



76 Broadway  
Sacramento, California 95818

**RECEIVED**

*By loprojectop at 9:07 am, Mar 17, 2006*

January 31, 2006

Mr. Don Hwang  
Alameda County Health Agency  
1131 Harbor Bay Parkway  
Alameda, California 94502

Re: **Report Transmittal**

SENSITIVE RECEPTOR SURVEY  
76 SERVICE STATION # 3072  
2445 CASTRO VALLEY BOULEVARD  
CASTRO VALLEY, CALIFORNIA

Dear Mr. Hwang:

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 contact

Shelby S. Lathrop (Contractor)  
ConocoPhillips  
Risk Management & Remediation  
76 Broadway  
Sacramento, CA 95818  
Phone: 916-558-7609  
Fax: 916-558-7639

Sincerely,

Thomas Kosel  
Risk Management & Remediation

Attachment

**RECEIVED**

By loprojectop at 9:08 am, Mar 17, 2006



*Customer-Focused Solutions*

January 31, 2006

TRC Project No. 42013903

Mr. Don Hwang  
Alameda County Health Agency  
1131 Harbor Bay Parkway  
Alameda, California 94502

RE: SENSITIVE RECEPTOR SURVEY  
76 SERVICE STATION # 3072  
2445 CASTRO VALLEY BOULEVARD  
CASTRO VALLEY, CALIFORNIA

Dear Mr. Hwang:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC has prepared this sensitive receptor survey report for 76 Service Station # 3072, located at 2445 Castro Valley Boulevard (Site) in Castro Valley, California (Figure 1).

#### **SCOPE OF WORK**

To identify public and municipal wells within one-half mile of the subject site, TRC contacted the Department of Water Resources (DWR) to obtain copies of well completion reports for any wells located in the Site vicinity. The results, excluding destroyed water supply wells and groundwater monitoring and extraction wells, are summarized in Table 1 and shown on Figure 1.

Also included in the survey was an evaluation of nearby surface water bodies as possible sensitive receptors. TRC accomplished this by observing various site and vicinity maps. Figure 1 shows the nearby surface water bodies located within a one-half mile radius of the Site.

#### **SENSITIVE RECEPTOR SURVEY**

A request was made to the DWR for well completion reports within the vicinity of the site. Of the 58 well reports received, three water supply wells were located within one-half mile radius of the site.

Two of the wells are located approximately 1,584 feet east and 1,980 feet north of the Site. These two wells are listed in the DWR well completion reports as domestic wells. The available construction details for these wells are provided in Table 1.

The third well is listed in the DWR well completion report as a 'cooling system return' and is located 1,980 feet north of the Site.

**Sensitive Receptor Survey**

76 Service Station # 3072

January 31, 2006

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There are two surface water bodies located within a one-half mile radius of the Site. They are an unidentified creek and South Reservoir located 1,425 feet east and 1,950 feet southeast of the Site, respectively.

Groundwater at the Site is encountered at an approximate depth of 7.5 feet below grade and flows to the northeast at an average hydraulic gradient of 0.012 feet per foot (Kaprealian Engineering's Quarterly Report, July 15, 1991).

**CONCLUSIONS**

Two of the wells identified (wells 2 and 3 on Table 1), are located within the path of local groundwater flow and are therefore potential sensitive receptors. However, based on the distance from the Site (greater than 1,000 feet), these wells are unlikely to be impacted by the Site hydrocarbon plume. The third well identified (well, 1 on Table 1) is not in the path of local groundwater flow and is therefore not considered a potential sensitive receptor.

The two surface water bodies identified during the survey are not located within the path of local groundwater flow and are not therefore considered potential sensitive receptors.

No other current or potential sensitive receptors were identified within a one-half mile radius of the Site.

If you have any questions or concerns regarding this information, please contact either of the undersigned at 925-688-1200.

Sincerely,

**TRC**



Rachelle Dunn  
Staff Geologist



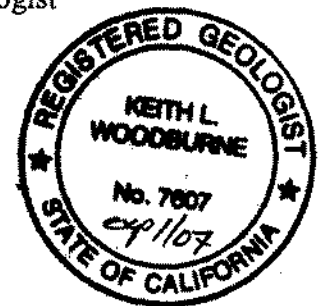
Keith Woodburne, P.G.  
Senior Project Geologist

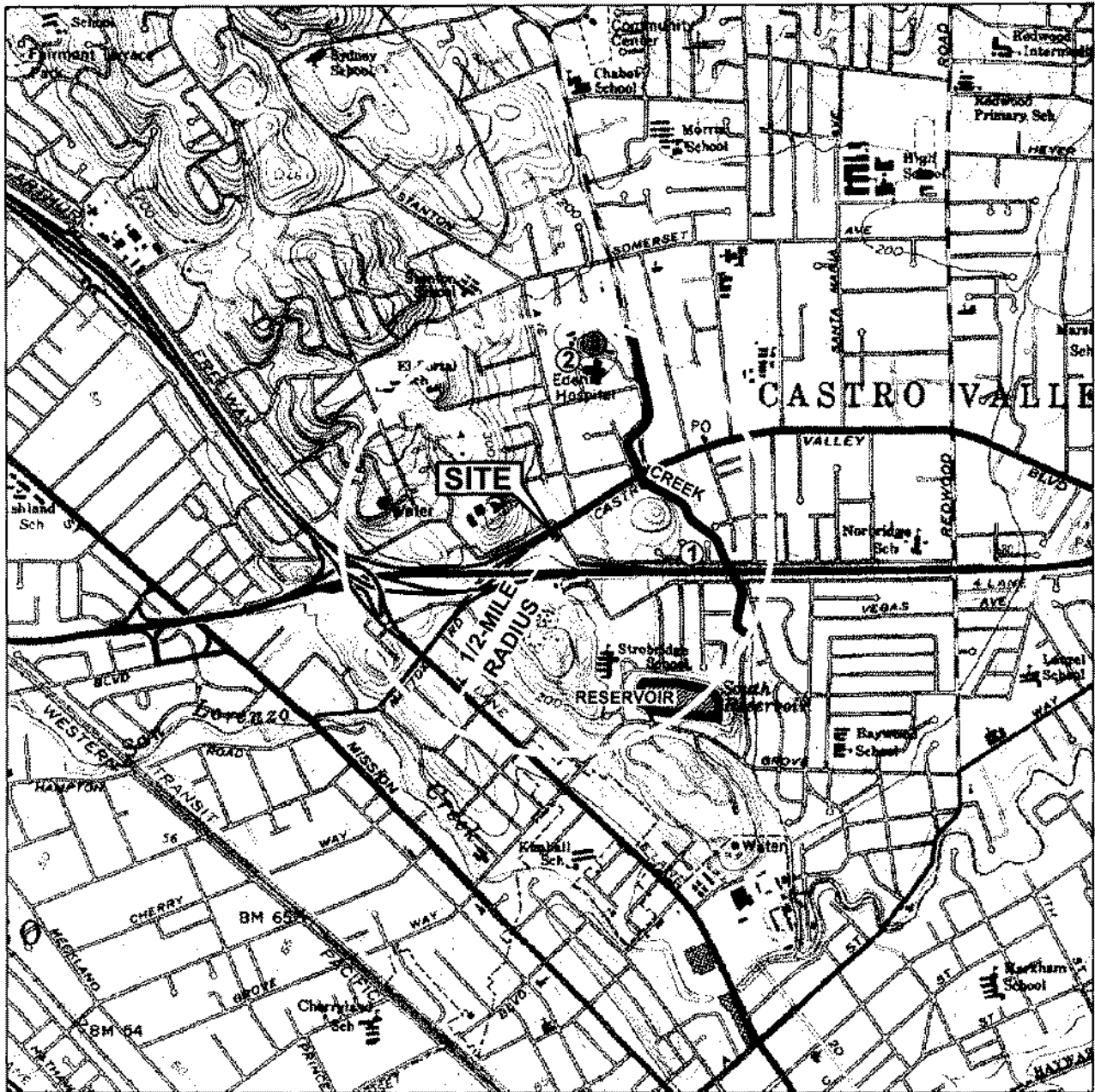
**Attachments:**

Figure 1 - Wells within one-half mile radius of site

Table 1 - Summary of Well Information

cc: Shelby Lathrop, ConocoPhillips (electronic upload only)





1 MILE 3/4 1/2 1/4 0 1 MILE



SCALE 1 : 24,000

SOURCE:  
United States Geological Survey  
7.5 Minute Topographic Maps:  
Hayward Quadrangle, California

**LEGEND**

- ① ② Domestic Wells
- Cooling System Return



**SENSITIVE RECEPTORS WITHIN  
HALF-MILE OF SITE**

76 Service Station #3072  
2445 Castro Valley Boulevard  
Castro Valley, California

**TRC**

**FIGURE 1**

TABLE 1

**SUMMARY OF WELL INFORMATION**

76 Service Station # 3072  
 2445 Castro Valley Boulevard  
 Castro Valley, California

TRC Well ID Number	Owner	Well Use	Well Total Depth (ft)	Screened Interval (ft)	Depth to Water (ft)	Date Installed	Approximate Distance From Site (ft)	Direction from Site
1	Sam Wallace	Domestic	52	NA	NA	7/3/1953	1,584	E
2	Eden Township Hospital	Domestic	250	NA	NA	9/9/1952	1,980	N
3	Eden Township Hospital	Cooling System Return	60	NA	NA	7/11/1952	1,980	N

Notes: NA = Not Available