the team should deploy more extensive access controls. They should:

- Set up physical barriers to prevent unauthorized persons from entering the work site;
- Keep the number of personnel and equipment on site to the minimum required to do the project effectively and safely;
- Establish work zones within the site (see the next section- work zones);
- Establish controlled access points to be used by authorized personnel;
- Track the entry and exit of personnel through a check-in, checkout system; and
- Establish a formal decontamination corridor from exclusion zones.

7.2 Work Zones

Field project managers working under health and safety plans for hazardous waste operations are required to establish work zones to prevent or reduce the spread of site contaminants to non-contaminated areas on or off site. Movement between zones should be restricted to those that need access to a specific area, and entry and exit between zones should be through designated access control points.

The actual locations of the zones will be determined prior to set up. The staging area will be used for communications and will be a contaminant-free zone. The CRZ will lie between the staging area and the exclusion zone and will be determined by the SSO. The exclusion zone will be delineated with caution tape, cones, or barricades. Personnel not immediately involved in the field activity at hand will not be allowed within the exclusion zone.

7.2.1 Exclusion Zone

The exclusion zone should include any area where contamination is known or suspected. Areas of air, water, or soil that are contaminated with hazardous materials (biohazards, radioactive materials, chemicals) should be included in the exclusion zone. The zone should be well known to site workers. On smaller projects, this can be a verbal identification to site workers, such as "A 20-foot radius around the drill rig". On larger projects, or in areas that may be encountered by observers or the general public, the zone may need to be defined with caution tape, traffic cones or in some instances, fencing and barriers. The need will be job

specific and the method should be identified by the site HSO. Some work practices that should be followed in the exclusion zone include:

- Employees in the exclusion zone must wear the PPE designated in this site health and safety plan for tasks executed within the zone;
- No eating, drinking, chewing gum or tobacco, smoking, application of cosmetics, including application of lip balm, sunscreen, or insect repellant is allowed in the exclusion zone;
- Sitting or kneeling in areas of high concentrations of contaminants should be avoided;
- If any PPE becomes defective, the employee should leave the work area via the designated egress area, decontaminate as needed, and replace the defective PPE before returning to work in the exclusion zone;
- The use of illegal drugs or consumption of alcohol is prohibited on all projects; and
- When leaving the exclusion zone, employees should exit via the designated access/egress point(s) and follow decontamination procedures as described by the HSO and this HASP.

7.2.2 Contaminant Reduction Zone (CRZ)

A CRZ is established to provide a transition between the exclusion zone and the support zone. The CRZ is set up at the access control points of the exclusion zone and will vary in size depending on the complexity of activities that need to occur within the zone. For small site investigations, the CRZ may simply be a designated area near containers set up to collect used disposable PPE and some soap and water. For larger projects, the CRZ may include specific decontamination points and be staffed by personnel specifically designated to participate in the decontamination of personnel and equipment exiting the exclusion zone. Depending on the site contaminants, level of contamination, and decontamination procedures, personnel in the CRZ may be required to wear protective clothing, gloves, or respirators. The specific requirements will be outlined by the HSO. The CRZ should be placed in an area that is not contaminated at the boundary of the exclusion zone.

7.2.3 Support Zone

The support zone is established near the entrance to the site and is far enough from the exclusion zone and CRZ that specialized protective clothing or respirators are not used. The use of normal field PPE such as hard hats, safety glasses, and safety work boots is expected except for areas such as office trailers, break and lunch areas, or other designated areas. Operational support activities and equipment storage and maintenance areas are located in the support zone. No equipment or personnel should go from the exclusion zone to the

support zone without passing through the CRZ and being decontaminated in accordance with the requirement set forth by the SSO.

7.2.4 Mobile Work Zone

For those projects that involve brief periods of work in multiple locations, a specific area may be designated as the exclusion zone for the duration of the work performed in that area. The exclusion zone can be terminated (provided there are no ongoing hazards or potential exposures to contaminants) and moved to the next area of work. For example, during soil borings or well installation, the exclusion zone can be defined as, "1.5 times the mast height" of the drill rig. Once the boring has been closed, or well installed and secured, and all drill cuttings have been secured, the area can be opened up and a new exclusion zone established around the next boring location.

7.2.5 Considerations When Establishing Work Zones

Work zones should be large enough to perform tasks within the zone safely, with no exposure to hazards to personnel outside the zone, but they should also be small enough to be able to secure and control access. Some considerations in establishing work zones include:

- Physical and topographical features of the site;
- Dimensions of the contaminated area;
- Weather;
- Physical, chemical, and toxicological characteristics of contaminants and chemicals used in the zone;
- Potential for exposure to site contaminants;
- Known and estimated concentrations of contaminants;
- Air dispersion of contaminants;
- Fire and explosion potential;
- Planned operations and space needed to perform the work safely;
- Surrounding areas;
- Decontamination procedures; and
- History of job site.

7.3 General Hazardous Waste Site Work Practices

Workers are expected to adhere to established safe work practices for their respective specialties (i.e., drilling, sampling, well development, etc.). A general Code of Safe Practices is presented in Appendix F. The need to exercise caution in the performance of specific work tasks while wearing PPE is made more acute due to: (1) weather conditions; (2) restricted mobility and reduced peripheral vision caused by the protective gear itself; (3) the need to maintain the integrity of the protective gear; and (4) the increased difficulty in communicating caused by respirators. Work at the site will be conducted according to established protocol and guidelines for the safety and health of all involved.

Among the most important of these principles for working at a site where hazardous materials are present are the following:

- A buddy system shall be employed. Work should be scheduled so that no person works unobserved within the exclusion zone at any time. Each worker within the exclusion zone should maintain visual contact with at least one other worker on the site. All site personnel should remain aware of each other and monitor each other's condition;

- In any unknown situation, always assume the worst conditions and plan responses accordingly;

- Because no PPE is 100% effective, all personnel must minimize contact with excavated or potentially contaminated materials. Plan work areas, decontamination areas, and procedures accordingly. Do not place equipment on drums or the ground. Do not sit on drums or other materials. Do not sit or kneel on the ground. Avoid standing in or walking through puddles or stained soils;

- **Smoking, eating, or drinking in potentially contaminated work areas will not be allowed.** To mitigate heat stress, water, Gatorade, or other non-alcoholic fluids may be consumed via squirt bottles in the contaminant reduction zone with the approval of the SSO. Open bottles, cups, etc. will not be permitted. Prior to doing such activities (outside of potentially contaminated areas), individual shall wash his/her hands and face prior to such. Oral ingestion of contaminants is a major route of entry for introducing toxic substances into the body;

- Avoid heat and other work stresses related to wearing protective gear. Work breaks should be planned to prevent stress-related accidents and fatigue;

- Personnel must be observant of not only their own immediate surroundings, but also those of others. Everyone will be working under constraints; therefore, a team effort is needed to notice and warn of impending dangerous situations. Extra precautions are necessary when working near heavy equipment and while utilizing PPE because vision, hearing, and communication may be impaired;

- Personnel with any facial hair that interferes with the proper fit of the respirator will not be allowed to work on sites requiring Level C. Work under Levels A and B is not permitted under this HASP;

- Sitting or kneeling should be avoided in areas of known or suspected areas of contamination. Hands and face should be thoroughly washed when leaving the work area. Defective PPE should be repaired or replaced immediately;

- Rigorous contingency planning and dissemination of plans to all personnel minimizes the impact of rapidly changing safety protocols in response to changing site conditions; and

- Personnel must be aware that chemical contaminants may mimic or enhance symptoms of other illnesses or intoxication. Drinking of alcohol while working onsite is prohibited during field investigation assignments.

Safe work practices to be employed during the entire progress of field activities are as follows:

- Set up, assemble, and check out all equipment for integrity and proper function prior to starting work activities;

- Do not use faulty or suspect equipment; and

- Use only new and intact protective clothing.

7.4 Personal Hygiene and Decontamination

7.4.1 General

Decontamination procedures for Level D and Modified Level D conditions consist of being required to wash hands with soap and potable water after performing any onsite activities and prior to ingestion of food or liquids. Decontamination procedures for onsite personnel during Level C conditions will follow applicable NIOSH/OSHA regulations. Decontamination procedures will be monitored by the SSO to determine their effectiveness.

7.4.2 Personal Decontamination

In the event that Level C PPE is donned to protect against hazardous waste and/or materials, the sequence for personnel decontamination for Level C PPE field activities is described below. Personnel decontamination for Level D and Modified Level D PPE activities will include the applicable procedures described below. Decontamination will occur at either a temporary job site decontamination pad or at a central decontamination pad. The SSO will determine specific methods as follows:

- If gross contamination is present, wash PPE in detergent or other appropriate solution and rinse in clean water;
- Remove hard hat;
- Remove disposable over-boots (if used);
- Remove outer gloves;
- Wash chemical-resistant boots with detergent solution and rinse with clean water;
- Remove coveralls or Tyvek suit. Starting at the neck, roll the coveralls off from the inside out and down past the boots. Take care to prevent the release and dispersion of dusts or prevent contact with decontamination water that may have accumulated on the coveralls. Do not contaminate clothing inside the coveralls during removal;
- Place disposable PPE in an appropriate container for disposal;
- Remove the respirator. Dispose of cartridges in PPE disposal container;
- Clean and disinfect the respirators and place into a plastic bag for storage;
- Remove liner gloves;
- Thoroughly wash hands and face; and
- Soap and water for hand and face cleansing will be available in the contaminant reduction zone (showers are not anticipated for this scope of work).

All disposable protective clothing shall be removed during decontamination and shall be disposed in a lidded container lined with a labeled drum liner. All waste generated at the site shall be disposed of according to the hazard classification of the debris. Wash hands with hand sanitizer stored on-site.

7.4.3 Respirators

Respirators if donned to protect against hazardous substances and other non-disposable PPE will be cleaned with alcohol wipes or manufacturer's supplied cleaning agents. When dry, respirators will be stored in accordance with PES' Respiratory Protection Program. Cartridges cannot be cleaned. New cartridges will be installed at the start of each shift.

7.5 Equipment Decontamination

Equipment utilized on the site (radios, instruments, samples, tools, drill rigs, other construction equipment) will be decontaminated prior to leaving the site. Smaller equipment can be protected from contamination by draping, masking, or otherwise covering the instruments with plastic (to the extent feasible) without hindering operation of the unit.

In the event that equipment comes in contact with potentially contaminated soil, water, or air containing dusts or other aerosols, the equipment will be cleaned before and after each use on this project. Decontamination will consist of combinations of steam cleaning and/or detergent (Liquinox® or equivalent) wash, tap water rinse, and distilled water rinse. Water from the decontamination pad will be collected in a sump and transferred to a large storage tank or pumped and properly disposed of when full.

Contaminated portable equipment will be taken from the drop area and the protective coverings removed and disposed in appropriate containers. Any dirt or obvious contamination will be brushed or wiped off with a disposable paper wipe. The units can then be placed inside in a clean plastic tub, wiped off with damp disposable wipes, and dried. The units will be checked, standardized, and recharged as necessary for the next day's operation, and then prepared with new protective coverings.

All contaminated articles and waste decontamination materials shall be properly containerized, labeled, and disposed of properly.

7.6 Sanitation

Temporary sanitary facilities will be established or identified at the site for the duration of the work and will be serviced at regular intervals. Workers will complete the following personal hygiene procedures before leaving the work site:

- Toilet and hand washing facilities will be located on site or an alternate sanitary facility and their specific location identified prior to beginning work activities;
- Where employees are engaging in the application of any operations involving substances which may be harmful to the employees, cleansing facilities shall be provided in proximity of the worksite and shall be so equipped as to enable employees to remove such substances. Depending upon the problem, these facilities may be in the form of ordinary soap and water or in the form of special compounds designed specifically for removal of the harmful material from skin surfaces;
- Potable drinking water will be on site for use by site personnel;

- Personal protective equipment shall be kept clean and in good repair. Safety devices, including protective clothing worn by the employee, shall not be interchanged among the employees until properly cleaned; and

- All equipment leaving the site will be free of gross hazardous and non hazardous waste (i.e. mud and/or soil).

7.7 Illumination

All work will be done in accordance with the requirements of 8 CCR 5192(m). If poor light levels are identified during any activity, adequate illumination levels will be provided to provide a minimum of 20 foot-candles in any work area.

7.8 Electrical Equipment Safety

All portable electrical hand tools and cords shall be inspected daily or when used to ensure safe operation. Any equipment found defective is to be tagged and removed from service until repairs are completed. All portable equipment will be run through a portable ground fault circuit interrupter (GFCI). Each GFCI will be tested daily using the test circuit built into the unit. Any unit failing the test will be tagged and removed from service until repairs can be completed.

All receptacles will be tested prior to use (using portable tester) to ensure that the receptacle has an adequate ground circuit and the wiring is proper. Units that fail the test will be tagged and put out of service until repairs can be made.

All electrical equipment and power cables used in and around structures containing petrochemical contamination must be explosion-proof and/or intrinsically safe and equipped with a three-wire ground lead.

7.9 Fire Prevention

If the potential for the accumulation of flammable vapors exist, periodic vapor-concentration measurements should be taken with an explosimeter or combustimeter. If at any time the vapor concentrations exceed 20% of LEL, then the SSO, or designated field worker, should immediately shut down all operations.

Only approved safety cans will be used to transport and store flammable liquids. All gasoline and diesel-driven engines requiring refueling must be shut down and allowed to cool before filling.

Smoking is not allowed during any operations within 15 feet of any work area in which petroleum products or solvents in free-floating, dissolved or vapor forms, or other flammable liquids may be present.

No open flame or spark is allowed in any area containing petroleum products, or other flammable liquids.

7.10 General Health

Medicine and alcohol can increase the effects of exposure to toxic chemicals. Unless specifically approved by a qualified physician, prescription drugs should not be taken by personnel assigned to operations where the potential for absorption, inhalation, or ingestion of toxic substances exists. Drinking and driving is prohibited at any time. Driving at excessive speeds is always prohibited.

Skin abrasions must be thoroughly protected to prevent chemicals from penetrating the abrasion. Contact lenses should not be worn by persons working on the site.

8.0 EMERGENCY RESPONSE PLAN AND CONTINGENCY PLAN

This emergency response and contingency plan, as developed under the requirements of 29 CFR 1910.120, applies to "on-site emergency responses" only. Much of the information for this section is covered elsewhere within this HASP; therefore, only the items not previously addressed will be included.

Emergency recognition, prevention, safe distances, places of refuge and emergency contacts will be discussed at the beginning of the project with all onsite personnel.

8.1 Emergency Response Plan

8.1.1 Required Emergency Equipment

The following emergency equipment will be onsite at all times:

- A first aid kit for minor injuries. The location of the first aid kit and appropriate PPE will be clearly indicated;
- Fire extinguishers;
- Portable eyewash;
- Telephone; and
- Emergency alarm.

8.1.2 Offsite Emergency Assistance

In the event of an emergency, the following emergency telephone numbers should be used: If an emergency situation occurs on the site, the PM and SSO must evaluate and critique the emergency response procedures and follow-up with corrective actions where necessary.

Oakland Fire Department: 911 or (510) 444-6043

Oakland Police Department: 911 or (510) 777-3211

8.1.3 Route to Nearest Emergency Hospital

The route to the hospital is shown on the map in Appendix G.

8.1.4 Project Contacts:

PM:	To be determined
SSO:	To be determined
Corporate HSO:	To be determined

8.2 Usual Procedure for Injury

1. Call for ambulance/medical assistance, if necessary. Notify the receiving hospital of the nature of physical injury or chemical overexposure.

2. If time allows, send/take pertinent information (i.e., Material Safety Data Sheet [MSDS]) to medical facility.

3. If the injury is minor, proceed to administer first aid, and then immediately notify the Site Safety Officer.

4. PM and HSO must be notified of situation.

If an accident, injury, or illness has occurred on site, an Accident/Injury/Illness Investigation report form will be filled out by the SSO within 48 hours of the incident and added to the personnel file. The form is presented in Appendix H.

8.3 Emergency Treatment

When transporting an injured person to a hospital, bring this HASP to assist medical personnel with diagnosis and treatment. In all cases of chemical overexposure, follow standard procedures as outlined below for poison management, first aid, and, if applicable, cardiopulmonary resuscitation. Four different routes of exposure and their respective first aid/poison management procedures are outlined below:

1. Ingestion:
   Refer to Table 1 or the applicable MSDS (if available) for specific recommendation and/or CALL THE POISON CONTROL CENTER AT: ***911*** FOR INSTRUCTIONS.

2. Inhalation:
   DO NOT ENTER CONFINED SPACE UNLESS PROPERLY EQUIPPED AND HAVE A STANDBY PERSON.

   Move the person from the contaminated environment. Initiate cardiopulmonary resuscitation (CPR) if necessary. Call or have someone call, for medical assistance. Refer to Table 1 or the applicable MSDS (if available) for additional specific information. If necessary, transport the victim to the nearest hospital as soon as possible.

3. Skin Contact:
   Wash off skin with a large amount of water immediately. Remove any contaminated clothing and rewash skin using soap, if available. Transport person to a medical facility if necessary.

4. Eyes:
   Hold eyelids open and rinse the eyes immediately with copious amounts of water for 15 minutes. If possible, have the person remove his/her contact lenses (if worn). Never permit the eyes to be rubbed. Transport person to a hospital as soon as possible.

APPENDIX A

AGREEMENT AND ACKNOWLEDGEMENT STATEMENT

APPENDIX A

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

Site Health and Safety Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the Plan and my individual responsibilities.

2. I agree to abide by the provisions of the Plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

Site Health and Safety Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the Plan and my individual responsibilities.

2. I agree to abide by the provisions of the Plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

Site Health and Safety Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the Plan and my individual responsibilities.

2. I agree to abide by the provisions of the Plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

Site Health and Safety Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the Plan and my individual responsibilities.

2. I agree to abide by the provisions of the Plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

Site Health and Safety Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the Plan and my individual responsibilities.

2. I agree to abide by the provisions of the Plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

Site Health and Safety Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the Plan and my individual responsibilities.

2. I agree to abide by the provisions of the Plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

Site Health and Safety Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the Plan and my individual responsibilities.

2. I agree to abide by the provisions of the Plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

Site Health and Safety Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the Plan and my individual responsibilities.

2. I agree to abide by the provisions of the Plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

Site Health and Safety Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the Plan and my individual responsibilities.

2. I agree to abide by the provisions of the Plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

AGREEMENT AND ACKNOWLEDGMENT STATEMENT

Site Health and Safety Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the Plan and my individual responsibilities.

2. I agree to abide by the provisions of the Plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

APPENDIX B

SITE HEALTH AND SAFETY PLAN AMENDMENT SHEET

APPENDIX B

SITE HEALTH AND SAFETY PLAN AMENDMENT SHEET

Project Name: _____

Project Number: _____

Location: _____

Changes in field activities or hazards:

Proposed Amendment:

Proposed by: _____ Date: _____

Approved by: _____ Date: _____

Declined by: _____ Date: _____

Amendment Number: _____

Amendment Effective Date: _____

APPENDIX C

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH) POCKET GUIDE DATA SHEETS FOR CHEMICALS OF POTENTIAL CONCERN

APPENDIX C

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH) POCKET GUIDE DATA SHEETS FOR CHEMICALS OF POTENTIAL CONCERN

NIOSH data sheets for site constituents of potential concern (COPCs), where available, were obtained at the following website: http://www.cdc.gov/niosh/npg/. The NIOSH website should be accessed to obtain additional information referenced in the sheets below, including the appendices web links cited therein.

NIOSH data sheets are not available for total petroleum hydrocarbons quantified as diesel (TPHd) and TPH quantified as motor oil (TPHmo).

Lead

Synonyms & Trade Names

Lead metal, Plumbum

CAS No.	RTECS No.	DOT ID & Guide
7439-92-1	OF7525000	
Formula	**Conversion**	**IDLH**
Pb		100 mg/m³ (as Pb) See: 7439921

Exposure Limits

NIOSH REL

*: TWA (8-hour) 0.050 mg/m³ See Appendix C
[*Note: The REL also applies to other lead compounds (as Pb) -- see Appendix C.]

OSHA PEL

*: [1910.1025] TWA 0.050 mg/m³ See Appendix C
[*Note: The PEL also applies to other lead compounds (as Pb) -- see Appendix C.]

Measurement Methods

NIOSH 7082, 7105, 7300, 7301, 7303, 7700, 7701, 7702, 9100, 9102, 9105;
OSHA ID121, ID125G, ID206
See: NMAM or OSHA Methods

Physical Description

A heavy, ductile, soft, gray solid.

MW:	BP:	MLT: 621°F	Sol:	VP:	IP:
207.2	3164°F		Insoluble	0 mmHg (approx)	NA
Sp.Gr:	**Fl.P:**	**UEL:**	**LEL:**		
11.34	NA	NA	NA		

Noncombustible Solid in bulk form.

Incompatibilities & Reactivities

Strong oxidizers, hydrogen peroxide, acids

Exposure Routes

inhalation, ingestion, skin and/or eye contact

Symptoms

lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension

Target Organs

Eyes, gastrointestinal tract, central nervous system, kidneys, blood, gingival tissue

Personal Protection/Sanitation

(See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: Daily
Remove: When wet or contaminated
Change: Daily

First Aid

(See procedures)
Eye: Irrigate immediately
Skin: Soap flush promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations

(See Appendix E)
NIOSH/OSHA

Up to 0.5 mg/m^3:
(APF = 10) Any air-purifying respirator with an N100, R100, or P100 filter (including N100, R100, and P100 filtering facepieces) except quarter-mask respirators.
Click here for information on selection of N, R, or P filters.
(APF = 10) Any supplied-air respirator

Up to 1.25 mg/m^3:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode
(APF = 25) Any powered, air-purifying respirator with a high-efficiency particulate filter.

Up to 2.5 mg/m^3:
(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter.
Click here for information on selection of N, R, or P filters.
(APF = 50) Any supplied-air respirator that has a tight-fitting facepiece and is operated in a continuous-flow mode

(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter
(APF = 50) Any self-contained breathing apparatus with a full facepiece
(APF = 50) Any supplied-air respirator with a full facepiece

Up to 50 mg/m³:
(APF = 1000) Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode

Up to 100 mg/m³:
(APF = 2000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

Emergency or planned entry into unknown concentrations or IDLH conditions:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter.
Click here for information on selection of N, R, or P filters.
Any appropriate escape-type, self-contained breathing apparatus

Gasoline

Synonyms & Trade Names

Motor fuel, Motor spirits, Natural gasoline, Petrol [Note: A complex mixture of volatile hydrocarbons (paraffins, cycloparaffins, and aromatics).]

CAS No.	RTECS No.	DOT ID & Guide
8006-61-9	LX3300000	1203 128
	Conversion	**IDLH**
	1 ppm = 4.5 mg/m³	Ca [N.D.]

	(approx)	See: IDLH INDEX

Exposure Limits

NIOSH REL

: Ca See Appendix A

OSHA PEL

†: none

Measurement Methods

OSHA PV2028
See: NMAM or OSHA Methods

Physical Description

Clear liquid with a characteristic odor.

MW:	BP:	FRZ:	Sol:	VP:	IP:
110 (approx)	102°F	?	Insoluble	38-300 mmHg	?
Sp.Gr(60°F): 0.72-0.76	Fl.P:	UEL:	LEL:		
	-45°F	7.6%	1.4%		

Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.

Incompatibilities & Reactivities

Strong oxidizers such as peroxides, nitric acid & perchlorates

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes, skin, mucous membrane; dermatitis; headache, lassitude (weakness, exhaustion), blurred vision, dizziness, slurred speech, confusion, convulsions; chemical pneumonitis (aspiration liquid); possible liver, kidney damage; [potential occupational carcinogen]

Target Organs

Eyes, skin, respiratory system, central nervous system, liver, kidneys

Cancer Site

[in animals: liver & kidney cancer]

Personal Protection/Sanitation	First Aid
(See protection codes) **Skin:** Prevent skin contact **Eyes:** Prevent eye contact **Wash skin:** When contaminated **Remove:** When wet (flammable) **Change:** No recommendation **Provide:** Eyewash, Quick drench	(See procedures) **Eye:** Irrigate immediately **Skin:** Soap flush immediately **Breathing:** Respiratory support **Swallow:** Medical attention immediately

Respirator Recommendations

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
Any appropriate escape-type, self-contained breathing apparatus

Benzene

Synonyms & Trade Names

Benzol, Phenyl hydride

CAS No.	RTECS No.	DOT ID & Guide
71-43-2	CY1400000	1114 130

Formula	Conversion	IDLH
C_6H_6	1 ppm = 3.19 mg/m^3	Ca [500 ppm] See: 71432

Exposure Limits	Measurement Methods
NIOSH REL : Ca TWA 0.1 ppm ST 1 ppm See Appendix A **OSHA PEL** : [1910.1028] TWA 1 ppm ST 5 ppm See Appendix F	**NIOSH** 1500, 1501, 3700, 3800; **OSHA** 12, 1005 See: NMAM or OSHA Methods

Physical Description

Colorless to light-yellow liquid with an aromatic odor. [Note: A solid below 42°F.]

MW:	BP:	FRZ:	Sol:	VP:	IP:
78.1	176°F	42°F	0.07%	75 mmHg	9.24 eV

Sp.Gr:	Fl.P:	UEL:	LEL:		
0.88	12°F	7.8%	1.2%		

Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.

Incompatibilities & Reactivities

Strong oxidizers, many fluorides & perchlorates, nitric acid

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes, skin, nose, respiratory system; dizziness; headache, nausea, staggered gait; anorexia, lassitude (weakness, exhaustion); dermatitis; bone marrow depression; [potential occupational carcinogen]

Target Organs

Eyes, skin, respiratory system, blood, central nervous system, bone marrow

Cancer Site

[leukemia]

Personal Protection/Sanitation

(See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet (flammable)
Change: No recommendation
Provide: Eyewash, Quick drench

First Aid

(See procedures)
Eye: Irrigate immediately
Skin: Soap wash immediately
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations

(See Appendix E)

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
Any appropriate escape-type, self-contained breathing apparatus

Ethyl benzene

Synonyms & Trade Names

Ethylbenzol, Phenylethane

CAS No.	RTECS No.	DOT ID & Guide

100-41-4	DA0700000	1175 130
Formula $CH_3CH_2C_6H_5$	**Conversion** 1 ppm = 4.34 mg/m³	**IDLH** 800 ppm [10%LEL] See: 100414
Exposure Limits **NIOSH REL** : TWA 100 ppm (435 mg/m³) ST 125 ppm (545 mg/m³) **OSHA PEL** †: TWA 100 ppm (435 mg/m³)		**Measurement Methods** **NIOSH** 1501; **OSHA** 7, 1002 See: NMAM or OSHA Methods

Physical Description

Colorless liquid with an aromatic odor.

MW:	BP:	FRZ:	Sol:	VP:	IP:
106.2	277°F	-139°F	0.01%	7 mmHg	8.76 eV
Sp.Gr:	**Fl.P:**	**UEL:**	**LEL:**		
0.87	55°F	6.7%	0.8%		

Class IB Flammable Liquid: Fl.P. below 73°F and BP at or above 100°F.

Incompatibilities & Reactivities

Strong oxidizers

Exposure Routes

inhalation, ingestion, skin and/or eye contact

Symptoms

irritation eyes, skin, mucous membrane; headache; dermatitis; narcosis, coma

Target Organs

Eyes, skin, respiratory system, central nervous system

Personal Protection/Sanitation	First Aid
(See protection codes) **Skin:** Prevent skin contact **Eyes:** Prevent eye contact **Wash skin:** When contaminated **Remove:** When wet (flammable) **Change:** No recommendation	(See procedures) **Eye:** Irrigate immediately **Skin:** Water flush promptly **Breathing:** Respiratory support **Swallow:** Medical attention immediately

Respirator Recommendations

NIOSH/OSHA

Up to 800 ppm:
(APF = 10) Any chemical cartridge respirator with organic vapor cartridge(s)*
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
(APF = 25) Any powered, air-purifying respirator with organic vapor cartridge(s)*
(APF = 10) Any supplied-air respirator*
(APF = 50) Any self-contained breathing apparatus with a full facepiece

Emergency or planned entry into unknown concentrations or IDLH conditions:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
Any appropriate escape-type, self-contained breathing apparatus

Diesel

LEL/UEL = 0.6/7.5 percent
TLV (TWA)/IDLH = not established
Hazard Properties = ignitable, toxic, volatile, carcinogenic
Exposure Routes = inhalation, skin absorption, and ingestion
Target Organs = central nervous system, skin, mucous membranes
Acute exposure symptoms = irritation, dizziness, loss of sense of smell.

Motor Oil

LEL/UEL = Not classified by OSHA as flammable or combustible
TLV(TWA)/IDLH = 5 mg/m^3
Hazard Properties = toxic, harmful if swallowed
Exposure Routes = inhalation, ingestion, skin absorption
Target Organs = Eyes, digestive system, liver, kidneys, CNS
Acute exposure symptoms = Dermatitis; mildly toxic by ingestion

APPENDIX D

EXPLANATION OF HAZARD EVALUATION GUIDELINES

APPENDIX D

EXPLANATION OF HAZARD EVALUATION GUIDELINES

Hazard: Airborne Contaminants

Guideline	Explanation
Threshold Limit Value Time-Weighted Average (TLV-TWA)	The TLV-TWA concentration for a normal 8-hour workday and a 40-nearly all workers may be repeatedly exposed without adverse effect.
Permissible Exposure Limit (PEL)	A time-weighted average concentration similar to (and in many cases derived from) TLV values.
Immediately Dangerous to Life or Health (IDLH)	IDLH means any atmospheric condition which poses an immediate threat to life, or which is likely to result in acute or immediate severe health effects. This includes oxygen deficiency conditions.

Hazard: Explosion

Guideline	Explanation
Lower Explosive Limit (LEL)	The minimum concentration of vapor in air below that the propagation of a flame will not occur in the presence of an ignition source.
Upper Explosive Limit (UEL)	The maximum concentration of vapor in air above which propagation of a flame will not occur in the presence of an ignition source.

Hazard: Fire

Guideline	Explanation
Flash Point	The lowest temperature at which the vapor of a combustible liquid can be made to ignite momentarily in air.

APPENDIX E

DIRECT READING INSTRUMENT LOG

APPENDIX E

DIRECT READING INSTRUMENT LOG

Project Name: Address: _____
Surveyor's Name: _____ Date: _____
Instrument: _____ Serial Number: _____
Calibration Date and Time: _____

Contaminant	Time	Reading		Contaminant	Time	Reading

APPENDIX F

CODE OF SAFE PRACTICES

APPENDIX F

CODE OF SAFE PRACTICES

(To be posted on site)

(This is a suggested code. It is general in nature and intended as a basis for preparation by the contractor of a code that fits his operations more exactly.)

GENERAL

1. All persons shall follow these safe practice rules, render every possible aid to safe operations, and report all unsafe conditions or practices to the foreman or superintendent.
2. Foremen shall insist on employees observing and obeying every rule, regulation, and order as is necessary to the safe conduct of the work, and shall take such action as is necessary to obtain observance.
3. All employees shall be given frequent accident prevention instructions. Instructions shall be given at least every 10 working days.
4. Anyone known to be under the influence of drugs or intoxicating substances that impair the employee's ability to safely perform the assigned duties shall not be allowed on the job while in that condition.
5. Horseplay, scuffling, and other acts that tend to have an adverse influence on the safety or well-being of the employees shall be prohibited.
6. Work shall be well planned and supervised to prevent injuries in the handling of materials and in working together with equipment.
7. No one shall knowingly be permitted or required to work while the employee's ability or alertness is so impaired by fatigue, illness, or other causes that it might unnecessarily expose the employee or others to injury.
8. Employees shall not enter manholes, underground vaults, chambers, tanks, silos, or other similar places that receive little ventilation, unless it has been determined that is safe to enter.
9. Employees shall be instructed to ensure that all guards and other protective devices are in proper places and adjusted, and shall report deficiencies promptly to the foreman or superintendent.
10. Crowding or pushing when boarding or leaving any vehicle or other conveyance shall be prohibited.
11. Workers shall not handle or tamper with any electrical equipment, machinery, or air or water lines in a manner not within the scope of their duties, unless they have received instructions from their foreman.
12. All injuries shall be reported promptly to the foreman or superintendent so that arrangements can be made for medical or first aid treatment.
13. When lifting heavy objects, the large muscles of the leg instead of the smaller muscles of the back shall be used.
14. Inappropriate footwear or shoes with thin or badly worn soles shall not be worn.
15. Materials, tools, or other objects shall not be thrown from buildings or structures until proper precautions are taken to protect others from the falling objects.

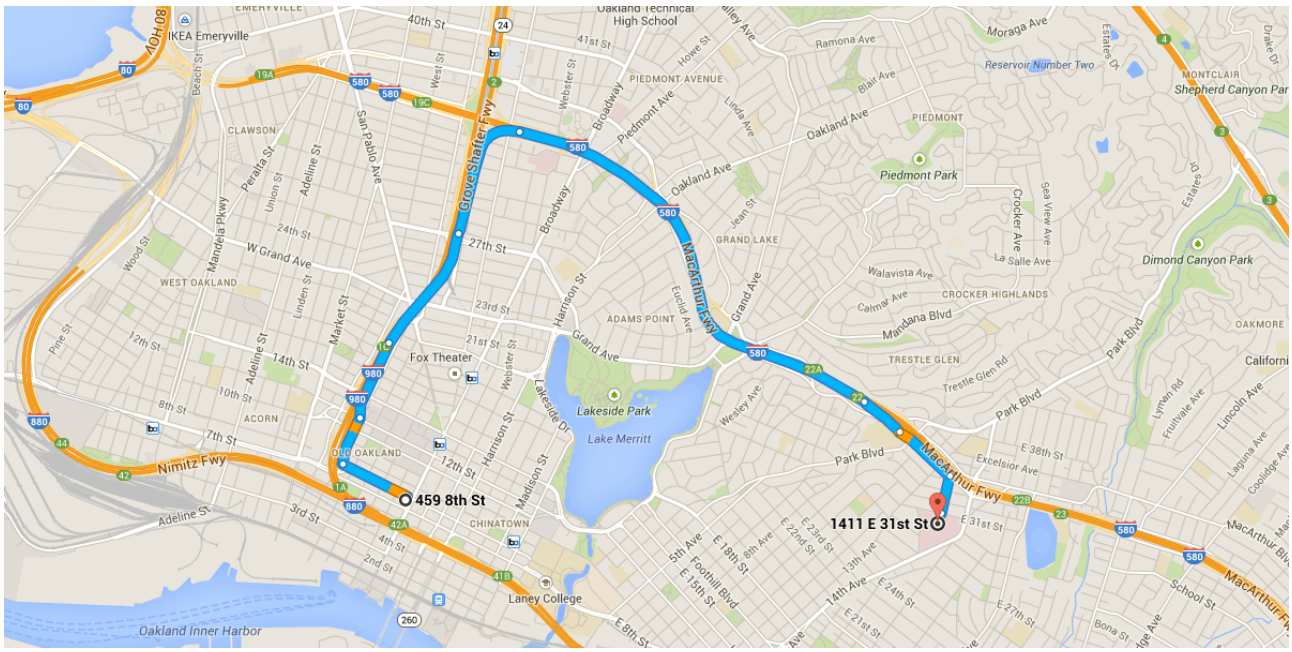
APPENDIX G

HOSPITAL LOCATION MAP

Google

Drive 4.8 miles, 8 min

Directions from **459 8th St** to **1411 E 31st St**

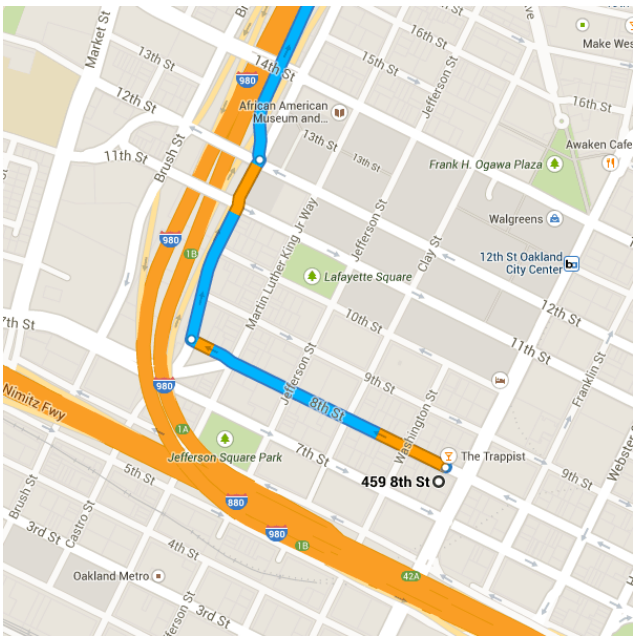


459 8th St

Oakland, CA 94607

Get on I-980 E

0.9 mi / 2 min



1. Head **northwest** on **8th St** toward **Washington St**

0.3 mi

2. Turn **right** onto **Castro St**

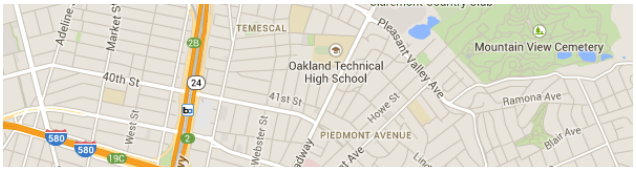
0.2 mi

3. Slight **left** to merge onto **I-980 E** toward **CA-24**

0.4 mi

Take I-580 E to MacArthur Blvd. Take the exit toward Park Blvd from I-580 E

3.4 mi / 4 min

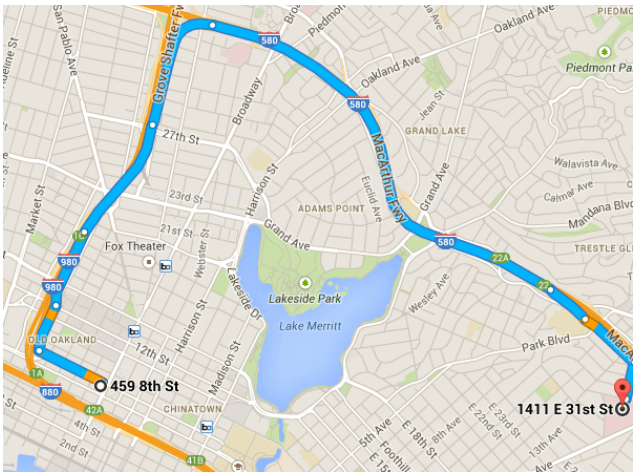


4. Merge onto **I-980 E**
0.6 mi

5. Take the exit toward **Hayward**
0.6 mi

6. Merge onto **I-580 E**
2.0 mi

7. Take the exit toward **Park Blvd**
0.2 mi



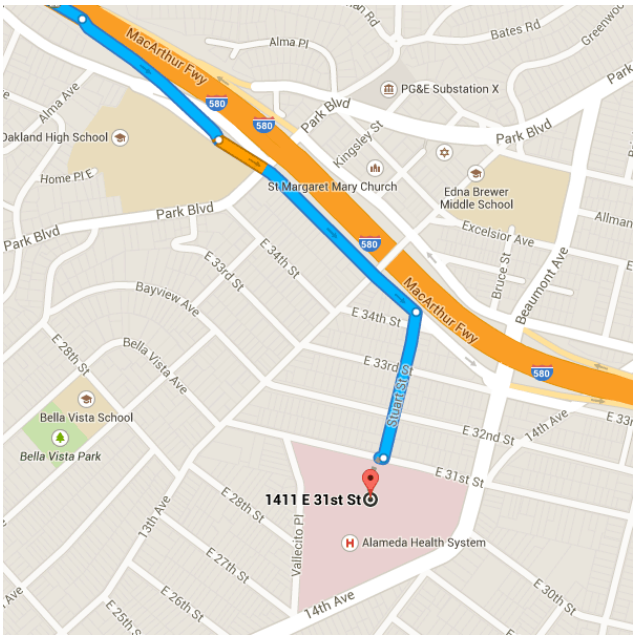
Follow **MacArthur Blvd** and **Stuart St** to **E 31st St**

0.5 mi / 2 min

8. Merge onto **MacArthur Blvd**
0.3 mi

9. Turn **right** onto **Stuart St**
0.2 mi

10. Turn **right** onto **E 31st St**
Destination will be on the left
23 ft



1411 E 31st St

Oakland, CA 94602

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

APPENDIX H

ACCIDENT, INJURY, ILLNESS INVESTIGATION REPORT

APPENDIX H
ACCIDENT, INJURY, ILLNESS INVESTIGATION REPORT

Job Site: _____

Please Print - complete all items - submit immediately

PART I - SUPERVISOR			
Employee	Employee #	Phone # ( )	
Address	City	State	Zip
Date of Birth / / Age	Sex	Social Security #	
Shift ☐ Day ☐ Evening ☐ Night	Date of Hire / /	Occupation	
Date of Injury / /	Time of Injury : AM : PM		
Location of Incident			
Date Reported / /	Time Reported	Reported to Whom?	

PART II - SUPERVISOR

(1) Was employee given First-Aid?	Yes ☐ No ☐	(3) Was Employee Placed on Transitional Duty?	Yes ☐ No ☐
(2) Sent to: Emergency Room	Yes ☐ No ☐	(4) Will employee lose time/work?	Yes ☐ No ☐
Preferred Provider	Yes ☐ No ☐	(5) If lost time, approx. days	_____
Personal Physician	Yes ☐ No ☐	(6) Was treatment refused?	Yes ☐ No ☐
Company Nurse	Yes ☐ No ☐		
Other	Yes ☐ No ☐		
Name & Address of Clinic		Phone # of Clinic	

Attach statement of all witnesses

PART III - SUPERVISOR

Name of Witness	Address	Phone
(1)		
(2)		

Describe in detail what employee was doing at the time of injury (what, how, why)

Did employee wear protective equipment? Yes ☐ No ☐

If YES, please specify

Part of body (check) indicate right or left when applicable

1 ☐ Head	7 ☐ Back	13 ☐ Knee	19 ☐ Neck
2 ☐ Face	8 ☐ Trunk	14 ☐ Leg	20 ☐ Shoulder
3 ☐ Eye	9 ☐ Arm	15 ☐ Ankle	21 ☐ Groin
4 ☐ Ear	10 ☐ Wrist	16 ☐ Foot	22 ☐ None
5 ☐ Mouth	11 ☐ Hand	17 ☐ Toe	23 ☐ Other _____
6 ☐ Heart	12 ☐ Finger	18 ☐ Hip	

Type of injury (check)

1 ☐ Reaction to foreign substances/objects	6 ☐ Fracture
2 ☐ Puncture	7 ☐ Amputation
3 ☐ Laceration	8 ☐ Sprain/Strain
4 ☐ Contusion	9 ☐ Other
5 ☐ Burn	

What type of training has been conducted to prevent recurrence?

Describe what acts or conditions may have contributed to the incident. (Analyze all the facts concerned. If either the injured person, a machine or other physical condition was involved, find out How. Use the Possible Worker's Compensation Accident Causes on the next page of this form to complete this section.)

Corrective Action(s) taken:

Investigated by: _____ Date: _____

PART IV - MANAGEMENT REVIEW

Are you satisfied with your review of Part I - III that the accident has been thoroughly investigated?
Yes ☐ No ☐
If NO, return for a more detailed report.

As a result of your review, have you identified any additional reasons why the accident occurred?
Yes ☐ No ☐
If YES, list the reasons:

Corrective action(s) you are taking?

Who have you made responsible for corrections?

Signature of Superintendent Date:

Manager Comments:

As a result of the Foreman's investigations and my comments above, I am satisfied that the accident has been thoroughly investigated. Corrective actions will be personally followed up by me until complete.

Signature of Manager _____ Date: _____

POSSIBLE WORKER'S COMPENSATION ACCIDENT CAUSES

UNSAFE ACT - PERSONAL FACTORS	UNSAFE CONDITION
Making safety devices inoperable	Inadequate guards or protection
Failure to use guards provided	Defective tools or equipment
Using defective equipment	Unsafe condition of machine
Servicing equipment in motion	Congested work area
Failure to use proper tools or equipment	Poor housekeeping
Operating machinery or equipment at unsafe speed	Unsafe floors, ramps, stairways, platforms
Failure to use personal protective equipment	Improper material storage
Operating without authority	Inadequate warning system
Lack of skill or knowledge	Fire or explosion hazards
Unsafe loading or placing	Hazardous substances
Improper lifting, lowering or carrying	Inadequate ventilation
Taking unsafe position	Radiation exposures
Unnecessary haste	Excessive noise
Influence of alcohol or drugs	Inadequate lighting
Physical limitation or mental attitude	
Unaware of hazards	
Unsafe act or other	

THE PURPOSE OF THIS INVESTIGATION FORM IS NOT TO PLACE FAULT OR BLAME. ITS PURPOSE IS TO INVESTIGATE ALL POSSIBLE CAUSES OF THE ACCIDENT TO TAKE NECESSARY CORRECTIVE ACTIONS AND CONTINUALLY IMPROVE PROJECT SAFETY.

DISTRIBUTION

SOIL MANAGEMENT PLAN
459 8TH STREET
OAKLAND, CALIFORNIA

AUGUST 17, 2015

COPY NO. ____

		Copy No.
3 Copies	Signature Land Advisors 2335 Broadway, Suite 200 Oakland, California 94612 Attention: Ms. Deborah Tu	1 – 3
3 Copies	PES File	4 – 6
1 Copy	Unbound Original	7

APPENDIX B

WASTE DISPOSAL DOCUMENTATION

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shippers of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number."

Original—Not Negotiable

Date 7/28/16. Bill of Lading No. M14031-

Shipper No.

A & A Trucking - 65 A Highway Ave. Bay Point (Name of Carrier) Carrier No. CA347132

TO: Consignee I 880 - Union pass -	FROM: Shipper
Street 5th St & Market St	Street
Destination Oakland Zip Code CA	Origin Zip Code
Route: 5th To Market. Vehicle No. Trucks #3, 6, 1 SCAC	Emergency Response Phone Number

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions (Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360.)	Weight (Subject to Correction)*	Rate or Class	CHARGES
M		Dump Trucks - M C4 per load.	220 cy	$21.48	$4725

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight".

REMIT C.O.D. TO: ADDRESS

C.O.D. Amt. $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES: $ 4725.00

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ _____ per _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____ (Signature of Consignor)

FREIGHT CHARG
Check Appropriate
☑ Freight prepaid
☐ Collect

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (co and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any p or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route t destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said erty, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effe the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifies that he is familiar w the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (iii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of Lading does apply, unless a specific exception from the requirement is provided in the Regulation for a particular material.

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203: Proper shipping name, hazardous class, UN identification number, packing group, and subsidiary class(es).

Note: Liability limitation fo or damage in this ship may be applicable. See United States Code, Sec 14706(c (1)(A) and (B).

SHIPPER

PER

CARRIER

PER

1 This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation.

Carrier acknowledges receipt of packages and any required placards. Carrier certifies emergency response in tion was made available and/or carrier has the U.S. Department of Transportation emergency response guic or equivalent documentation in the vehicle. Property described above is received in good order, except as no

BILLING OFFICE
5009 FORNI
CONCORD, C

925) 228-1118

CUSTOMER

DATE: 9-1

PROJECT NA

65353
#

TRUCK LIC.

TRANSPOR
- [ ] End Dump
- [ ] DBL Bott
- [ ] Super Du

- [ ] Bobtail
- [ ] 10 Wheeler
- [ ] Trailer

DIABLO VALLEY ROCK
5009 FONT DRIVE (A)
CONCORD, CA. 94520
925-602-8800

Sale

ID: 000556000080015594866O0
09-01-16 10:42:03

MASTERCARD ********5745
Approval Code: 001350
Amount: $ 125.00
Tax: $ 0.00
Total: $ 125.00

Invoice#: 000005

Customer Copy
THANK YOU!

CRUSHER READY
- [ ] Concrete $_____/TN
- [ ] AC $_____/TN
- [x] Brick $_____/TN
- [ ] Mixed $_____/TN
- [ ] other $_____/TN

OVERSIZE
- [ ] Concrete $_____/TN
- [ ] AC $_____/TN
- [ ] Brick $_____/TN
- [ ] Mixed $_____/TN
- [ ] other $_____/TN

OVERSIZE W/STEEL
- [ ] Concrete $_____/TN
- [ ] other $_____/TN

NET TONS
1 Load

GROSS POUNDS

TARE POUNDS

NET POUNDS

DRIVER ON
GROSS SCALE

Time Out:_____

Charge / Check # MC

Amount $ 125.00

Rec. By X

Driver's Signature

Driver's Printed Name

Diablo Valley Rock Weighmaster

DEPUTY Date 9/1/16

PERSON'S USING THESE PREMISES DO SO AT THEIR OWN RISK
CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES
RUMMAGING IN DUMP AREA IS PROHIBITED
SMOKING ON DUMP SITE IS PROHIBITED
PLEASE NOTIFY OFFICE OF ANY COMPLAINT
THANK YOU!

Hauler

45 - 8th (b)

RECYCLE FEE INVOICE

DIABLO VALLEY ROCK

LOCATION: 925 WATERBIRD WAY, MARTINEZ CA 94553

Greg –

BILLING OFFICE
5009 FORNI DRIVE SUITE A
CONCORD, CA 94520

PH (925) 228-1118

CUSTOMER / CONTRACTOR: Mauri Concrete

DATE: 9.1.16

PROJECT NAME & CITY: Richmond

No. 65361
JOB#

TRUCK LIC. PLATE #: _____ TRAILER LIC. PLATE # _____

TRANSPORTATION BY: Mauri Concrete

- ☐ End Dump
- ☐ DBL Bottom Dump
- ☐ Super Dump
- ☐ Transfer
- ☒ Semi-Bottom Dump
- ☐ Pick-up
- ☐ Bobtail
- ☒ 10 Wheeler
- ☐ Trailer

CRUSHER READY

- ☐ Concrete $_____/TN
- ☐ AC $_____/TN
- ☐ Brick $_____/TN
- ☐ Mixed $_____/TN
- ☐ other $_____/TN

OVERSIZ

- ☐ Concret
- ☐ AC
- ☐ Brick
- ☐ Mixed
- ☐ other

TEEL

_/TN

_/TN

NET TONS

1 to and

GROSS PO

TARE POU

NET POU

DRIVER (

GROSS $

Charge / Check #_____

Amount $ 225.00

DIABLO VALLEY ROCK
5009 FONI DRIVE (A)
CONCORD, CA. 94520
925-602-8800

Sale

ID: 000556000080015594860O
09/01/16 12:00:57

MASTERCARD
**********7426
Appr Code: 25873P
Total: $ 225.00

Invoice#: 000009

Customer Copy
THANK YOU!

Rec. By _____

Driver's Signature

Driver's Printed Name

Diablo Valley Rock Weighmaster

DEPUTY Date 9/1/16

PERSON'S USING THESE PREMISES DO SO AT THEIR OWN RISK
CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES
RUMMAGING IN DUMP AREA IS PROHIBITED
SMOKING ON DUMP SITE IS PROHIBITED
PLEASE NOTIFY OFFICE OF ANY COMPLAINT
THANK YOU!

RECYCLE FEE INVOICE

DIABLO VALLEY ROCK

LOCATION: 925 WATERBIRD WAY, MARTINEZ CA 94553

BILLING OFFICE
5009 FORNI DRIVE SUITE A
CONCORD, CA 94520

PH (925) 228-1118

CUSTOMER / CONTRACTOR: Mauri Concrete

DATE: 8.11.16

No. 64670

PROJECT NAME & CITY: Oakland

JOB#

TRUCK LIC. PLATE #: _____ TRAILER LIC. PLATE # _____

TRANSPORTATION BY: Mauri Concrete

- ☐ End Dump
- ☐ Transfer
- ☐ Bobtail
- ☐ DBL Bottom Dump
- ☐ Semi-Bottom D...
- ☐ ...er
- ☐ Super Dump
- ☐ Pick-up

CRUSHER READY		OVERSIZE		EEL
☐ Concrete	$_____/TN	☐ Concrete	$	TN
☐ AC	$_____/TN	☐ AC	$	TN
☒ Brick	$_____/TN	☐ Brick	$	
☐ Mixed	$_____/TN	☐ Mixed	$	
☐ other	$_____/TN	☐ other	$	

NET TONS: 1 load

GROSS POUND

TARE POUNDS

NET POUNDS

DRIVER ON

GROSS SCALE

Charge / Check # MC

Amount $ 225.00

DIABLO VALLEY ROCK
5009 FONI DRIVE (A)
CONCORD, CA, 94520
925-602-8800

Sale

ID: 000556000080015594860O
08/11/16 12:53:56

MASTERCARD
**********7426
Appr Code: 67468P
Total:

Invoice#: 000011
$ 225.00

Customer Copy
THANK YOU!

Rec. By _____

Driver's Signature

Driver's Printed Name

Diablo Valley Rock Weighmaster

DEPUTY Date 8/11/16

PERSON'S USING THESE PREMISES DO SO AT THEIR OWN RISK
CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES
RUMMAGING IN DUMP AREA IS PROHIBITED
SMOKING ON DUMP SITE IS PROHIBITED
PLEASE NOTIFY OFFICE OF ANY COMPLAINT
THANK YOU!

RECYCLE FEE INVOICE

DIABLO VALLEY R

LOCATION: 925 WATERBIRD WAY, MA

BILLING OFFICE
5009 FORNI DRIVE SUITE A
CONCORD, CA 94520

CUSTOMER / CONTRACTOR: Nam

DATE: 9.13.16

PROJECT NAME & CITY: Richmo

TRUCK LIC. PLATE #: _____ TRAILE

TRANSPORTATION BY: Nam

- ☐ End Dump
- ☒ DBL Bottom Dump
- ☐ Super Dump
- ☐ Transfer
- ☒ Semi-Botto
- ☐ Pick-up

CRUSHER READY

- ☒ Concrete $_____/TN
- ☐ AC $_____/TN
- ☐ Brick $_____/TN
- ☐ Mixed $_____/TN
- ☐ other $_____/TN

OVERSIZE

- ☒ Concrete
- ☐ AC $_____
- ☐ Brick $_____/TN
- ☐ Mixed $_____/TN
- ☐ other $_____/TN

EL
TN
TN

NET TONS	GROSS POUNDS
1 load	TARE POUNDS
	NET POUNDS
Charge / Check # UC	DRIVER ON GROSS SCALE
Amount $ 100.00	Time Out: _____

Rec. By _____

Driver's Signature

Driver's Printed Name

Diablo Valley Rock Weighmaster

DEPUTY Date 9/13/16

PERSON'S USING THESE PREMISES DO SO AT THEIR OWN RISK
CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES
RUMMAGING IN DUMP AREA IS PROHIBITED
SMOKING ON DUMP SITE IS PROHIBITED
PLEASE NOTIFY OFFICE OF ANY COMPLAINT
THANK YOU!

RECYCLE FEE INVOICE

DIABLO VALLEY ROCK
5009 FORNI DRIVE (A)
CONCORD, CA. 94520
925-602-8800

Sale

ID: 000556000080015594860O
09/13/16 09:18:22

MASTERCARD

**********4898

Appr Code: 91526T Invoice#: 000003

Total: $ 100.00

Customer Copy
THANK YOU!

DIABLO VALLEY ROCK

LOCATION: 925 WATERBIRD WAY, MARTINEZ CA 94553

459-61[illegible]

BILLING OFFICE
5009 FORNI DRIVE SUITE A
CONCORD, CA 94520

PH (925) 228-1118

CUSTOMER / CONTRACTOR: Mauri Concrete

DATE: 10-21-16

PROJECT NAME & CITY: Oakland

No. 67082
JOB#

TRUCK LIC. PLATE #: _____ TRAILER LIC. PLATE #

TRANSPORTATION BY: Mauri-Con

- ☐ End Dump
- ☐ DBL Bottom Dump
- ☐ Super Dump
- ☐ Transfer
- ☐ Semi-Bottom Di
- ☐ Pick-up

CRUSHER READY

- ☒ Concrete $____/TN
- ☐ AC $____/TN
- ☒ Brick $____/TN
- ☐ Mixed $____/TN
- ☐ other $____/TN

OVERSIZE

- ☐ Concrete $
- ☐ AC $
- ☐ Brick $
- ☐ Mixed $
- ☐ other $

NET TONS: 1 load

GROSS POUNDS

TARE POUNDS

NET POUNDS

DRIVER ON

GROSS SCALE

Time Out

Charge / Check # WC

Amount $ 125.00

DIABLO VALLEY ROCK
5009 FONI DRIVE (A)
CONCORD, CA. 94520
925-602-8800

Sale

ID: 000556000080015594860O
10/21/16 09:57:51

MASTERCARD

**********7426

Appr Code: 92749P Invoice#: 000087

Total: $ 125.00

Customer Copy
THANK YOU!

Rec. By _____

Driver's Signature

Driver's Printed Name

Diablo Valley Rock Weighmaster

DEPUTY Date 10/21/16

PERSON'S USING THESE PREMISES DO SO AT THEIR OWN RISK
CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES
RUMMAGING IN DUMP AREA IS PROHIBITED
SMOKING ON DUMP SITE IS PROHIBITED
PLEASE NOTIFY OFFICE OF ANY COMPLAINT
THANK YOU!

RECYCLE FEE INVOICE

DIABLO VALLEY ROCK

LOCATION: 925 WATERBIRD WAY, MARTINEZ CA 94553

BILLING OFFICE
5009 FORNI DRIVE SUITE A
CONCORD, CA 94520

PH (925) 228-1118

CUSTOMER / CONTRACTOR: Main Concrete

DATE: 10/4/16

No. 66576

PROJECT NAME & CITY: El Cabrante

JOB#

TRUCK LIC. PLATE #: _____ TRAILER LIC. PLATE # _____

TRANSPORTATION BY: Main Concr

- ☐ End Dump
- ☐ Transfer
- ☐ DBL Bottom Dump
- ☐ Semi-Bottom D
- ☐ Super Dump
- ☐ Pick-up

CRUSHER READY		OVERSIZE	
☐ Concrete	$_____/TN	☐ Concrete	$
☐ AC	$_____/TN	☐ AC	$
☑ Brick	$_____/TN	☐ Brick	$
☐ Mixed	$_____/TN	☐ Mixed	$
☐ other	$_____/TN	☐ other	$

NET TONS	GROSS POUNDS
	TARE POUNDS
	NET POUNDS
	DRIVER ON GROSS SCALE
Charge / Check # VISA	T
Amount $ 125.00	

DIABLO VALLEY ROCK
5009 FONI DRIVE (A)
CONCORD, CA. 94520
925-602-8800

Sale

ID: 000556000080015594800
10/04/16 13:01:01

VISA
xxxxxxxxxxxx8464
Appr Code: 004098 Invoice#: 000023
Total: $ 125.00

Customer Copy
THANK YOU!

Rec. By _____

Driver's Signature

Driver's Printed Name

Diablo Valley Rock Weighmaster

DEPUTY Date 10/4/16

PERSON'S USING THESE PREMISES DO SO AT THEIR OWN RISK
CHILDREN AND PETS ARE NOT ALLOWED OUT OF VEHICLES
RUMMAGING IN DUMP AREA IS PROHIBITED
SMOKING ON DUMP SITE IS PROHIBITED
PLEASE NOTIFY OFFICE OF ANY COMPLAINT
THANK YOU!

RECYCLE FEE INVOICE

SITE KELLER CANYON LANDFILL 925-232-2999
901 Bailey Road-Pittsburg, CA

CUSTOMER 002279
CASH/ONE TIME CUSTOMERS
901 BAILEY ROAD
PITTSBURG, CA 94565
Contract:GATE DIRTH [Inbound]

SITE 01 | TICKET # 1072728 | CELL

WEIGHMASTER Felipe C.

DATE/TIME IN 8/22/16 2:54 pm | DATE/TIME OUT 8/22/16 2:54 pm

VEHICLE A & A TRUCKING | CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT | NET TONS
TARE OUT TARE WEIGHT | NET WEIGHT

INBOUND
CASH

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
		458 8th Street Oakland CA Origin: Oakland	$0.00	$0.00	$0.00	$0.00
				$0.00	$0.00	$0.00
		TOTAL 2000 YARDS DIRT		$0.00	$0.00	$0.00

Payment (s)

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accurace, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE _____

NET AMOUNT $0.00
TENDERED $0.00
CHANGE
CHECK#

RS-F042UPR (07/12)

DISTRIBUTION
RECORD REPORT OF CONSTRUCTION
PROGRESS REPORT
459 8TH STREET
OAKLAND, CALIFORNIA

OCTOBER 28, 2016

COPY NO. _____

		Copy No
3 Copies	459 8th Street, LLC 2335 Broadway, Suite 200 Oakland, California 94612 Attention: Ms. Deborah Tu	1 – 3
1 Copy	Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, California 94502-6577 Attention: Ms. Kit Soo, P.G.	electronic only
2 Copies	PES Job Files	4 – 5
1 Copy	Unbound Original	6