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2:24 pm, Mar 17, 2009

Alameda County  
Environmental Health

  
76 Broadway  
Sacramento, California 95818

March 16, 2009

Barbara Jakub  
Alameda County Health Agency  
1131 Harbor Bay parkway, Suite250  
Alameda, California 94502-577

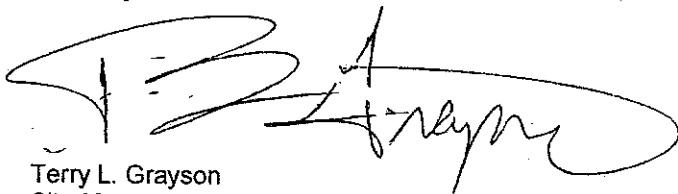
Re: ***Sensitive Receptor Survey (SRS)***  
**76 Service Station # 6129 RO # 058**  
**3420 35<sup>th</sup> Avenue**  
**Oakland, CA**

Dear Ms. Jakub:

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

If you have any questions or need additional information, please call me at (916) 558-7666.

Sincerely,



Terry L. Grayson  
Site Manager  
Risk Management & Remediation

March 16, 2009

Mrs. Barbara Jakub, P.G.  
Alameda County  
Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

**Re: Sensitive Receptor Survey**  
76 Station No. 6129  
3420 35<sup>th</sup> Avenue  
Oakland, California  
LOP No. RO0000058



Dear Mrs. Jakub:

This report has been prepared by Delta Consultants (Delta) on behalf of ConocoPhillips Company (COP). The sensitive receptor survey was completed to identify all water supply wells within a one-mile radius of the site and sensitive receptors within 1,000 feet from the site referenced above (Figure 1).

#### **METHODS**

The survey entailed obtaining well logs records from the California Department of Water Resources (DWR) office in Sacramento and a survey to identify any sensitive receptors within the survey area.

#### **FINDINGS**

Water Well Survey: DWR well log records were reviewed in order to determine the location of any water-supply wells within a one-mile radius of the subject site. Using the DWR well logs, a total of nine (9) wells were identified as being within a one-mile radius of the subject site. The closest well is an irrigation well located 0.1 miles west of the site. Well locations located within the survey area are shown on Figure 2. Historically the groundwater flow direction at the site has been predominately towards the southwest. Historic groundwater flow directions are shown on a rose diagram presented as Attachment A. The data for wells within the survey area are presented in Table 1.

Other wells located in the vicinity of the site include monitoring wells and wells whose associated DWR logs contained inadequate information to establish their precise location and/or well type. DWR logs for wells within the survey area are presented as Attachment B.

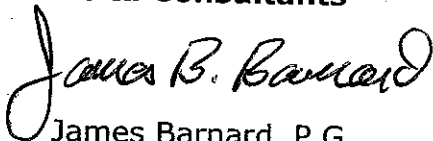
Drinking water in the area is provided by the San Francisco Regional Water Supply, which obtains its water from the Hetch Hetchy Regional Water System, the state Water project, which is brought into the area by the South Bay aqueduct, and by local supplies, which include the Niles Cone Groundwater Basin.

Sensitive Receptor Survey: A survey was conducted to identify any sensitive receptors within a 1,000 foot survey area. There were no schools, hospitals, or other facilities that qualify as a sensitive receptor within a 1000-foot radius of the site.

Bodies of Water: San Francisco Bay, at its closest, is located approximately 2.15 miles south west of site and Lake Merritt is located approximately 2.79 miles west of the site.

Please call James Barnard at (916) 503-1279 if you have any questions regarding the contents of this report.

Sincerely,  
**Delta Consultants**



James Barnard, P.G.  
Project Manager  
California Registered Professional Geologist No. 7478



cc: Mr. Terry Grayson – ConocoPhillips (electronic copy)

**Figures:**

Figure 1	Site Locator Map
Figure 2	Water Supply Well Location Map

**Table:**

Table 1	Well Survey Data
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**Attachments:**

Attachment A	Historical Groundwater Flow Rose Diagram
Attachment B	DWR records for Specified Wells

## Figures

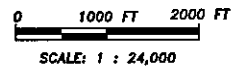
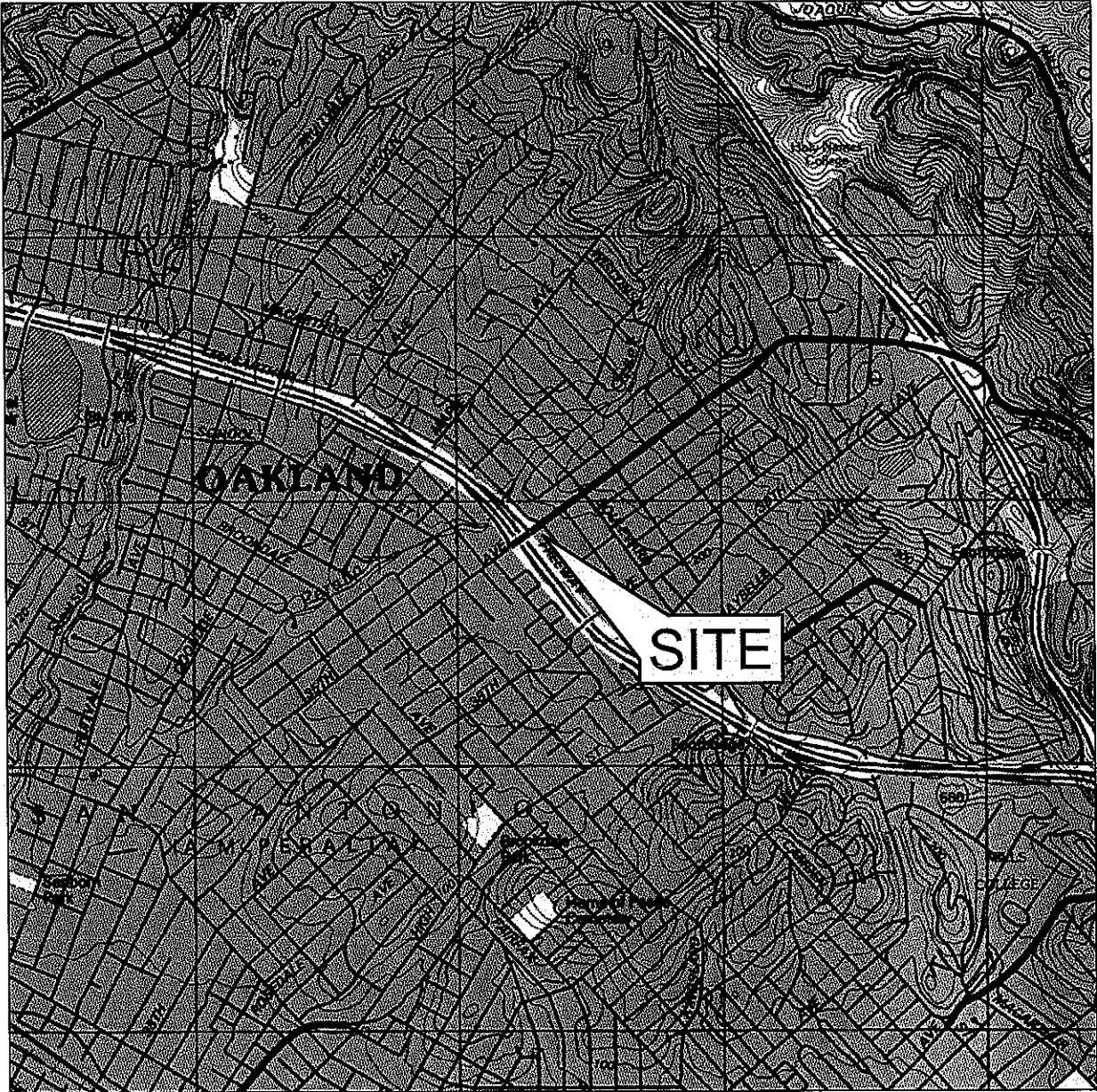


FIGURE 1

SITE LOCATION MAP

76 STATION NO. 6129  
 3420 35th AVENUE  
 OAKLAND, CALIFORNIA

PROJECT NO. C106-129	DRAWN BY JH 09/09/08
FILE NO. Site Locator 6129	PREPARED BY DD
REVISION NO. 2	REVIEWED BY



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, OAKLAND EAST QUADRANGLE, 1967

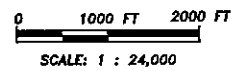
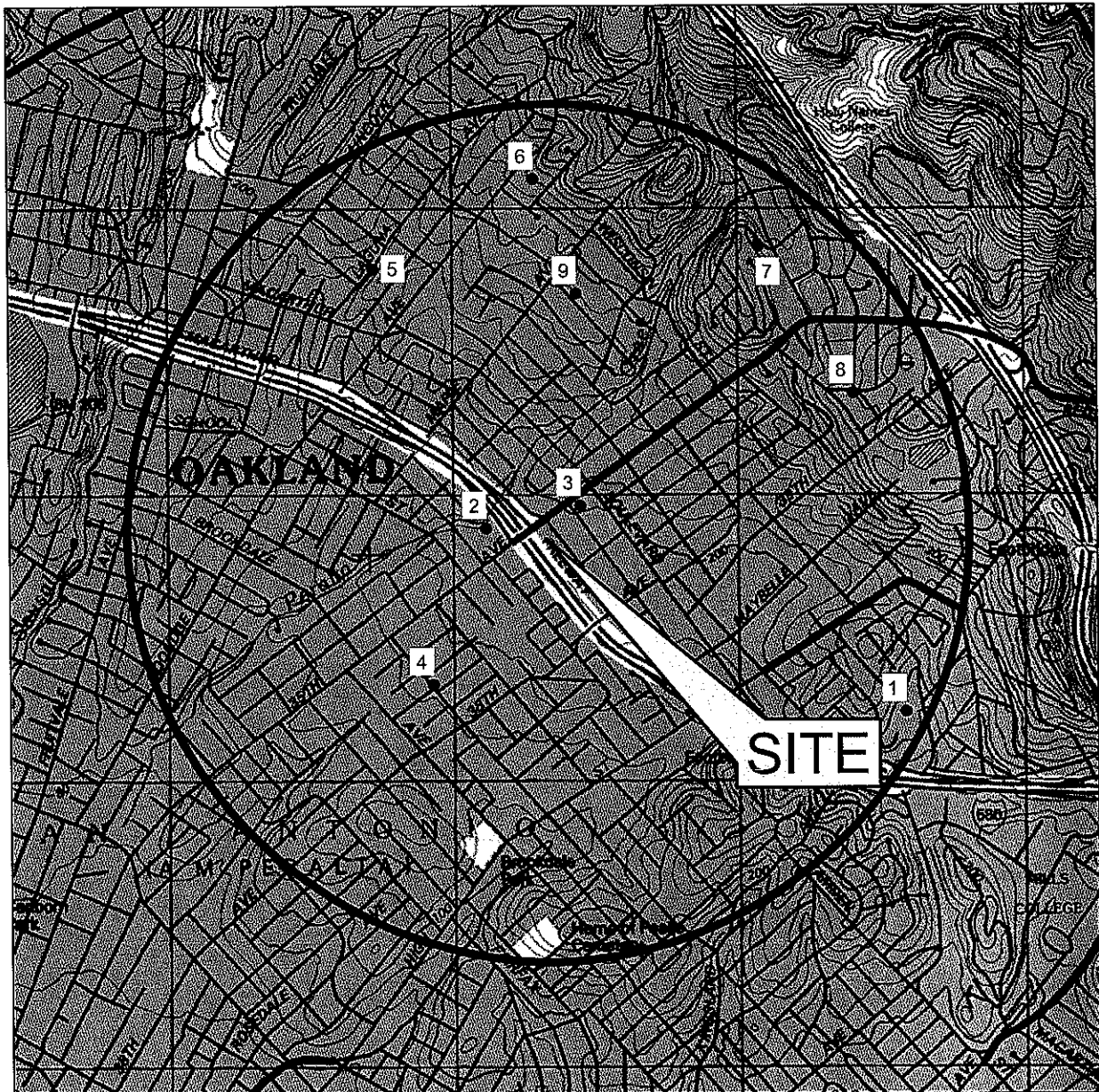


FIGURE 2  
WATER SUPPLY WELL LOCATION MAP

76 STATION NO. 6129  
3420 35th AVENUE  
OAKLAND, CALIFORNIA

PROJECT NO. C106-129	DRAWN BY JH 03/05/09
FILE NO. Site Locator 6129	PREPARED BY EW
REVISION NO. 3	REVIEWED BY DD



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, OAKLAND EAST QUADRANGLE, 1967

## Tables

**Table 1**  
 One-Mile Agency Receptor Survey  
 ConocoPhillips Station No. 6129  
 3420 35th Avenue, Oakland, CA

DWR <sup>1</sup> Well No.	Address	City	State	Zip	Owner	Well Type	Distance from Site (miles)	Direction Relative to Site
1 2S 3W-3E1	Steele St. East of Enos Ave.	Oakland	CA	94619	PG&E	Cathodic Protection	0.9	SE
2 2S/3W 4D3	3397 Arkansas St.	Oakland	CA	94619	Arthur Smith	Irrigation	0.1	W
3 2S/3W 4C	Redding St. 35' East of 35th	Oakland	CA	94619	PG&E	Cathodic Protection	0.1	E
4 2S 3W 4E1	Allendale and Viola	Oakland	CA	94619	PG&E	Cathodic Protection	0.4	SW
5 2S/3W 5N1	Scenic Ave West of Laguna Ave	Oakland	CA	94619	PG&E	Cathodic Protection	0.7	NW
6 1S/3W-33E2	4010 Coolidge Ave	Oakland	CA	94619	Herman Volz	Irrigation	0.8	N
7 1S 3W 33G1	4324 Norton Ave	Oakland	CA	94619	Zeber Zel	Domestic/Irrigation	0.8	NE
8 1S3W 33R1	Monterey Blvd, west of Dunsmuir	Oakland	CA	94619	PG&E	Cathodic Protection	0.7	E
9 1S/3W 33L1	3062 Arizona St	Oakland	CA	94619	Steven Olson	Irrigation	0.5	N

DWR: Department of Water Resources

<sup>1</sup>Well Locations shown on Figure 2.

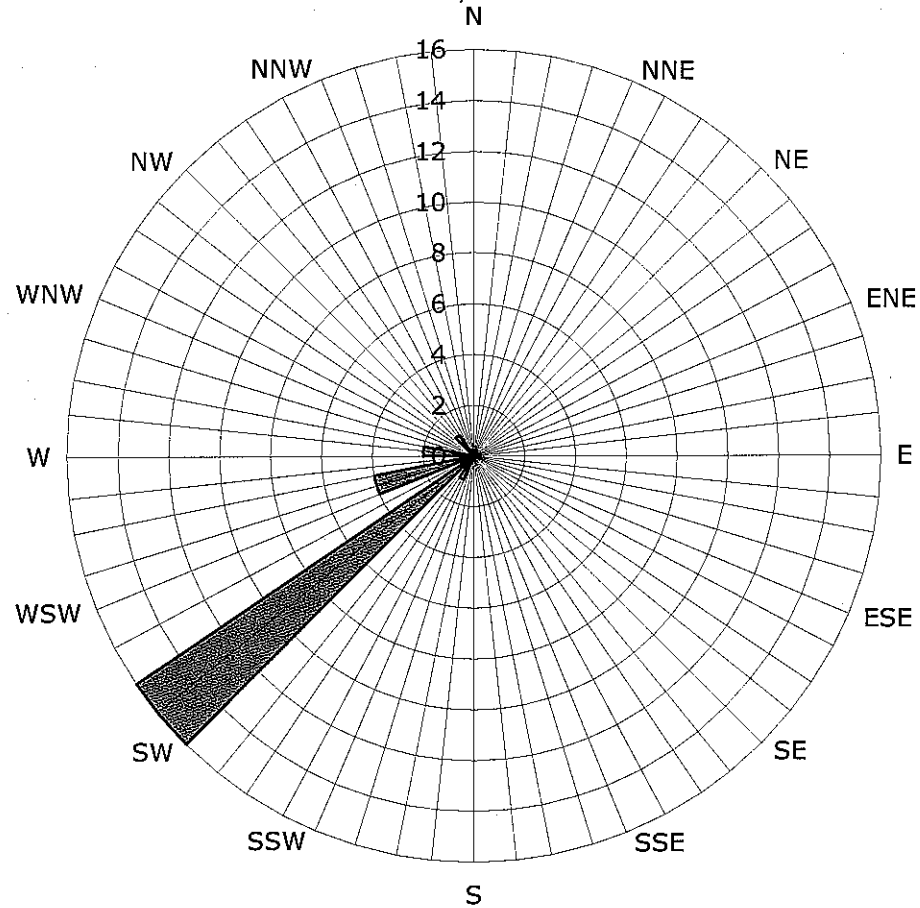


**Attachment A**

***Historical Groundwater Flow Rose Diagram***

**Historic Groundwater Flow Directions  
ConocoPhillips Site No. 6129**

3420 35th Avenue  
Oakland, California



**Legend**  
Concentric circles represent  
quarterly monitoring events  
First Quarter 1990 through  
Fourth Quarter 2008  
24 data points shown

■ Groundwater Flow Direction

**Attachment B**

***DWR records for Specified Wells***

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

**CONFIDENTIAL**

**STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)**

**REMOVED**

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WELL COMPLETION REPORT  
(WELL LOGS)

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WELL COMPLETION REPORT  
(WELL LOGS)

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