

## Detterman, Mark, Env. Health

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**From:** Sami Malaeb [s.malaeb@comcast.net]  
**Sent:** Wednesday, October 16, 2013 11:14 AM  
**To:** Detterman, Mark, Env. Health  
**Cc:** britpete@aol.com  
**Subject:** RE: RO2945; Chevron 9-8861; 2145 35th Ave, Oakland: Soil and Groundwater Investigation; Additional Soil Bores  
**Attachments:** Figure 22 Locations of Borings 10.16.13).pdf; TABLE 1 (Soil Analytical Results for Offsite borings).pdf; TABLE 2 (Groundwater Analytical Results 07.02 and 07.03, 2013).pdf; BH-23 Boring Log (09.27.2013).pdf; BH-24 Boring Log (09.27.2013).pdf; BH-25 Boring Log (09.27.2013).pdf

Hi Mark:

This email is to summarize the latest drilling and sampling activities at the site located at 2145 35<sup>th</sup> Avenue in Oakland. As planned, we drilled borings BH23, BH24, and BH25 on September 27, 2013. No petroleum hydrocarbons were detected in soil or groundwater. Attached please find an updated and corrected figure showing the locations of the borings and projected groundwater plume. Also, we attached updated tables for the offsite boring soil and groundwater results and the boring logs.

What is worth mentioning is that in drilling borings BH24 and BH25, soil color approximately between 12 to 16 feet below surface grade was greenish gray with no odor or detection of petroleum hydrocarbons. This would indicate plume bio-attenuation at these locations. At this point we conclude that enough borings were drilled to predict the extent of the plume and no further borings are needed. We plan to start preparing the offsite soil and groundwater investigation report to document the drilling in July and September of this year. In this report, we plan to update the conceptual site model, including the sensitive receptor and well survey and present the conclusions and recommendations.

Due to the needed time for offsite access, we request an extension to submit the soil and groundwater investigation report from October 25, 2013 to December 6, 2013. That is an extension of approximately 45 days. I will call you to discuss this email.

Thanks,

Regards,

EEC  
Sami Malaeb, PE, QSP/QSD  
Cell: (925) 858-9608

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**From:** Detterman, Mark, Env. Health [mailto:Mark.Detterman@acgov.org]  
**Sent:** Wednesday, September 25, 2013 2:15 PM  
**To:** 'Sami Malaeb'  
**Cc:** britpete@aol.com  
**Subject:** RE: RO2945; Chevron 9-8861; 2145 35th Ave, Oakland: Soil and Groundwater Investigation; Additional Soil Bores

Thanks Sami. The figure looks good.

*Mark Detterman*  
*Senior Hazardous Materials Specialist, PG, CEG*  
*Alameda County Environmental Health*

1131 Harbor Bay Parkway  
Alameda, CA 94502  
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PDF copies of case files can be downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

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**From:** Sami Malaeb [<mailto:s.malaeb@comcast.net>]  
**Sent:** Wednesday, September 25, 2013 11:18 AM  
**To:** Detterman, Mark, Env. Health  
**Cc:** [britpete@aol.com](mailto:britpete@aol.com)  
**Subject:** RE: RO2945; Chevron 9-8861; 2145 35th Ave, Oakland: Soil and Groundwater Investigation; Additional Soil Bores

Hi Mark:

I was successful getting a permission to drill behind the neighboring Apartment building and on 35<sup>th</sup> Avenue. The drilling date is scheduled for this Friday, September 27, 2013. On Friday, we will complete three borings (BH23, BH24, and BH25). See the attached figure. I will discuss the analytical results for the soil and groundwater from these borings with you once I receive them.

Let me know if you have any questions.

Regards,

EEC  
Sami Malaeb, PE, QSP/QSD  
Cell: (925) 858-9608

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**From:** Sami Malaeb [<mailto:s.malaeb@comcast.net>]  
**Sent:** Tuesday, August 20, 2013 2:34 PM  
**To:** 'Detterman, Mark, Env. Health'  
**Cc:** 'britpete@aol.com'  
**Subject:** RE: RO2945; Chevron 9-8861; 2145 35th Ave, Oakland: Soil and Groundwater Investigation; Additional Soil Bores

Hi Mark:

Thanks for your email below. Just couple of items:

1. The Figure you attached to your directive was not the updated one. Please see the updated figure I provided to you, attached.
2. Please note that an offsite utility and receptor survey has been completed and documented in the report dated August 2012 and titled "PHASE II ENVIRONMENTAL INVESTIGATION REPORT AND SUPPLEMENTAL INVESTIGATION WORKPLAN". The utilities offsite are still the same. Therefore, such a survey is still valid.

Regards,

EEC

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**From:** Detterman, Mark, Env. Health [<mailto:Mark.Detterman@acgov.org>]  
**Sent:** Tuesday, August 20, 2013 12:35 PM  
**To:** 'Sami Malaeb'; [britpete@aol.com](mailto:britpete@aol.com); [reinlib@aol.com](mailto:reinlib@aol.com); [LGRIFFIN@OAKLANDNET.COM](mailto:LGRIFFIN@OAKLANDNET.COM); 'mrodarte@waterboards.ca.gov'  
**Cc:** Roe, Dilan, Env. Health  
**Subject:** RO2945; Chevron 9-8861; 2145 35th Ave, Oakland: Soil and Groundwater Investigation; Additional Soil Bores

Sami,

Thanks for the packet of data from the most recent site investigation, including the revised aerial image of existing and proposed soil bore locations (attached). You have indicated that the aerial image provides the best depiction of soil bore locations due to the scale of the figure. As originally intended, after the submittal of the data packet it was anticipated that groundwater monitoring wells would be installed to provide downgradient delineation of the groundwater plume. While the recently installed soil bores detected potentially significant concentrations of TPH immediately offsite (up to 7,100 ug/l TPHg, 5,000 ug/l TPHss, 2,100 ug/l TPHd, and 8 ug/l benzene), they do not appear to have detected the downgradient extent of the groundwater contamination. Because the site is located in a stream valley and the subsurface is very granular, the possibility of natural preferential pathways (paleochannels such as buried stream segments) may be providing a natural conduit away from the site. ACEH is in agreement that it appears more appropriate to redirect site activities and install up to 5 additional soil bores in order to understand natural pathways in the subsurface beneath the site and vicinity. As such two limited soil bore transects have been proposed (infill of a line between BH18 and BH19, and a transect perpendicular to 35<sup>th</sup> Ave - BH19 to BH25). As discussed, due to the potential for these natural conduits, ACEH prefers soil bore transects with a spacing of no more than 20 feet in distance. ACEH understands that the bores in these two transects will be repositioned slightly in order to meet this requested spacing goal. It is understood that bores BH26 and BH27 may be repositioned to meet the spacing goal, or held in reserve in case indications of contamination are encountered in the other transects. Please note that the installation of groundwater monitoring wells has not been eliminated; it may still be appropriate to install wells downgradient of the site presuming an offsite soil or groundwater plume is identified.

While not previously requested it appears that an offsite utility conduit survey will be useful to understanding the potential downgradient extent of groundwater contamination at the site and vicinity. It is understood that approved costs may not include this scope or work. Because the information will likely prove useful, we can discuss when the work is best incorporated into the work flow. Groundwater appears to be located at depths that are coincident with typical utility installation depths and may also provide a manmade preferential pathway away from the site that may account for the apparent lack of an offsite groundwater plume. Thus the utilities should be accounted for in order to understand contaminant flow pathways. As a consequence, ACEH requests that a utility survey (location and depth) of utilities in the vicinity of the site be illustrated in future site plans. Please see Attachment A, Preferential Pathway and Sensitive Receptor Survey, but please be aware that a sensitive receptor survey is currently not requested as an offsite plume has not been documented at this time.

I've also set a delivery date for the report; however, should additional work, such as the installation of groundwater wells be needed, the date can and should be revised to allow sufficient time for the additional actions. Should that be required, please let me know.

### **TECHNICAL REPORT REQUEST**

Please upload technical reports to the ACEH ftp site (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the specified file naming convention below, according to the following schedule:

- **October 25, 2013**– Soil and Groundwater Investigation Report; with Revised Cross Sections; File to be named: RO2945\_SWI\_R\_yyyy-mm-dd

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

Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>. If your email address does not appear on the cover page of this notification, ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

If you have any questions, please call me at (510) 567-6876 or send me an electronic mail message at [mark.detterman@acgov.org](mailto:mark.detterman@acgov.org).

*Mark Detterman  
Senior Hazardous Materials Specialist, PG, CEG  
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Email: [mark.detterman@acgov.org](mailto:mark.detterman@acgov.org)*

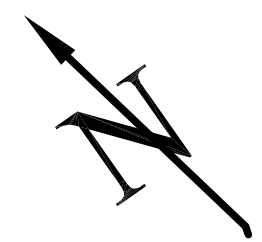
*PDF copies of case files can be downloaded at:*

*<http://www.acgov.org/aceh/lop/ust.htm>*

RESIDENTIAL HOUSES

# SALISBURY STREET

CALCULATED GROUNDWATER FLOW DIRECTION



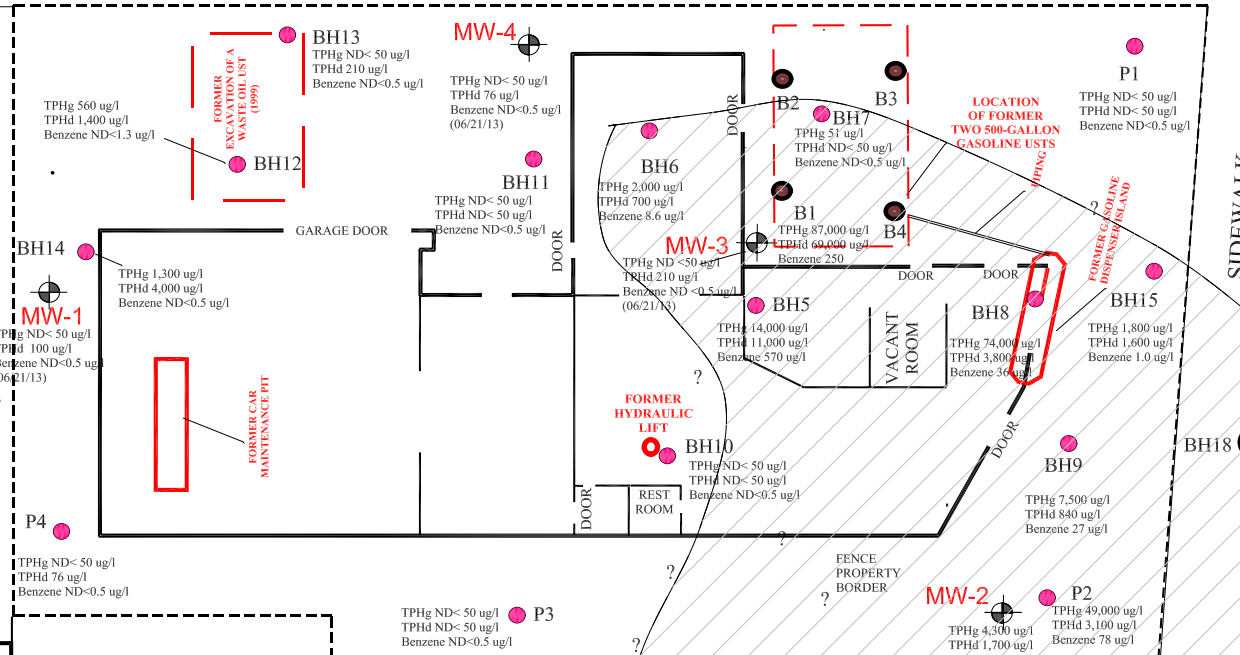
SIDEWALK

0 FEET 20  
APPROXIMATE SCALE

SUBJECT SITE

RESIDENTIAL HOUSE

RESIDENTIAL HOUSE



35TH AVENUE

SIDEWALK

RESIDENTIAL HOUSES

DRILLED MONITORING WELLS IN 2012

BORINGS DRILLED IN 2012

BORINGS DRILLED IN 2007

BORINGS DRILLED IN JULY 2013

BORINGS DRILLED IN SEPTEMBER 2013

TPHg 560 ug/l  
TPHd 1,400 ug/l  
Benzene ND<1.3 ug/l

Concentrations in Groundwater

APARTMENT BUILDING

PROJECTED HYDROCARBON PLUME IN SHALLOW WATER

RESIDENTIAL HOUSES

## FIGURE 22

### OCTOBER 2013

#### BORING LOCATIONS 2145 35TH AVENUE, OAKLAND, CALIFORNIA

RESIDENTIAL HOUSES



1485 BAYSHORE BOULEVARD, SUITE 374  
SAN FRANCISCO, CA 94124

BH20  
TPHg <50 ug/l  
TPHd <49 ug/l  
Benzene <0.5 ug/l

BH22  
TPHg <50 ug/l  
TPHd <49 ug/l  
Benzene <0.5 ug/l

BH25  
TPHg <50 ug/l  
TPHd <52 ug/l  
Benzene <0.5 ug/l

BH24  
TPHg <50 ug/l  
TPHd <52 ug/l  
Benzene <0.5 ug/l

BH23  
TPHg <50 ug/l  
TPHd <52 ug/l  
Benzene <0.5 ug/l

TPHg <50 ug/l  
TPHd <49 ug/l  
Benzene <0.5 ug/l

BH21

BH16  
TPHg 190 ug/l  
TPHd <49 ug/l  
Benzene <0.5 ug/l

BH17  
TPHg 7,100 ug/l  
TPHd 2,100 ug/l  
Benzene 8.0 ug/l

MW-2  
TPHg 4,300 ug/l  
TPHd 1,700 ug/l  
Benzene <0.5 ug/l  
(06/21/13)

P2  
TPHg 49,000 ug/l  
TPHd 3,100 ug/l  
Benzene 78 ug/l

BH9  
TPHg 7,500 ug/l  
TPHd 840 ug/l  
Benzene 27 ug/l

BH18  
TPHg 1,800 ug/l  
TPHd 650 ug/l  
Benzene 1.6 ug/l

BH8  
TPHg 74,000 ug/l  
TPHd 3,800 ug/l  
Benzene 360 ug/l

BH5  
TPHg 14,000 ug/l  
TPHd 11,000 ug/l  
Benzene 570 ug/l

BH1  
TPHg 87,000 ug/l  
TPHd 60,000 ug/l  
Benzene 250 ug/l

BH6  
TPHg 2,000 ug/l  
TPHd 700 ug/l  
Benzene 8.6 ug/l

BH7  
TPHg 51 ug/l  
TPHd ND<50 ug/l  
Benzene ND<0.5 ug/l

MW-4  
TPHg ND<50 ug/l  
TPHd 76 ug/l  
Benzene ND<0.5 ug/l  
(06/21/13)

BH13  
TPHg ND<50 ug/l  
TPHd 210 ug/l  
Benzene ND<0.5 ug/l

BH11  
TPHg ND<50 ug/l  
TPHd ND<50 ug/l  
Benzene ND<0.5 ug/l

BH12  
TPHg 560 ug/l  
TPHd 1,400 ug/l  
Benzene ND<1.3 ug/l

MW-1  
TPHg ND<50 ug/l  
TPHd 100 ug/l  
Benzene ND<0.5 ug/l  
(06/21/13)

BH14  
TPHg 1,300 ug/l  
TPHd 4,000 ug/l  
Benzene ND<0.5 ug/l

P4  
TPHg ND<50 ug/l  
TPHd 76 ug/l  
Benzene ND<0.5 ug/l

P3  
TPHg ND<50 ug/l  
TPHd ND<50 ug/l  
Benzene ND<0.5 ug/l



DRILLING DATE: 09/27/2013  
 DRILLING METHOD: Direct Push  
 DRILLING RIG TYPE: Geoprobe Limited Access

DRILLING LOCATION: 2145 35th Avenue, Oakland, CA  
 LOGGED BY: Sami Malaeb, PE, QSP/QSD  
 CHECKED BY: David Hoexter, PG, CEG, REA

**LOG OF BORING**  
**BH-23**

DEPTH (FEET)	SAMPLE DEPTH	SAMPLE NAME	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION	LITHOLOGY DESCRIPTION DEPTH	PID READING	COMMENTS
1				7.0" concrete top, then, Clayey Gravel/Sand mixture (GC), moist, (No odor of petroleum hydrocarbons or stain)	0.0 ' to 1.5'	0.0 ppm	Fill to ~ 1.5'
2				Black Clay (CH), medium stiff, moist (No odor of petroleum hydrocarbons or stain)	1.5' to 5.0'	0.0 ppm	
3							
4		BH23-4					
5							
6				Black Sandy Clay to Clayey Sand (CL), medium stiff, moist (turned brown to black between 11.0' and 13.0', no odor of petroleum hydrocarbons or stain)	5.0' to 11.0'	0.0 ppm	
7							
8		BH23-8					
9							
10							
11		BH23-11					
12							
13							
14				Brown Sand (SW) with ~10% gravel, medium dense, wet (No odor of petroleum hydrocarbons or stain)	13.0 ' to 15.0'	0.0 ppm	First Encountered Groundwater 
15							
16				Brown Clayey Sand (SC) medium dense, moist (No odor of petroleum hydrocarbons or stain)	15.0 ' to 16.0'	0.0 ppm	
17				BOTTOM OF BORING at 16.0'			
18							
19							
20							
21							
22							
23							
24							
25							



DRILLING DATE: 09/27/2013  
 DRILLING METHOD: Direct Push  
 DRILLING RIG TYPE: Geoprobe Limited Access

DRILLING LOCATION: 2145 35th Avenue, Oakland, CA  
 LOGGED BY: Sami Malaeb, PE, QSP/QSD  
 CHECKED BY: David Hoexter, PG, CEG, REA

**LOG OF BORING**  
**BH-24**

DEPTH (FEET)	SAMPLE DEPTH	SAMPLE NAME	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION	LITHOLOGY DESCRIPTION DEPTH	PID READING	COMMENTS
1				2.0" concrete top and sand	0.0' to 0.5'		
2				Black Clay (CH), medium stiff, moist (No odor of petroleum hydrocarbons or stain)	0.5' to 6.0'	0.0 ppm	
3							
4		BH24-4					
5							
6							
7				Dark Brown Clay (CL) with ~ 5% gravel and coarse sand, medium stiff, moist (little to no gravel from 7.0' to 10.0', no odor of petroleum hydrocarbons or stain)	6.0' to 10.0'	0.0 ppm	
8		BH24-8					
9							
10							
11				Dark Brown to Black Gravel/Sand mixture (GC), medium dense, moist to wet (No odor of petroleum hydrocarbons or stain)	10.0' to 12.0'		
12		BH24-12					
13				Gray Clay (CL) with ~ 5% gravel and coarse sand, medium stiff, moist (No odor of petroleum hydrocarbons)	12.0' to 13.0'		
14				Dark Gray Clayey Sand (SC) medium dense, moist to wet (No odor of petroleum hydrocarbons, color indicates bio-attenuated petroleum hydrocarbons)	13.0' to 16.0'	0.0 ppm	
15		BH24-16					
16							
17				BOTTOM OF BORING at 16.0'			
18							
19							
20							
21							
22							
23							
24							
25							

First Encountered Groundwater



Color indicates bio-attenuated petroleum hydrocarbons between 13.0' and 16.0'





DRILLING DATE: 09/27/2013  
 DRILLING METHOD: Direct Push  
 DRILLING RIG TYPE: Geoprobe Limited Access

DRILLING LOCATION: 2145 35th Avenue, Oakland, CA  
 LOGGED BY: Sami Malaeb, PE, QSP/QSD  
 CHECKED BY: David Hoexter, PG, CEG, REA

**LOG OF BORING**  
**BH-25**

DEPTH (FEET)	SAMPLE DEPTH	SAMPLE NAME	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION	LITHOLOGY DESCRIPTION DEPTH	PID READING	COMMENTS
1				Grass Area with Clayey Sand (SC), loose to medium dense, moist (with organics, no odor of petroleum hydrocarbons or stain)	0.0' to 1.0'		
2				Black Clay (CH), medium stiff, moist (No odor of petroleum hydrocarbons or stain)	1.0' to 4.0'	0.0 ppm	
3							
4		BH25-4					
5				Dark Brown Sandy Clay (CL), medium stiff, moist no odor of petroleum hydrocarbons or stain)	4.0' to 7.0'		
6							
7							
8		BH25-8		Dark Brown Clayey Sand (SC) medium dense, moist (No odor of petroleum hydrocarbons or stain)	7.0' to 8.0'	0.0 ppm	
9				No recovery	8.0' to 10.0'		
10							
11				Dark Brown to Black Clayey Sand (SC) medium dense, moist (No odor of petroleum hydrocarbon or stain)	10.0' to 13.0'		First Encountered Groundwater
12		BH25-12					
13							
14				Greenish Gray Clayey Sand (SC) medium dense, wet (No odor of petroleum hydrocarbons, color indicates bio-attenuated petroleum hydrocarbons)	13.0' to 16.0'	0.0 ppm	Color indicates bio-attenuated petroleum hydrocarbons between 13.0' and 16.0'
15		BH25-16					
16							
17				BOTTOM OF BORING at 16.0'			
18							
19							
20							
21							
22							
23							
24							
25							



TABLE 1  
SUMMARY OF CHEMICAL ANALYSES  
SOIL SAMPLES COLLECTED FROM THE BORINGS  
DRILLED ON 07/02/2103, 07/03/2013 and 09/27/2013  
PETROLEUM HYDROCARBONS, BTEX, MTBE, AND NAPHTHALENE  
2145 35<sup>th</sup> Avenue, Oakland, California

Sample ID	Date Sampled	TPH-G <sup>(1)</sup> (mg/kg) <sup>(2)</sup>	TPH-ss <sup>(3)</sup> (mg/kg)	TPH-D <sup>(4)</sup> (mgkg)	TPH as Motor Oil (mgkg)	TPH as Hydraulic Oil (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE <sup>(5)</sup> (mg/kg)	Naphthalene (mg/kg)
BH16-3	07/03/2013	<1.1	<1.1	<1.0	<5.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	<0.0049
BH16-7	07/03/2013	<1.1	<1.1	<1.0	<5.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	<0.0049
BH16-10.5	07/03/2013	<0.97	<0.97	<1.0	<5.0	<5.0	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047
BH16-16	07/03/2013	<0.99	<0.99	<1.0	<5.0	<5.0	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047
BH16-20	07/03/2013	<1.1	<1.1	<1.0	<5.0	<5.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050
BH17-2.5	07/03/2013	<1.1	<1.1	3.4(Y) <sup>6</sup>	5.1	8.5	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047
BH17-6	07/03/2013	1.4(Y) <sup>6</sup>	<1.0	<1.0	<5.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	0.0093
BH17-9	07/03/2013	590(Y) <sup>6</sup>	410(Y) <sup>6</sup>	21(Y) <sup>6</sup>	6.7	16	<1.0	<1.0	2.8	<2.0	<1.0	4.4
BH17-11	07/03/2013	130(Y) <sup>6</sup>	88	2.4(Y) <sup>6</sup>	<5.0	<5.0	<0.024	<0.024	0.066	0.070	<0.024	0.61
BH17-15.5	07/03/2013	<1.1	<1.1	<1.0	<5.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048
BH18-2.5	07/03/2013	<1.0	<1.0	<1.0	<5.0	<5.0	<0.0044	<0.0044	<0.0044	<0.0088	<0.0044	<0.0044
BH18-7.5	07/03/2013	<0.96	<0.96	<1.0	<5.0	<5.0	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047
BH18-10.5	07/03/2013	<1.0	<1.0	<1.0	<5.0	<5.0	<0.0044	<0.0044	<0.0044	<0.0088	<0.0044	<0.0044
BH18-16	07/03/2013	<1.0	<1.0	<1.0	<5.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	<0.0049
BH19-7.5	07/02/2013	<0.97	<0.97	<1.0	<5.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048
BH19-11.5	07/02/2013	<1.0	<1.0	<1.0	<5.0	<5.0	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047
BH19-16	07/02/2013	<0.93	<0.93	<1.0	<5.0	<5.0	<0.0046	<0.0046	<0.0046	<0.0092	<0.0046	<0.0046
BH20-11	07/02/2013	<0.94	<0.94	2.5(Y) <sup>6</sup>	18	17(Y) <sup>6</sup>	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	0.0094
BH20-21	07/02/2013	<1.1	<1.1	<1.0	<5.0	<5.0	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047
BH21-11	07/02/2013	<1.1	<1.1	1.6(Y) <sup>6</sup>	<5.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048
BH21-21.5	07/02/2013	<0.98	<0.98	<0.99	<5.0	<5.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050
BH22-11.5	07/02/2013	<1.1	<1.1	<1.0	<5.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048
BH22-22	07/02/2013	<1.0	<1.0	<0.99	<5.0	<5.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050
BH23-4	09/27/2013	<0.97	<0.97	<1.0	<5.0	<5.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050
BH23-8	09/27/2013	<0.95	<0.95	<0.99	<5.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	0.0049
BH23-11	09/27/2013	<1.1	<1.1	<0.99	<5.0	<5.0	<0.0045	<0.0045	<0.0045	<0.090	<0.0045	<0.0045
BH24-4	09/27/2013	<0.93	<0.93	<1.0	<5.0	<5.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050
BH24-8	09/27/2013	<0.96	<0.96	<1.0	<5.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	0.0049
BH24-12	09/27/2013	<1.1	<1.1	<1.0	<5.0	<5.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050
BH24-16	09/27/2013	<0.92	<0.92	<1.0	<5.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048
BH25-4	09/27/2013	<1.1	<1.1	<1.0	<5.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	0.0049
BH25-8	09/27/2013	<0.99	<0.99	<1.0	<5.0	<5.0	<0.0046	<0.0046	<0.0046	<0.0092	<0.0046	<0.0046
BH25-12	09/27/2013	<1.1	<1.1	<1.0	<5.0	<5.0	<0.0046	<0.0046	<0.0046	<0.0092	<0.0046	<0.0046
BH25-16	09/27/2013	<0.92	<0.92	<1.0	<5.0	<5.0	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047

TPH-G<sup>(1)</sup> = Total petroleum hydrocarbons as gasoline by EPA Method 8015B  
(mgkg)<sup>(2)</sup> = Milligram per kilogram or part per million  
TPH-ss<sup>(3)</sup> = Total petroleum hydrocarbons as Stoddard solvent by EPA Method 8015B  
TPH-D<sup>(4)</sup> = Total petroleum hydrocarbons as diesel by EPA Method 8015B  
MTBE<sup>(5)</sup> = Methyl Tertiary Butyl Ether  
(Y)<sup>(6)</sup> = Sample exhibits chromatographic pattern which does not resemble standard

TABLE 2  
SUMMARY OF CHEMICAL ANALYSES  
GROUNDWATER SAMPLES COLLECTED FROM THE BORINGS  
DRILLED ON 07/02/2103, 07/03/2013 and 09/27/2013  
PETROLEUM HYDROCARBONS, BTEX, MTBE, AND NAPHTHALENE  
2145 35<sup>th</sup> Avenue, Oakland, California

Sample ID	Date Sampled	TPH-G <sup>(1)</sup> (µg/l) <sup>(2)</sup>	TPH-ss <sup>(3)</sup> (µg/l)	TPH-D <sup>(4)</sup> (µg/l)	TPH as Motor Oil (µg/l)	TPH as Hydraulic Oil (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl benzene (µg/l)	Total Xylenes (µg/l)	MTBE <sup>(5)</sup> (µg/l)	Naphthalene (µg/l)
BH16-W	07/03/2013	<b>190 (Y)<sup>(6)</sup></b>	<b>130 (Y)<sup>(6)</sup></b>	<49	<290	<290	<0.5	<0.5	<b>0.8</b>	<b>1.2</b>	<0.5	<2.0
BH17-W	07/03/2013	<b>7,100 (Y)<sup>(6)</sup></b>	<b>5,000(Y)<sup>(6)</sup></b>	<b>2,100(Y)<sup>(6)</sup></b>	<290	<b>610 (Y)</b>	<b>8.0</b>	<b>3.0</b>	<b>140</b>	<b>340</b>	<1.0	<b>110</b>
BH18-W	07/03/2013	<b>1,800 (Y)<sup>(6)</sup></b>	<b>1,300(Y)<sup>(6)</sup></b>	<b>650 (Y)</b>	<290	<290	<b>1.6</b>	<0.5	<0.5	<b>1.0</b>	<0.5	<2.0
BH19-W	07/022013	<50	<50	<49	<290	<290	<0.5	<0.5	<0.5	<1.0	<0.5	<2.0
BH20-W	07/02/2013	<50	<50	<49	<290	<290	<0.5	<0.5	<0.5	<1.0	<0.5	<2.0
BH21-W	07/022013	<50	<50	<49	<290	<290	<0.5	<0.5	<0.5	<1.0	<0.5	<2.0
BH22-W	07/02/2013	<50	<50	<49	<290	<290	<0.5	<0.5	<0.5	<1.0	<0.5	<2.0
BH23-W	09/27/2013	<50	<50	<52	<310	<310	<0.5	<0.5	<0.5	<1.0	<0.5	<2.0
BH24-W	09/27/2013	<50	<50	<52	<310	<310	<0.5	<0.5	<0.5	<1.0	<0.5	<2.0
BH25-W	09/27/2013	<50	<50	<52	<310	<310	<0.5	<0.5	<0.5	<1.0	<0.5	<2.0

- TPH-G<sup>(1)</sup> = Total petroleum hydrocarbons as gasoline by EPA Method 8015B  
(µg/l)<sup>(2)</sup> = microgram per liter or part per million  
TPH-ss<sup>(3)</sup> = Total petroleum hydrocarbons as Stoddard solvent by EPA Method 8015B  
TPH-D<sup>(4)</sup> = Total petroleum hydrocarbons as diesel by EPA Method 8015B  
MTBE<sup>(5)</sup> = Methyl Tertiary Butyl Ether  
(Y)<sup>(6)</sup> = Sample exhibits chromatographic pattern which does not resemble standard

**Bold** = Concentration presented in bold where such a value is at or exceeds the reporting laboratory reporting limit.