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By Alameda County Environmental Health at 9:41 am, Jul 09, 2014



ARCADIS U.S., Inc.  
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**Fourth Quarter 2013 and First Quarter 2014 Semi-Annual Groundwater  
Monitoring Report  
Former BP Station #11109,  
4280 Foothill Blvd  
Oakland, California  
ACEH Case #RO0000426**

ENVIRONMENT

"I declare that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Date:  
April 30, 2014

Submitted by:

Contact:  
Hollis E. Phillips

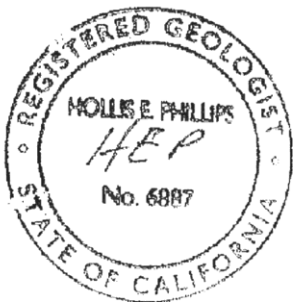
ARCADIS U.S., Inc

Phone:  
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Hollis E. Phillips, PG  
Project Manager

Our ref:  
GP09BPNA.C001



Imagine the result



Karel L. Detterman, P.G.  
Hazardous Materials Specialist  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

Subject:  
CPT/UVOST Field Investigation Work Plan  
Former BP Station #11109  
4280 Foothill Boulevard  
Oakland, California  
ACEH CASE Number: RO0000426

Dear Ms. Detterman:

ARCADIS U.S., Inc. (ARCADIS) prepared this Cone Penetration Test (CPT)/ Ultraviolet Optical Screening Tool (UVOST) Field Investigation Work Plan (work plan) to propose additional site investigation activities at the former BP service station (No. 11109), located at 4280 Foothill Boulevard in Oakland, California (site; Figure 1). This work plan was prepared in response to a meeting between the Alameda County Environmental Health (ACEH) and ARCADIS on January 30, 2014. During the meeting, the following data gaps were identified:

1. Adequacy of the monitoring well network.
2. Need for additional cross-sections, including soil boring data collected from Chevron 4265 Foothill Boulevard (RO427) and Shell 4411 Foothill Boulevard (RO415).
3. Extent of the benzene plume is not defined on site and off site.
4. Underground utilities and their potential to act as preferential pathways.
5. Updated well/sensitive receptor survey using data from both the Alameda County Public Works Agency (ACPWA) and the Department of Water Resources (DWR).
6. Further evaluation of the area around the former waste oil (WO) underground storage tank (UST).
7. Re-evaluate data collected from the free product baildown test.

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ENVIRONMENTAL

Date:  
April 4, 2014

Contact:  
Hollis E. Phillips

Phone:  
415.432.6903

Email:  
[hollis.phillips@arcadis-us.com](mailto:hollis.phillips@arcadis-us.com)

Our ref:  
GP09BPNA.C106.K0000

Imagine the result

This work plan presents a proposed scope of work to evaluate the extent of potential residual separate-phase hydrocarbons (SPH); the extent of the plume in the downgradient direction and soil and groundwater near the WO UST. Items listed above that are not evaluated in this work plan are discussed at the end of this letter.

## **Site Background**

The site is an active NTG-branded gas station located on the northern corner of the intersection of Football Boulevard and High Street in Oakland, California. The site has operated as a gasoline service station since at least the early 1970s. BP acquired the station from Mobil Oil Company in 1989 and operated the station under the BP brand. In 1994, BP sold the station to Tosco, which was acquired by Conoco Phillips who operated a 76-branded station at the site for some time. Currently, the station operates under the independent brand, NTG Self Service Gasoline.

Leaking USTs were removed and replaced in 1991. Product conveyance lines and fuel dispensing equipment were subsequently replaced in the 1990s. Existing USTs consist of three 10,000-gallon double-wall fiberglass gasoline USTs and one 1,000-gallon double-wall fiberglass WO UST. Site features are shown on Figure 2.

## **Site and Regional Geologic and Hydrogeologic Conditions**

According to the East Bay Plain Groundwater Basin Beneficial Use Evaluation Report (San Francisco Regional Water Quality Control Board [SFRWQCB] 1999), the site is located within the Oakland subarea of the East Bay Plain of the San Francisco Basin. The Oakland subarea contains a sequence of alluvial fans. The alluvial fill thickness ranges from 300 to 700 feet deep. There are no well-defined aquitards such as estuarine muds. The largest and deepest wells in this subarea historically pumped 1 to 2 million gallons per day at depths greater than 200 feet. Overall, sustainable yields are low due in part to low recharge potential. The Merritt Sand in West Oakland was an important part of the early water supply for the City of Oakland. The Merritt Sand is shallow (up to 60 feet), but before the turn of the last century, septic systems contaminated the water supply wells.

Throughout most of the Alameda County East Bay Plain, from Hayward north to Albany, water-level contours show that the general direction of groundwater flow is from east to west or from the Hayward Fault to San Francisco Bay. Groundwater flow direction generally correlates to topography. Flow direction and velocity are also influenced by buried stream channels that typically are oriented from east to west. However, in the southern end of the study area, near the San Lorenzo subarea, the direction of flow may vary. According to information presented in the East Bay Plain

Groundwater Basin Beneficial Use Evaluation Report (SFRWQCB 1999), the small set of water-level measurements available showed that the groundwater in the upper aquifers may be flowing south, with the deeper aquifers (the Alameda Formation), moving north. The nearest natural drainage is Peralta Creek, located approximately 1,500 feet west of the site. Peralta Creek flows generally north to south at its closest distance to the site.

During the sampling event conducted on September 20, 2013, the groundwater gradient was 0.03 foot per foot. Based on historical groundwater elevation data, the direction of groundwater flow was to the southwest (ARCADIS 2013a).

The most recent groundwater monitoring event was conducted on March 13, 2014. Depth to groundwater at the site ranged from approximately 10 to 16 feet below ground surface (bgs). A summary of analytical results will be provided in the Fourth Quarter 2013 and First Quarter 2014 Semiannual Groundwater Monitoring Report, which will be submitted on or before April 30, 2014.

### **Site History and Previous Assessments**

Previous environmental investigations are summarized in the Final Feasibility Study and Corrective Action Plan, Former BP Service Station No. 11109 (ARCADIS 2011).

Soil impacts originate from historical operations relating to the former USTs. Additionally soil and groundwater may have been impacted by a historical release from a dispenser island located between the USTs and the southern portion of the site (Figure 2). Laboratory analysis of soil samples collected from soil borings confirmed the presence of petroleum hydrocarbons in soil beneath the site. Groundwater has been sampled quarterly or semiannually since the 1986 site investigation, which was conducted following the originally reported UST release. Historically, measurable quantities of SPH have been detected in wells MW-5, MW-10, and MW-12. The highest concentrations of site constituents of concern (COCs) are detected at MW-5. The well was not sampled during the most recent sampling event in March 2014 due to the presence of a sheen. However, when MW-5 was last sampled (first quarter 2010), the results indicated concentrations of gasoline range organics (GRO) at 67,000 micrograms per liter ( $\mu\text{g/L}$ ), benzene at 1,400  $\mu\text{g/L}$ , toluene at 380  $\mu\text{g/L}$ , ethylbenzene at 620  $\mu\text{g/L}$ , and total xylenes at 1,800  $\mu\text{g/L}$ .

### **Proposed Subsurface Assessment Activities**

To evaluate the extent of petroleum-hydrocarbon affected soil and groundwater at the site and address the data gaps listed above, ARCADIS proposes to advance a

minimum of seven CPT/UVOST borings. Lithologic and SPH screening data from unsaturated and saturated soils will be collected from the CPT/UVOST equipment. Following SPH characterization, a maximum of three groundwater samples will be collected from each boring location to evaluate impacts in groundwater. Proposed CPT/UVOST locations are shown on Figure 2.

### **Pre-Field Activities**

Prior to initiating drilling activities, the site-specific Health and Safety Plan will be updated in accordance with state and federal requirements for use during the proposed field activities. All necessary permits and licenses will be obtained prior to initiating the subsurface investigations. Underground utilities and other potential subsurface obstructions near the proposed well locations will be located and marked prior to sampling. The utility survey will include identifying the site using white paint and obtaining an Underground Service Alert (USA-North) ticket for the site by calling USA-North at least 48 hours prior to drilling activities. Additionally, a private third-party utility locator will screen all proposed boring locations to determine the location of nearby underground utilities. Ground-penetrating radar (GPR) will be employed to determine the approximate depth of underground utilities in order to investigate the potential for preferential pathways. In addition, accessible manholes will also be uncovered to determine the depth of the utilities.

### **CPT/UVOST Borings**

A minimum of four CPT/UVOST borings (B-2 through B-5) will be advanced to delineate SPH near MW-5 and the former dispenser islands (Figure 2). Additionally one boring (B-1) will be advanced near the former WO UST and two borings (B-6 and B-7) will be advanced across Foothill Boulevard to evaluate downgradient off-site COCs. CPT/UVOST borings will be advanced to approximately 35 feet bgs. Lithologic data and real-time fluorescence measurements will be obtained from each boring to assess the lateral and vertical extents of SPH-affected material in the area. CPTs will be conducted using a piezocone connected by stainless steel rods to a hydraulic system that pushes the piezocone through the soil. The piezocone measures friction, tip resistance, and pore pressure, which are logged and used to evaluate soil types on a nearly continuous geologic log. CPT will be performed in accordance with revised (2002) ASTM International (ASTM) standards (D-5778-95).

UVOST is a down-hole tool deployed by a direct-push technology rig (i.e., CPT) that detects the laser-induced fluorescence response of polyaromatic compounds present in hydrocarbon fuels. UVOST is used to quantify relative concentrations of hydrocarbons present in soil at or below the water table. Because UVOST will be

operated in conjunction with the CPT rig, chemical data and site lithology can be correlated.

Detector response to sorbed, dissolved, or free-phase constituents varies spatially due to changes in soil type and the weathering state of the constituent. Generally, UVOST provides high-resolution vertical petroleum hydrocarbon profiles for soil and groundwater within the immediate area around the UVOST borehole. The UVOST detectors provide qualitative information (not definitive quantitative data) that permits the user to identify centers of mass and semiquantitative concentration gradients.

### **Soil Sampling**

To evaluate potential soil contamination near the former WO UST, soil samples will be collected from boring location B-1. The CPT rig will be used to advance hollow push rods to the desired sampling depth, the core (soil sampling device) will be extracted, and samples will be collected from the core. Up to two soil samples will be collected from B-1 based on photo ionization detector (PID) readings and field observations. After collecting the samples, all down-hole equipment will be retrieved and decontaminated and the borehole will be brought to grade with neat cement grout to match existing conditions.

All samples will be sealed in laboratory-supplied containers, labeled, and placed in an ice-chilled cooler for delivery to Test America, a California Department of Public Health-certified analytical laboratory, under proper chain of custody procedures. Soil samples collected from B-1 will be analyzed for the following:

- GRO and motor oil by United States Environmental Protection Agency (USEPA) Method 8015B (M)
- Benzene, toluene, ethylbenzene, xylenes (collectively, BTEX), methyl tertiary butyl ether (MTBE), and naphthalene by USEPA Method 8260B
- Polycyclic aromatic hydrocarbons (PAHs) by USEPA 8270C/D - Selective Ion Monitoring (SIM)
- Total lead by USEPA Method 6010B

Based on recent soil data collected by Pacific Gas & Electric Company beneath the sidewalk along High Street, up to two soil samples will be collected from B-3 and B-5 and analyzed for motor oil by USEPA Method 8015B (M).

## Groundwater Sampling

Groundwater grab samples will be collected from borings located adjacent to CPT boring locations B-1, B-6, and B-7. A HydroPunch<sup>®</sup> sampler with a 5-foot screened interval will be advanced to the sampling depth and groundwater samples will be collected using a bailer and submitted to TestAmerica for laboratory analysis. If sufficient water to sample does not accumulate, a 1-inch PVC screen will be temporarily installed within the borehole until sufficient water is accumulated. Collection depths will be determined based on CPT and UVOST readings. Upon completion of the sample collection, all down-hole equipment will be retrieved and decontaminated. The boreholes will be brought to grade using neat cement grout and completed at the surface to match existing conditions.

All samples will be sealed in laboratory-supplied containers, labeled, and placed in an ice-chilled cooler for delivery to Test America under proper chain of custody procedures. Groundwater samples collected adjacent to B-6 and B-7 will be analyzed for the following:

- GRO by USEPA Method 8015B (M)
- BTEX and MTBE by USEPA Method 8260B

The groundwater samples collected from boring location B-1, located near the former WO UST, will also be analyzed for:

- PAHs by USEPA 8270C/D - SIM
- Naphthalene by USEPA Method 8260B

## Quality Assurance and Quality Control Procedures

To verify that the analytical data collected during the investigation is valid and useable, the data will be evaluated using a standard quality assurance (QA) and quality control (QC) program. Field QA/QC procedures will include daily calibration of sampling equipment (including PID), use of standard chain of custody procedures for sample control, and written and visual documentation of field activities in daily field logs and in photographs. One equipment blank sample will be collected to assess the accuracy and precision of field sampling methods.

The degree of laboratory accuracy and precision will be established by evaluating method blanks, laboratory control samples, matrix spike samples, and surrogate QC

sample results. In addition, data quality related comments reported by the laboratory will be reviewed during this evaluation and incorporated into the summary report as necessary.

### **Investigation-Derived Waste Disposal**

Investigation-derived waste (IDW) generated during drilling operations will be containerized in 55-gallon drums and temporarily stored on site, pending characterization for off-site disposal. A composite sample of IDW will be collected for waste profiling purposes. Following the receipt of waste characterization results, all IDW will be transported to an appropriate disposal facility.

### **Reporting**

A site investigation summary report documenting the results of the investigation will be submitted within 60 days following completion of the activities discussed in this work plan.

### **Schedule**

ARCADIS is prepared to initiate field work after receipt of all necessary approvals and permits.

### **Remaining Items from January 30, 2014 Meeting**

1. Adequacy of the monitoring well network:
  - a. *Submerged screens.* Monitoring well screens at this site (except MW-10, MW-11, and MW-12) are typically submerged. Because these wells are located downgradient from the former USTs and former dispenser island (Figure 2), ARCADIS is of the opinion that they provide adequate coverage to assess SPH at the site. However, if the results of the CPT/UVOST investigation described in this work plan indicate that the presence of SPH is more widespread, the installation of additional monitoring wells screened across the water table will be considered.
  - b. *Groundwater flow direction.* The ACEH indicated that groundwater flow direction varies from southwest to northwest. As discussed in the Second and Third Quarters 2013 Semiannual Groundwater Monitoring Report (ARCADIS 2013a), the fluctuation observed in groundwater flow direction has occurred because wells located at the adjacent Chevron site have not



been included in groundwater elevation contour maps and due to an incorrect historical interpretation of monitoring results from third quarter 2009 through third quarter 2012 (ARCADIS 2013a). Attachment A presents a rose diagram displaying groundwater flow direction data from first quarter 1991 through third quarter 2013. Erroneously calculated data from third quarter 2009 through third quarter 2012 was omitted from the diagram. When historical data since 1991 is included, groundwater flow direction is consistently toward the southwest. Historical analytical data collected from MW-2 and MW-4 indicate minimal impacts, further indicating that the groundwater flow direction is predominantly to the southwest.

- c. *MW-2*. The ACEH indicated that MW-2 appears to have been damaged during site construction. ARCADIS confirmed that the well is in fact compromised (it is filled with dirt and gravel from bottom up to 13 feet bgs). The proposed boring location B-1 (and adjacent hydropunch location) will provide supplemental soil and groundwater data for this area.
2. Need for additional cross sections, including Chevron 4265 Foothill Boulevard (RO427) and Shell 4411 Foothill Boulevard (RO415) data, as appropriate. Cross sections will be generated that include the new CPT and SPH data, historical site lithology, and Chevron and Shell lithology. The cross sections will be submitted with the site investigation summary report.
3. Evaluate underground utilities acting as preferential pathways. ARCADIS contacted the City of Oakland to determine the approximate depth of known utilities beneath Foothill Boulevard and High Street. As indicated in an email from Fred Loeser of the City of Oakland (Attachment B), the depth of the utilities on High Street and Foothill Boulevard are unknown and the only way to determine the depth is to pot hole and visually inspect the depths in existing manholes. Additionally, Foothill Boulevard at High Street is a moratorium street; therefore, excavation is discouraged by the City of Oakland.

To determine the approximate depth of the utilities, ARCADIS proposes to use GPR during the utility locate activities and look into accessible manhole covers. Based on these surveys, ARCADIS will evaluate if utilities may intercept groundwater. If it is determined that utilities intercept groundwater, ARCADIS will advance a CPT/Hydropunch boring between the site and the utility (adjacent to the utility). ARCADIS' health and safety policy for subsurface investigations requires a distance of at least 3 feet from a known utility; this policy precludes ARCADIS from drilling in trenches with known utilities. Immediately following the utility survey, ARCADIS will notify the ACEH of the findings and will propose

potential additional sample locations, if necessary. ARCADIS recommends collecting additional samples (only if necessary) during the proposed site investigation. Therefore, immediate review and response by the ACEH is necessary.

4. Update well/sensitive receptor survey using data from both ACPWA and the DWR. Attachments C and D present requests for an ACPWA well completion report and a DWR well completion report that require ACEH signature. Upon receipt of a signed copy of the requests, ARCADIS will submit the requests to the ACPWA and the DWR, respectively. Results of the survey will be discussed in the site investigation report (providing the agencies submit information prior to the due date of the submittal).
5. Re-evaluate data from the free product baildown test. Additional review of the free product baildown test data provided in the Results of DPE Pilot Test and SPH Removal letter (letter; ARCADIS 2013b), indicates that the data presented in Table 2 of the letter correspond with the values in the field notes. Additionally, the data presented in the letter (ARCADIS 2013b) also correspond with the values in the field notes, except for product thickness at MW-12 on November 7, 2012 (ARCADIS 2013b). SPH thickness was incorrectly reported as 0.21 foot in the letter, but was correctly presented in Table 2 of the letter as 0.52 foot (ARCADIS 2013b).

Review of the ACEH's handwritten notes provided during the January 30, 2014 meeting indicate that post-bailing SPH thickness was assumed to be zero foot. When the SPH recharge rates are calculated based on the actual post-bailing product thicknesses presented in Table 2 of the letter, the recharge rates presented in the letter are correct (ARCADIS 2013b). Additionally, the ACEH noted a 3 foot rise in depth to water in MW-5, MW-10, and MW-12 from November to December 2012. This change in water level did not affect the SPH baildown test because the screen at MW-5 was submerged throughout the test and the screen at MW-12 was exposed throughout the test. The screen at MW-10 was submerged in December 2012; however, SPH was not observed at this location during the event in January 2013 when the screen was exposed. This additional evaluation confirms that the results of the SPH baildown test presented in the letter (ARCADIS 2013b) are correct.

If you have any questions or comments regarding the contents of this work plan, please contact Hollis Phillips at 415.432.6903 or by e-mail at [hollis.phillips@arcadis-us.com](mailto:hollis.phillips@arcadis-us.com).

Sincerely,  
ARCADIS U.S., Inc.



Hollis Phillips, P.G.  
Principal Geologist

Enclosures:

Figure 1: Site Location Map

Figure 2: Site Plan Showing Proposed CPT/UVOST Locations

Attachment A: Rose Diagram

Attachment B: Response from City of Oakland Regarding Utility Depth

Attachment C: ACPWA Well Completion Request Form and Email Correspondence

Attachment D: DWR Well Completion Request Form

Copies:

File

## References

ARCADIS. 2011. Final Feasibility Study and Corrective Action Plan, Former BP Station No. 11109, 4280 Foothill Blvd., Oakland, California, ACEH Case #RO0000426. January 14.

ARCADIS. 2013a. Second and Third Quarter 2013 Semiannual Groundwater Monitoring Report, Former BP Station #11109, 4280 Foothill Blvd., Oakland, California, ACEH Case #RO0000426. October 30.

ARCADIS. 2013b. Results of DPE Pilot Test and SPH Removal Letter, Former BP Station #11109, 4280 Foothill Blvd., Oakland, California, ACEH Case #RO0000426. June 28.

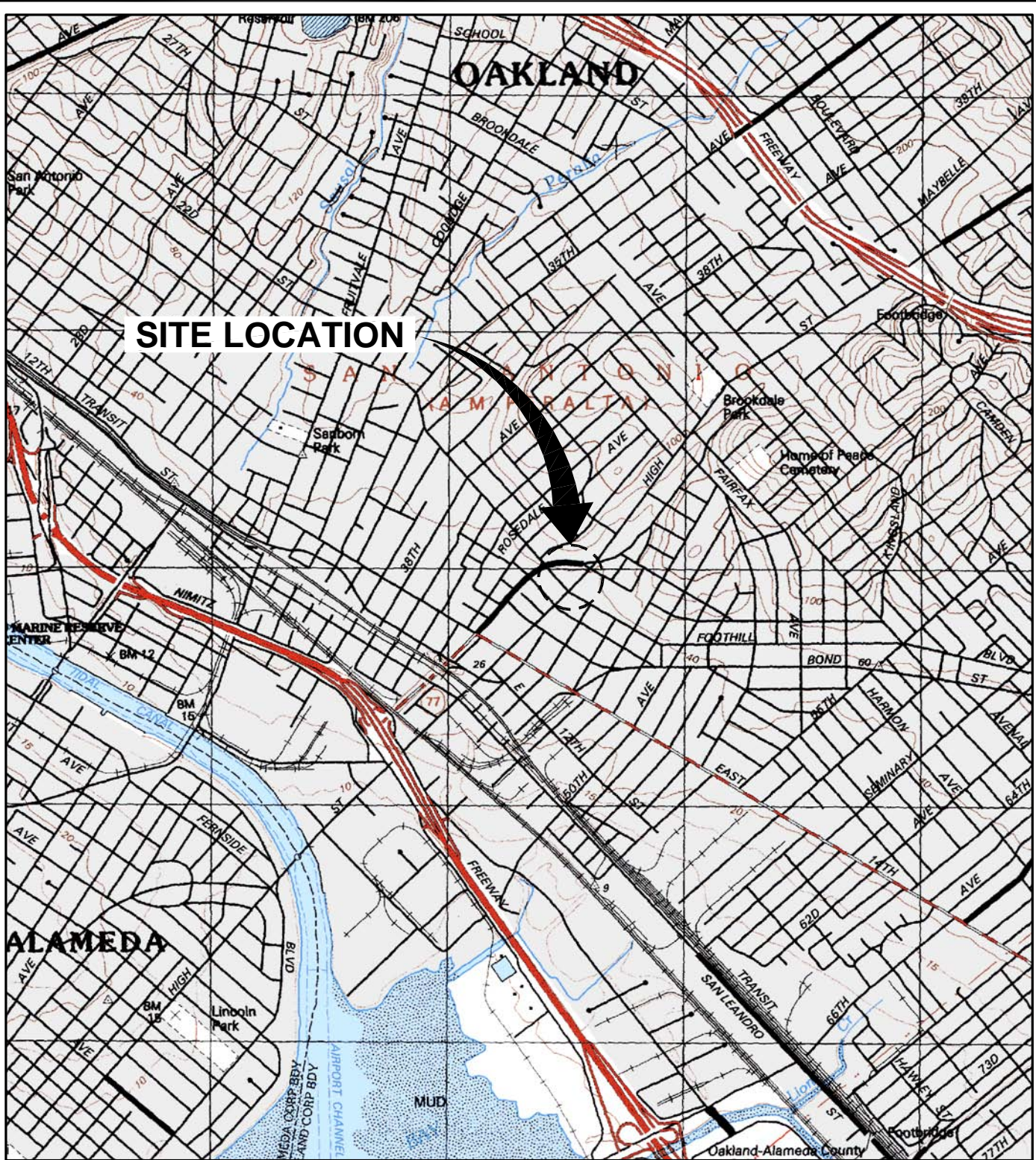
San Francisco Regional Water Quality Control Board. 1999. East Bay Plain Groundwater Basin Beneficial Use Evaluation Report.

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Figures

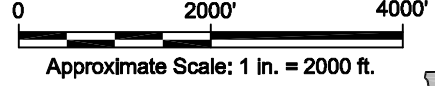


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**SITE LOCATION**

REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND WEST, CA., 1993, AND SAN LEANDRO, 1993, REVISED 1996.



FORMER BP STATION #11109  
 4280 FOOTHILL BOULEVARD  
 OAKLAND, CALIFORNIA

**SITE LOCATION MAP**

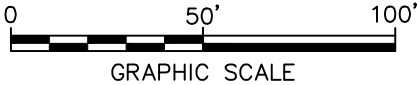
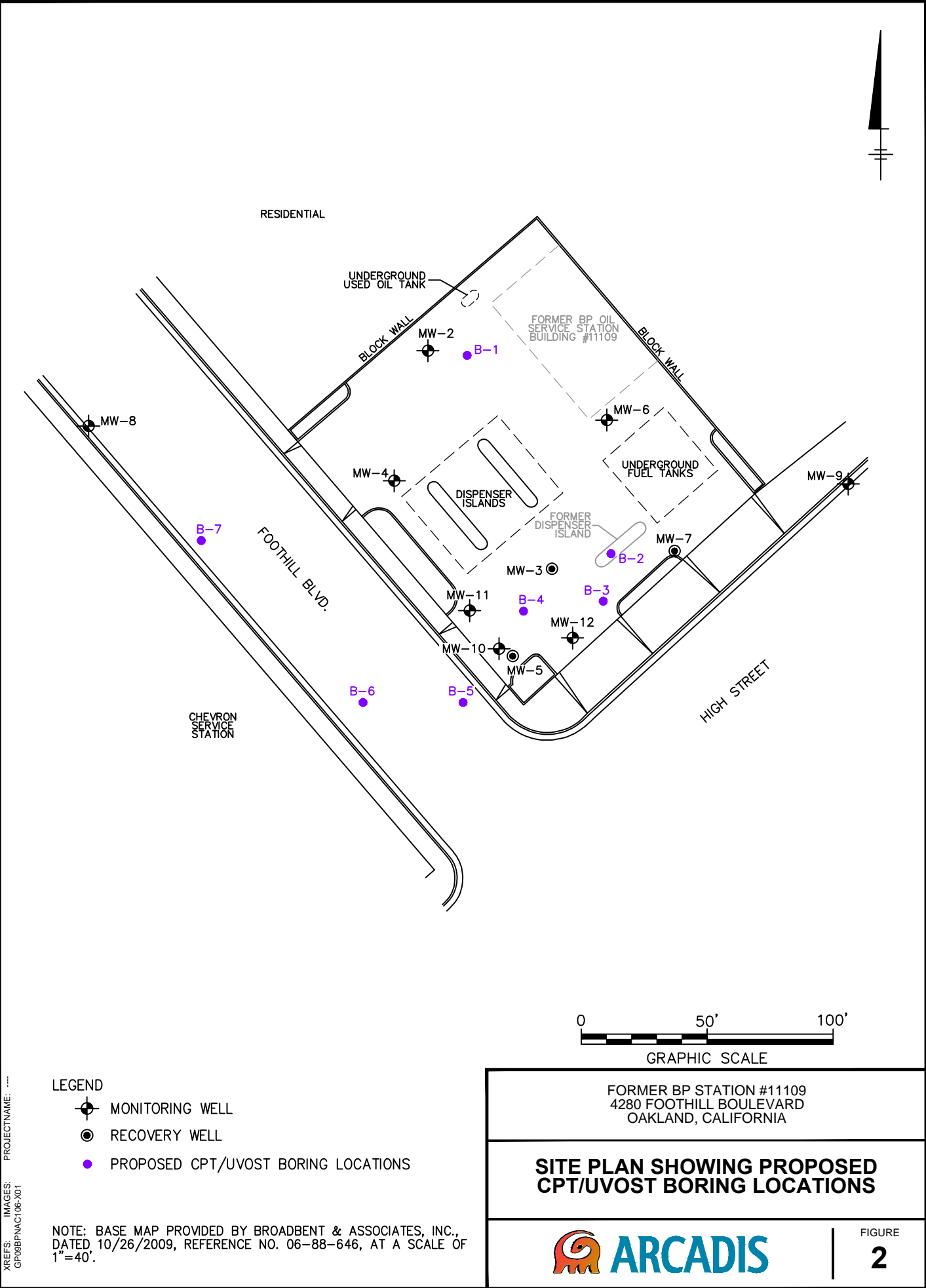





FIGURE  
**1**




CITY: EMERYVILLE, CA DIV/GROUP: ENVCAD DB: J. HARRIS, A. REYES, J. HARRIS  
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PROJECTNAME: ---  
 XREFS: IMAGES: GP09BP\NAC1\06-X01



- LEGEND**
-  MONITORING WELL
  -  RECOVERY WELL
  -  PROPOSED CPT/UVOST BORING LOCATIONS

NOTE: BASE MAP PROVIDED BY BROADBENT & ASSOCIATES, INC., DATED 10/26/2009, REFERENCE NO. 06-88-646, AT A SCALE OF 1"=40'.

FORMER BP STATION #11109 4280 FOOTHILL BOULEVARD OAKLAND, CALIFORNIA	
<b>SITE PLAN SHOWING PROPOSED          CPT/UVOST BORING LOCATIONS</b>	
	FIGURE <b>2</b>

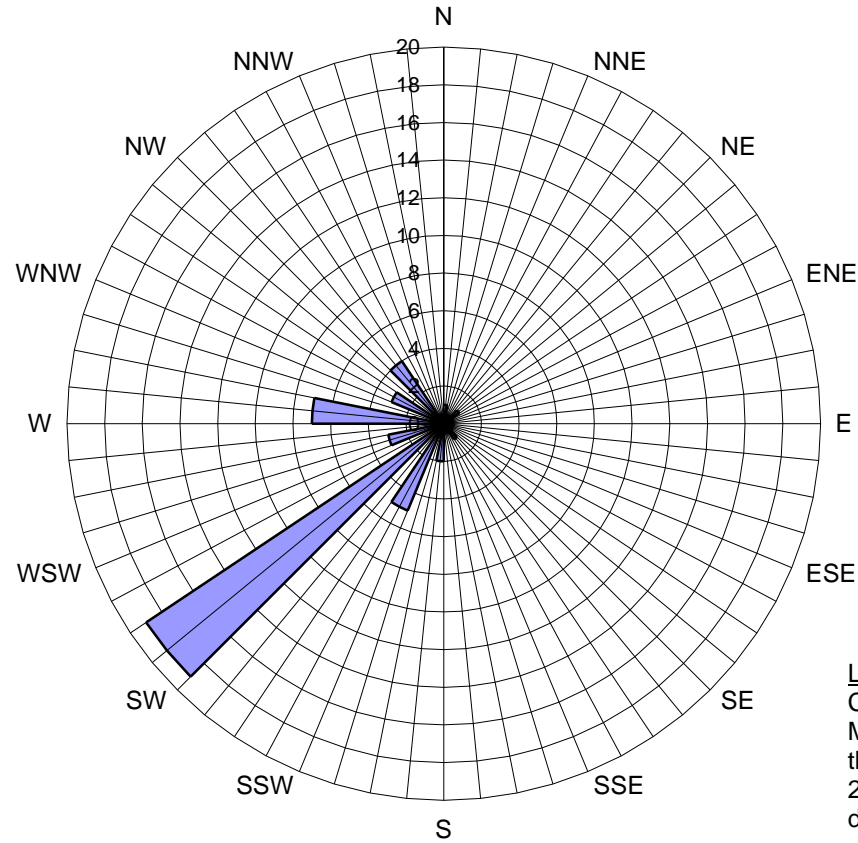
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Attachment A

Rose Diagram



**Figure 7**  
**Groundwater Flow Direction Rose Diagram**  
 Former BP Service Station No. 11109  
 4280 Foothill Boulevard, Oakland, California



Legend  
 Concentric Circles represent 2  
 Monitoring Events: 1st Quarter 1991  
 through 3rd Quarter 2013; 3rd Quarter  
 2009 through 3rd Quarter 2012 omitted  
 due to erroneous calculation.

■ Groundwater Flow Direction

ARCADIS

Attachment B

Response from City of Oakland  
Regarding Utility Depth

## Shah, Arpen

---

**To:** Jessup, Barbara  
**Subject:** RE: Sanitary sewer and storm drain location

**From:** "Loeser, Fred" <[FLoeser@oaklandnet.com](mailto:FLoeser@oaklandnet.com)>  
**Date:** April 2, 2014, 3:45:37 PM PDT  
**To:** "Jessup, Barbara" <[Barbara.Jessup@arcadis-us.com](mailto:Barbara.Jessup@arcadis-us.com)>  
**Subject:** Re: Sanitary sewer and storm drain location

Ms. Jessup,

I'm out of the office until Monday but I can say that we don't note the depth of the sewer main or storm drains on our maps. We have flow line marked but a look down the manholes is generally needed to confirm the depth. Potholing is usually used to find the exact depth and location.

I believe Foothill at High St. Is a moratorium street and excavation is frowned upon on those streets so designated.

Can your question wait until next week?

Sent from my iPhone

On Apr 1, 2014, at 3:40 PM, "Jessup, Barbara" <[Barbara.Jessup@arcadis-us.com](mailto:Barbara.Jessup@arcadis-us.com)> wrote:

Mr. Loeser,

I am doing some background research on a site at 4280 Foothill Blvd. in Oakland, and I am trying to determine the depths to utilities under Foothill Blvd. and High St. (I'm attaching a map, with utility locations)

Are you the appropriate person to ask about the depths to the storm drains and sanitary sewers located at this site?

Thanks for your help,  
Barbara

**Barbara Jessup** | Geologist 1 | [barbara.jessup@arcadis-us.com](mailto:barbara.jessup@arcadis-us.com)

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T: 510 652 9602 | M: 928 699 8736  
[www.arcadis-us.com](http://www.arcadis-us.com)

ARCADIS, Imagine the result  
**Please consider the environment before printing this email.**

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Attachment C

ACPWA Well Completion Request  
Form and Email Correspondence



Public Works Agency  
Alameda County

COUNTY OF ALAMEDA  
PUBLIC WORKS AGENCY  
WATER RESOURCES SECTION  
399 Elmhurst Street, Hayward, CA 94544-1307  
James Yoo PH: (510) 670-6633 FAX: (510) 782-1939  
FOR GENERAL DRILLING PERMIT INFO:  
[www.acgov.org/pwa/wells](http://www.acgov.org/pwa/wells)

**WELL COMPLETION REPORT RELEASE AGREEMENT—AGENCY**  
(Government and Regulatory Agencies and their Authorized Agents)

Project No./Site Address 4280 Foothill Blvd. City Oakland

Township, Range, and Section T 2 S, R 3 W, sec 8 Radius 1/4 mile  
(Must include entire study area and a map that shows the area of interest.)

Under California Water Code Section 13752, the agency named below requests permission from Department of Water Resources to inspect or copy, or for our authorized agent named below to inspect or copy, Well Completion Reports filed pursuant to Section 13751 to (check one):

- Make a study, or,
- Perform an environmental cleanup study associated with an unauthorized release of a contaminant within a distance of 2 miles.

In accordance with Section 13752, information obtained from these reports shall be kept confidential and shall not be disseminated, published, or made available for inspection by the public without written authorization from the owner(s) of the well(s). The information shall be used only for the purpose of conducting the study. Copies obtained shall be stamped **CONFIDENTIAL** and shall be kept in a restricted file accessible only to agency staff or the authorized agent.

Hollis Phillips, on behalf of BP  
Authorized Agent

100 Montgomery Street Suite 300  
Address

San Francisco, CA 94104  
City, State, and Zip Code

 Sir Hollis Phillips  
Signature

Principal Geologist  
Title

Telephone ( ) (415) 432-6903

Fax ( )

4/1/14  
Date

hollis.phillips@arcadis-us.com

E-mail

Government or Regulatory Agency

Address

City, State, and Zip Code

Signature

Title

Telephone ( )

Fax ( )

Date

E-mail

## Shah, Arpen

---

**To:** Jessup, Barbara  
**Subject:** RE: well completion report release agreement

**From:** Wells <[wells@acpwa.org](mailto:wells@acpwa.org)>  
**Date:** April 2, 2014, 10:38:31 AM PDT  
**To:** "Jessup, Barbara" <[Barbara.Jessup@arcadis-us.com](mailto:Barbara.Jessup@arcadis-us.com)>  
**Subject:** RE: well completion report release agreement

Hi Barbara,

I still need the regulator fill out and sign the form also.

James

---

**From:** Jessup, Barbara [<mailto:Barbara.Jessup@arcadis-us.com>]  
**Sent:** Tuesday, April 01, 2014 5:19 PM  
**To:** Wells  
**Cc:** Shah, Arpen  
**Subject:** well completion report release agreement

Hi James,

Here is the completed form we discussed this afternoon.

Please feel free to contact me if you have any questions. I'll be in the field, so it would be best to reach me on my cell: 928-699-8736

Thank you for your help,  
Barbara

**Barbara Jessup** | Geologist 1 | [barbara.jessup@arcadis-us.com](mailto:barbara.jessup@arcadis-us.com)

ARCADIS U.S., Inc. | 2000 Powell Street, 7<sup>th</sup> Floor | Emeryville, CA 94608  
T: 510 652 9602 | M: 928 699 8736  
[www.arcadis-us.com](http://www.arcadis-us.com)

ARCADIS, Imagine the result  
**Please consider the environment before printing this email.**

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ARCADIS

Attachment D

DWR Well Completion Request Form

## DEPARTMENT OF WATER RESOURCES

NORTHERN REGION  
2440 Main Street  
Red Bluff, CA 96080  
(530) 529-7300  
(530) 529-7322 (Fax)

NORTH CENTRAL REGION  
3500 Industrial Blvd.  
West Sacramento, CA 95691  
(916) 376-9612  
(916) 376-9676 (Fax)

SOUTH CENTRAL REGION  
3374 E. Shields Ave Ste A7  
Fresno, CA 93726  
(559) 230-3300  
(559) 230-3301 (Fax)

SOUTHERN REGION  
770 Fairmont Avenue  
Glendale, CA 91203  
(818) 500-1645 ext. 233  
(818) 543-4604 (Fax)

### WELL COMPLETION REPORT RELEASE REQUEST AND CONFIDENTIALITY AGREEMENT REGULATORY-RELATED ENVIRONMENTAL CLEANUP STUDY

Well Completion Reports associated with wells located within two miles of an area affected or potentially affected by a known unauthorized release of a contaminant will be made available upon request to any person performing an environmental cleanup study associated with the unauthorized release, if the study is conducted pursuant to a regulatory agency order (Water Code Section 13752).

Requests must be made on the form below, signed and submitted to the appropriate DWR District Office. Please provide the township, range, and section of the property where the study is to be conducted. Attach a map or a sketch with a north arrow, and provide as much identifying information requested below as possible; additional paper may be attached if necessary.

By signing below, the requester acknowledges and agrees that, in compliance with Section 13752, the information obtained from these reports will be kept confidential and will not be disseminated, published, or made available for inspection by the public. Copies obtained must be stamped **CONFIDENTIAL** and kept in a restricted file accessible only to authorized personnel. These reports must not be used for any purpose other than for the purpose of conducting the environmental cleanup study.

Project Name: Former BP11109 County: Alameda  
Street Address: 4280 Foothill Boulevard City: Oakland  
Township, Range, and Section: T2S, R3W, sec 8 Radius: 1/4 mile  
(Include entire study area and a map that shows the area of interest.) (maximum 2 miles)

ARCADIS  
Requester's Company

Alameda County Environmental Health  
Regulatory Agency Name

HOLLIS PHILLIPS  
Requester's Name (please print)

Agency Contact Name (please print)

100 Montgomery St Suite 300  
Address

Address

San Francisco, CA 94104  
City, State, and Zip Code

City, State, and Zip Code

Signature: HE Phillips

Signature:

Title: Principal Geologist

Title:

Telephone: (415) 432-6903

Telephone: ( )

FAX: (415) 374-2745

FAX: ( )

Date: 4/3/14

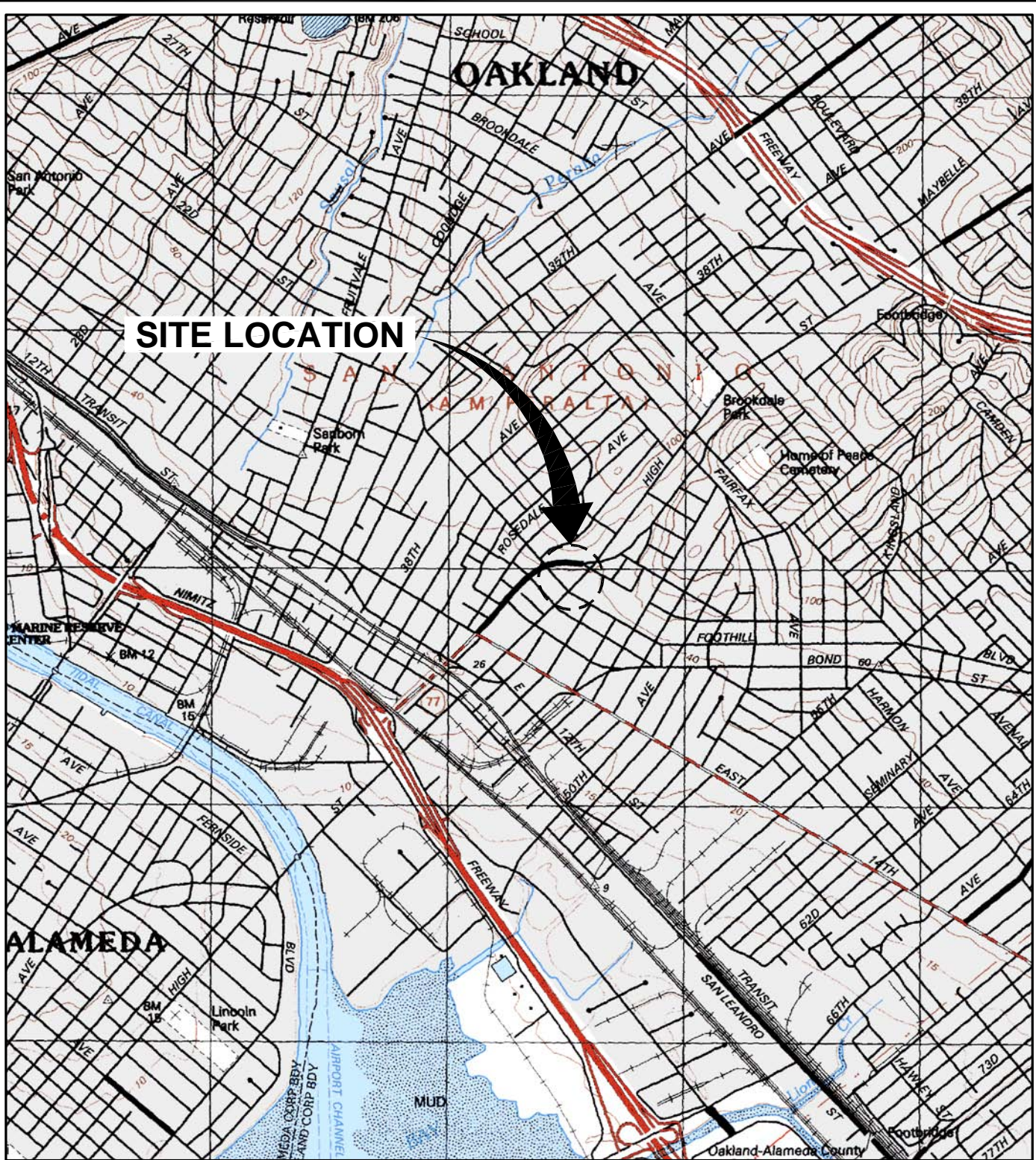
Date:

E-mail: hollis.phillips@arcadis-us.com

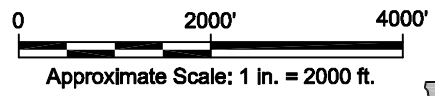
E-mail:



CITY: POTALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD: PIC: RM: H. PHILLIPS TM: B. MCKENNA LVR: (O) (N) = "OFF" - "REF" 11/20/2009 8:40 AM BY: HARRIS, JESSICA  
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REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND WEST, CA., 1993, AND SAN LEANDRO, 1993, REVISED 1996.



FORMER BP STATION #11109  
 4280 FOOTHILL BOULEVARD  
 OAKLAND, CALIFORNIA

**SITE LOCATION MAP**

FIGURE  
**1**