ConocoPhillips
76 Broadway
Sacramento, California 95818

February 3, 2009

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

Re: ***Quarterly Summary Reports—Fourth Quarter 2008***
Former 76 Service Station # 0843 RO # 0450
1629 Webster Street
Alameda, 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

February 3, 2009

Ms. Barbara Jakub
Alameda County Health Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: Quarterly Summary Report – Fourth Quarter 2008
And Sensitive Receptor Survey
Fuel Leak Case No. RO0000450

DELTA

Dear Ms. Jakub:

On behalf of ConocoPhillips Company (COP), Delta Consultants (Delta) is submitting the Quarterly Summary Report - Fourth Quarter 2008 and forwarding a copy of TRC Solutions, Inc. (TRC's) *Quarterly Monitoring Report, October through December 2008,* dated January 8, 2008, for the following location:

Service Station	**Location**
76 Service Station No. 0843	1629 Webster Street Alameda, California

Sincerely,
Delta Consultants

Dennis S. Dettloff, P.G.
Senior Project Manager
California Registered Professional Geologist No. 7480

PROFESSIONAL GEOLOGIST
DENNIS SHANNON DETTLOFF
No. 7480
STATE OF CALIFORNIA

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

a member of Inogen Environmental Alliance

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QUARTERLY SUMMARY REPORT
Sensitive Receptor Survey
Fourth Quarter 2008
76 Service Station No. 0843
1629 Webster Street
Alameda, California

PREVIOUS ASSESSMENT

June 1998 - Tosco Marketing Company (Tosco, now ConocoPhillips) exhumed and removed two 10,000-gallon gasoline underground storage tanks (USTs), one 550-gallon used oil UST, product lines, and fuel dispensers. Two holes approximately ¾-inch in diameter were observed in the used oil tank during removal. Approximately 338 tons of hydrocarbon impacted soil and backfill were removed from beneath the former USTs, fuel dispensers, and product lines during the UST removal activities.

March 1999 – Four soil borings (B1 through B4) were advanced at the site and converted to monitor wells MW-1 through MW-4. Groundwater was encountered from 8 to 15 feet below ground surface (bgs). Static groundwater was observed at depths ranging from 4 and 6 feet bgs subsequent to well installation.

December 1999 – Two off-site soil borings (B5 and B6) were advanced and subsequently converted to monitor wells MW-5 and MW-6. Groundwater was initially present at approximately 10 feet bgs. Static groundwater was observed at a depth of approximately 7 feet bgs subsequent to well installation.

March 2001 - An underground utility survey was conducted to identify and locate underground utilities beneath and in the vicinity of the site that could provide potential preferential pathways for groundwater flow.

May 2001 - Five direct-push soil borings (GP-1 through GP-5) were advanced to evaluate whether underground utilities in the vicinity of the site are providing preferential pathways for groundwater flow and the migration of dissolved phase hydrocarbons. The results of the investigation indicated insufficient evidence that underground utility lines were providing preferential pathways for the off-site migration of dissolved phase hydrocarbons.

December 2001 - Twelve direct-push soil borings (GP-6 through GP-17) were advanced to further assess the extent of residual hydrocarbons in the vadose zone beneath the site. The results of the investigation indicated that the extent of the residual hydrocarbon impact reported in the previous investigations was limited.

December 2002 - One on-site monitoring well (MW-2) was destroyed during remedial excavation of hydrocarbon-impacted soil. Prior to destruction, monitoring well MW-2 was located near the former eastern dispenser island. During the remedial excavation, monitoring well MW-2 was replaced with on-site backfill monitoring well MW-2A. Approximately 292 tons of hydrocarbon-impacted soil was removed from beneath the former eastern dispenser island.

September 2003 - A *Request and Work Plan for Closure* prepared by ERI was submitted to the Alameda County Health Care Services Agency (ACHCSA), dated September 10,

2003. The report summarized why no further action is needed for the site; the report also included plans to destroy the existing wells upon regulatory acceptance for no further action. Closure was not granted.

June 2004 – A work plan was submitted for the installation of two additional monitor wells down-gradient of MW-5.

May 2005 – A work plan titled *Work Plan Addendum – Site Assessment Activity* dated May 17, 2005 was prepared by ATC Associates Inc. (ATC) for the installation of two off-site monitor wells.

September 2005 – A work plan was prepared by ATC titled *Work Plan Subsurface Investigation*, for the installation of one on-site monitor well.

September 2005 – Site environmental consulting responsibilities were transferred to Delta.

On January 24, 2007 Delta submitted a work plan to the ACHCSA recommending the advancement of one soil boring and the installation of three ozone injection wells at the site.

On August 14, 2008 Gregg Drilling under the supervision of a Delta field geologist advanced one soil boring to a depth of 55 feet bgs. The details of this investigation are described in the *Site Investigation Report* dated October 29, 2008.

SENSITIVE RECEPTORS

June/July 2002 - A groundwater receptor survey was conducted. Three irrigation wells were located within a one-half mile radius of the site. The wells are located approximately 1,980 feet west and 2,245 feet southwest of the site, cross-gradient and up-gradient of the site.

November 2006 – A survey entailing a visit to the DWR office in Sacramento was conducted to examine well log records and to identify domestic wells within the survey area. The DWR survey provided 15 potential receptors within one mile of the site; one domestic well located 0.5 mile southwest of the site; one domestic/irrigation well located 0.7 mile southeast of the site; 11 irrigation wells with three located 0.1 mile northwest, west, and southeast of the site; and two industrial wells located 0.3 miles southwest and 0.9 mile northeast of the site.

The 2006 sensitive receptor survey data are presented as Attachment A.

GROUNDWATER MONITORING AND SAMPLING

Quarterly groundwater monitoring and sampling was initiated in March 1999. During the most recent groundwater monitoring and sampling event conducted on November 26, 2008, depth to groundwater ranged from 6.82 feet (MW-5) to 8.65 feet (MW-1) below top of casing (TOC). The groundwater flow direction was interpreted to be to the north with a gradient of 0.02 foot per foot (ft/ft) as compared to the previous quarterly sampling event when the groundwater flow direction was interpreted to be to the north

with a gradient of 0.012 ft/ft. Historic groundwater flow directions are shown on a rose diagram presented as Attachment B.

Chemicals of Concern:

- **TPPH:** Total purgeable petroleum hydrocarbons (TPPH) were above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from monitoring wells MW-1, MW-2A, MW-4, and MW-6 at concentrations of 720 micrograms per liter (µg/L), 120 µg/L, 55 µg/L and 300 µg/L, respectively during the fourth quarter 2008 sampling event. However, the laboratory notes indicate that the TPPH in monitoring wells MW-1 and MW-6 does not exhibit a "gasoline" pattern. TPPH is entirely due to MTBE.

- **Benzene:** Benzene was above the laboratory's indicated reporting limits in the groundwater sample collected and submitted for analysis from monitoring well MW-2A at a concentration of 0.56 µg/L during the fourth quarter 2008 sampling event.

- **MTBE:** MTBE was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from monitoring wells MW-1, MW-2A, MW-3, MW-4, and MW-6 at concentrations of 2,400 µg/L, 1.8 µg/L, 2.8 µg/L, 11 µg/L, and 400 µg/L, respectively during the fourth quarter 2008 sampling event.

Ethyl-benzene, toluene, and total xylenes were above the laboratory's indicated reporting limit in the groundwater sample collected and submitted for analysis from monitoring well MW-2A at concentrations of 4.6 µg/L, 0.66 µg/L, and 6.0 µg/L, respectively during the fourth quarter 2008 sampling event. With the exception of the constituents listed above, all other constituents tested were below the laboratory's indicated reporting limits during the fourth quarter 2008 sampling event.

REMEDIATION STATUS

Approximately 338 tons of hydrocarbon impacted soil and backfill were removed from beneath the former USTs, fuel dispensers, and product lines during the June 1998 UST removal activities. Approximately 292 tons of hydrocarbon-impacted soil was removed from beneath the former eastern island during the December 2002 excavation.

CHARACTERIZATION STATUS

Based on the data obtained during the August 2008 site investigation additional assessment has been recommend in the vicinity of monitoring well MW-2A.

Analytical data from groundwater samples collected from the Shell service station located approximately 75 feet south (up-gradient) of the site indicate that TPPH and MTBE are present in the groundwater and it appears that MW-1 is showing petroleum hydrocarbon impact from the off-site migration of these constituents onto the site.

DISCUSSION

Delta is currently preparing a work plan for the destruction of monitoring wells MW-1 and MW-2A due proposed on-site construction activities by the current property owner. In addition, the work plan will include the replacement of MW-1 by MW-1A and the installation of three ozone injection wells at the site.

RECENT CORRESPONDENCE

No correspondence was sent or received during the fourth quarter 2008.

WASTE DISPOSAL SUMMARY

Waste generated during the recent site investigation was removed from site and properly disposed of on December 18, 2008 at a COP-approved facility.

THIS QUARTER ACTIVITIES (Fourth Quarter 2008)

1. TRC conducted the quarterly monitoring and sampling activities at the site.

2. On behalf of COP Delta submitted a Site Investigation Report Describing the advancement of one CPT boring at the site on October 29, 2009.

NEXT QUARTER ACTIVITIES (First Quarter 2009)

1. TRC will conduct quarterly groundwater monitoring and sampling activities at the site.

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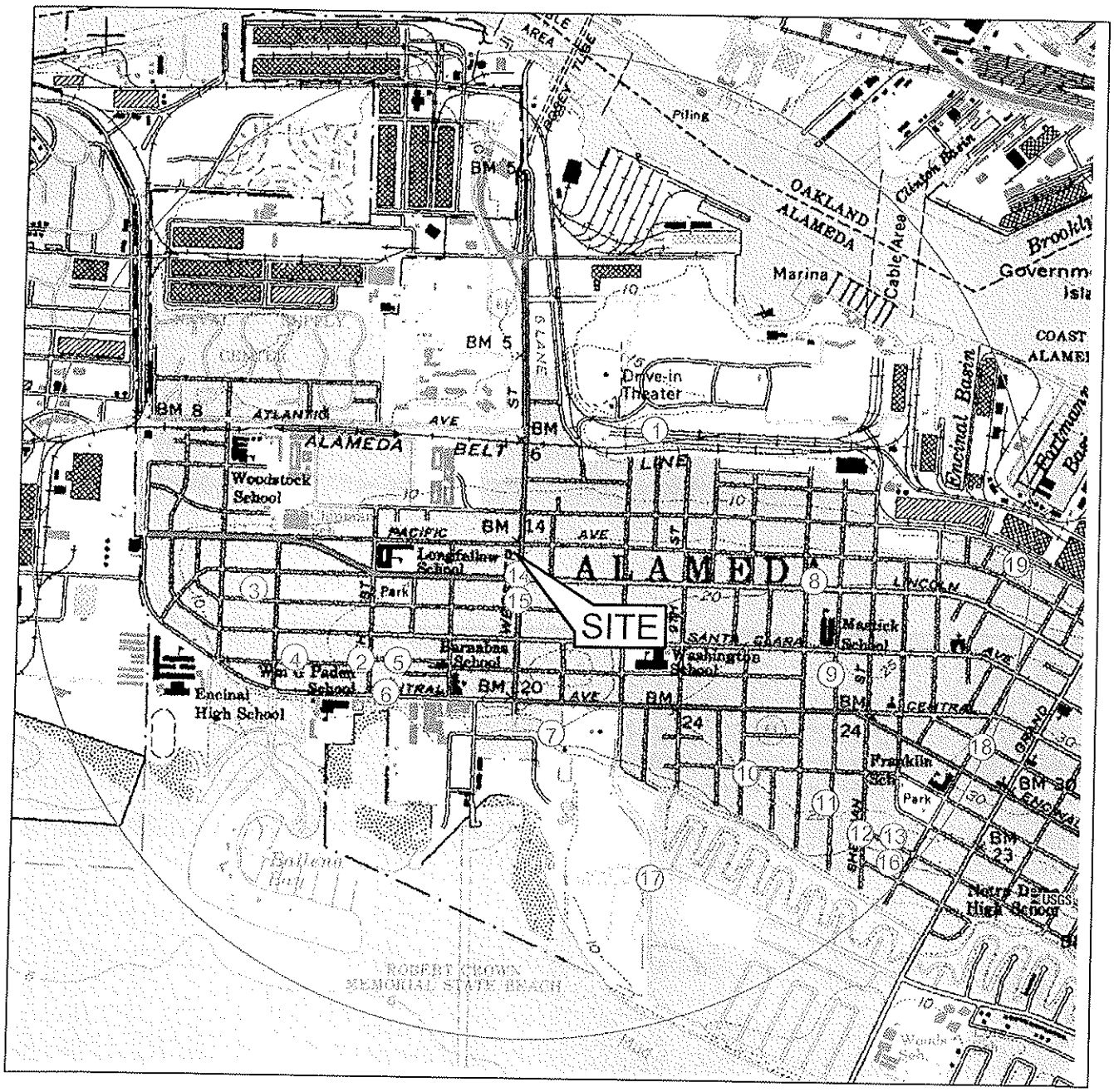
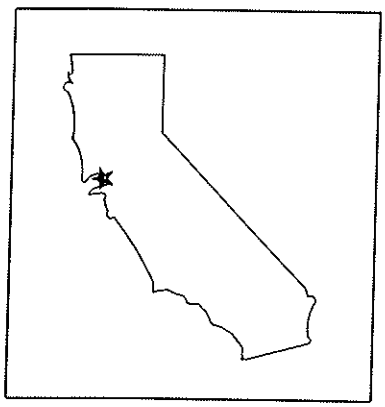
CONSULTANT: Delta Consultants

Attachment A – Sensitive Receptor Survey Data

Attachment B – Historic Groundwater Flow Directions

Attachment A
Sensitive Receptor Survey Data





North

SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, OAKLAND WEST QUADRANGLE, 1996

FIGURE 1

SITE LOCATOR SENSITIVE RECEPTOR MAP

76 STATION NO. 0843
1629 WEBSTER STREET
ALAMEDA, CALIFORNIA

PROJECT NO. C100-843	DRAWN BY JH 12/12/06
FILE NO. Site Locator 0843	PREPARED BY JH
REVISION NO.	REVIEWED BY

DELTA

Table 1

One-Mile Agency Receptor Survey
ConocoPhillips Station No.0843
1629 Webster Street, Alameda, California

	DWR[1] Well No.	Address	City	State	Zip	Owner	Well Type	Distance from Site (miles)	Direction Relative to Site
1-	2S/4W-2R1	Marina Village, off Sherman St.	Alameda	CA		Vintage Properties	Irrigation	0.7	NE
2-	2S/4W-10H2	424 Santa Clara Ave.	Alameda	CA	94501	Richard F. Fawcett	Domestic	0.5	SW
3-	2S/4W-10B1	132 Haight Ave.	Alameda	CA	94501	Idella E. McManus	Irrigation	0.7	W
4-	2S/4W-10G1	314 Santa Clara Ave.	Alameda	CA	94501	James GoLightly	Irrigation	0.6	SW
5-	2S/4W-10H3	462 Santa Clara Ave.	Alameda	CA		PG&E	Cathodic protection	0.4	SW
6-	2S/4W-10H1	447 Taylor Avenue	Alameda	CA	94501	A.E. Bryant	Irrigation	0.5	SW
7-	2S/4W-11M1	645 Central	Alameda	CA		Paul Merrett	Industrial	0.3	SW
8-	2S/4W-11A1	Pacific Ave. east of Chapin	Alameda	CA		PG&E	Cathodic protection	0.5	E
9-	2S/4W-11H1	Santa Clara east of Verdi St.	Alameda	CA		PG&E	Cathodic protection	0.6	SE
10-	2S/4W-11K2?	920 Centennial Ave.	Alameda	CA		Lawrence Picetti	Irrigation	0.5	SE
11-	2S/4W-11J2	1036 San Antonio Ave.	Alameda	CA	94501	Grover A. Chessmore	Domestic/Irrigation	0.7	SE
12-	2S/4W-11J3	1236 St. Charles	Alameda	CA	94501	Frank Weeden	Irrigation	0.8	SE
13-	2S/4W-11J4	1224 Bay St.	Alameda	CA	94501	Richard Bartalini	Irrigation	0.8	SE
14-	2S/4W-11D1	603 Pacific Ave.	Alameda	CA	94501	H.W. Moore	Irrigation	0.1	NW
15-	2S/4W-11E1	1614 6th St.	Alameda	CA	94501	Daniel C. Robinson	Irrigation	0.1	W
16-	2S/4W-11J1	1205 Bay St.	Alameda	CA	94501	W.E. Lyons	Irrigation	0.9	SE
17-	2S/4W-11Q1	900 Otis Drive	Alameda	CA		Chevron USA, Inc.	Dewatering	0.7	SE
18-	2S/4W-12M1	1401 F. Cottage St.	Alameda	CA	94501	Central West Homeowners	Irrigation	1.0	SE
19-	2S/4W-12D2	1521 Buena Vista	Alameda	CA	94501	Alameda Liquid Bulk Terminal	Industrial	0.9	NE
[2]20-	2S/4W-3E1	Alameda Naval Air Station west side of Main Street	Alameda	CA		U.S. Navy			
[2]21-	2S/4W-5A1	Naval Air Station (old PAA)	Alameda	CA					
[2]22-	2S/4W-3E3	B Avenue, Building 17	Alameda	CA	94501	U.S. Naval Air Station	Cathodic protection		
[2]23-	2S/4W-1D1	Embarcadero rail crossing (25' from rr, 300 yds from Emb.)	Oakland	CA		Union Pacific Railroad	Cathodic protection		

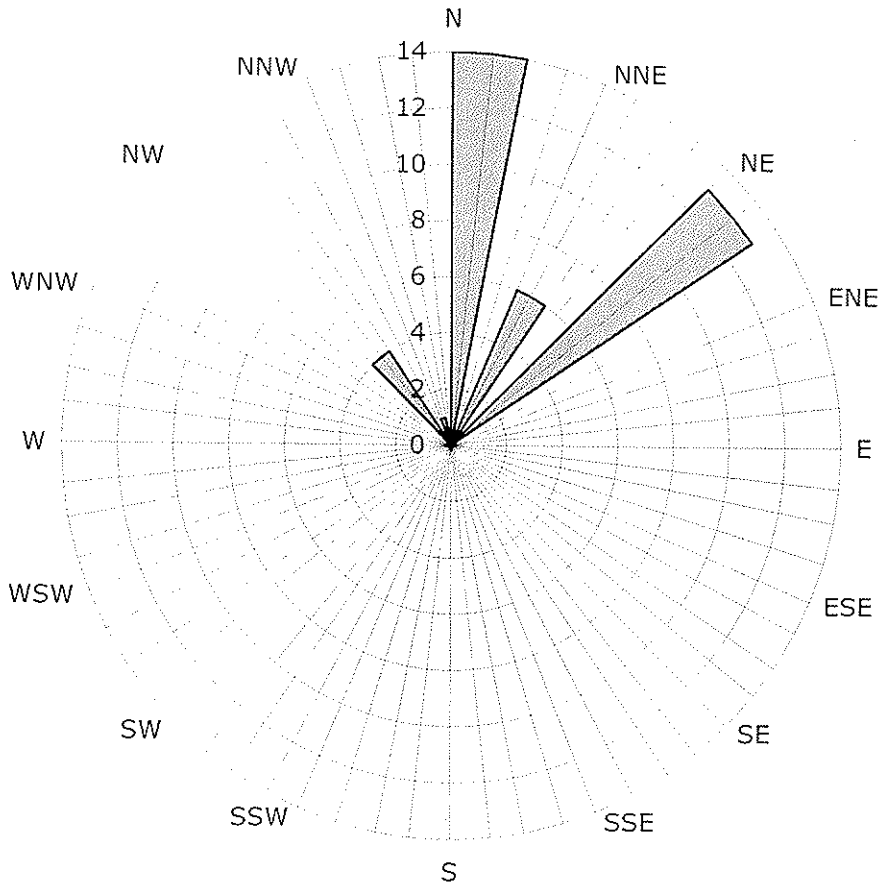
DWR: Department of Water Resources

[1] Well Locations shown on Figure 1.

[2] Specific address cannot be located on map.

Attachment B
Historic Groundwater Flow Directions

Historic Groundwater Flow Directions
ConocoPhillips Site No. 0843
1629 Webster Street
Alameda, California



Legend
Concentric circles represent quarterly monitoring events
First Quarter 1999 through Fourth Quarter 2008
38 data points shown

Groundwater Flow Direction