ConocoPhillips
76 Broadway
Sacramento, California 95818

April 30, 2009

Ms. Barbara Jakub
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Re: **Report Transmittal**
Quarterly Summary Report – First Quarter 2009
76 Service Station #6277
15803 East 14th Street
San Leandro, California
Fuel Leak Case No. RO00002969

Dear Ms. Jakub:

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

If you have any questions or need additional information, please call:

Ted Moise (Contractor)
ConocoPhillips
Risk Management & Remediation
76 Broadway
Sacramento, CA 95818

Phone: (510) 245-5162
Fax: (918) 662-4480

Sincerely,

Eric G. Hetrick
Site Manager
Risk Management & Remediation

Attachment

April 30, 2009

Ms. Barbara Jakub
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay parkway, Suite 250
Alameda, California 94502

Re: Quarterly Summary Report – First Quarter 2009
76 Service Station No. 6277
15803 East 14th Street
San Leandro, CA 94578
Fuel Leak Case No. RO00002969

DELTA

Dear Ms. Jakub:

On behalf of ConocoPhillips Company (ConocoPhillips), Delta Consultants (Delta) has prepared this quarterly summary report for the above referenced facility.

Sincerely,
Delta Consultants

Jonathon Fillingame
Staff Geologist

PROFESSIONAL GEOLOGIST
DENNIS SHANNON DETTLOFF
No. 7480
STATE OF CALIFORNIA

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

cc: Ted Moise, ConocoPhillips (electronic copy only)

QUARTERLY SUMMARY REPORT
First Quarter 2009

76 Service Station No. 6277
15803 East 14th Street
San Leandro, CA 94578

PREVIOUS SITE ACTIVITY

1969 - Reported site history indicates the site was first developed as a gas station from an empty lot in 1969.

1989 - Two 10,000-gallon gasoline underground storage tanks (USTs), one 550-gallon waste oil UST, and the product piping were removed from the site in March of 1989 during UST replacement activities. Kaprealian Engineering Inc. (KEI) work at the site began on March 6, 1989, when KEI was retained by Unocal to advance two exploratory borings designated as SB-1 and SB-2 at the site. The borings were advanced at the request of Alameda County. The borings were advanced in order to explore for the possible presence of soil impact in the vicinity of the tank pit for the proposed new underground storage tanks. The borings were advanced to depths of 10.5 and 13.5 feet below grade. Ground water was encountered in the borings at depths of 11 to 12 feet below grade.

The samples collected from the exploratory borings SB-1 and SB-2 were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethyl-benzene and total xylenes, (BTEX). The analytical results of the soil samples collected at a depth of 5 feet below grade in the two borings indicated TPHg concentrations ranging from below the laboratory's indicated reporting limits to 2.1 parts per million (ppm).

The analytical results of the soil samples collected at a depth of 10 feet below grade indicated TPHg concentrations ranging from 200 ppm to 620 ppm. Based on results of this preliminary investigation, KEI recommended that the contractor excavate the existing tank pit to a depth of approximately 13 feet below grade. KEI returned to the site on March 13, 1989. Water was encountered in the fuel tank pit at a depth of about 11 feet below grade, thus prohibiting the collection of any soil samples from immediately beneath the USTs. Six soil samples, labeled SW1 through SW6, were collected from the sidewalls of the fuel tank pit at depths of approximately 1 foot above the water table; and one soil sample, labeled W01, was collected from beneath the waste oil tank at a depth of about 10 feet below grade. Based on observations in the field, it was decided to excavate additional soil from three of the four tank pit sidewalls.

On March 14, 1989, four trenches were installed to define the limits of additional soil excavation needed. Four soil samples were then collected at depths of about 10 feet below grade. The analytical results of the soil samples collected from the fuel tank pit indicated TPHg concentrations ranging from 24 ppm to 150 ppm. A sample collected adjacent to the existing building indicated 3,500 ppm of TPH as gasoline; however, the sample collected after excavating 2 feet of sidewall toward the building, indicated TPH as gasoline at concentration of 100 ppm. One soil sample (SW2) indicated 390 ppm of TPHg. The analytical results of the soil samples collected from the waste oil tank pit indicated 280 ppm and 41 ppm of total oil and grease (TOG). The analytical results of the water sample (W1) collected from the old fuel tank pit indicated 19,000 parts per billion (ppb) of TPHg and 230 ppb of benzene.

On March 23, 1989, KEI returned to the site for pipe trench soil sampling. Six soil samples, labeled P1, P2, P3, P4, P5, and P6, were collected from beneath the product lines at depths of approximately 3 to 3.5 feet below grade. The analytical results of the soil samples P1 through P6 collected from the pipe trenches indicated concentrations of TPHg ranging from 1.1 ppm to 6.8 ppm.

The fuel UST pit and the waste oil UST pit were over-excavated in order to remove hydrocarbon-impacted soil. The majority of the hydrocarbon-impacted soil appears to have been removed from the site, except for the capillary fringe in the vicinity of the former UST pit and the building.

On May 24, 1989, four two-inch diameter monitoring wells, designated as MW-1 through MW-4 were installed at the site. The four wells were each drilled and completed to total depths ranging from 24.5 to 25 feet below grade. Ground water was encountered at depths ranging from 11 to 12 feet beneath the surface during drilling.

The monitoring and sampling program was initiated in July of 1989, and monitoring wells MW-1 through MW-4 and two additional monitoring wells (MW-5 and MW-6) installed on March 9, 1993 were monitored monthly and sampled on a quarterly basis until 1996. Groundwater flow ranged predominantly from the southwest to the north during the course of the investigation. Chlorinated solvents have consistently been reported in the up-gradient monitoring wells MW-3 and MW-4, and it appears that the chlorinated solvent impact at the Tosco site may be due to an unidentified source (or sources) located up-gradient of the subject site, or is part of a regional chlorinated solvent contaminant plume. The perimeter monitoring wells have historically shown relatively low to non-detectable concentrations of TPHg and BTEX.

On February 1, 1990, monitoring well MW-2 was destroyed in preparation for additional soil excavation in the vicinity of this well. Soil was excavated to a depth corresponding to approximately 6 to 12 inches below the level of the

ground water, which was encountered at a depth of about 11.5 feet below grade. After additional excavation, four soil samples were collected from the sidewalls of the excavation, each approximately 6 to 12 inches above the ground water surface. Soil excavation activities were terminated due to the close proximity of the former and new underground storage tank pits and the property line of the site. The analytical results of three soil samples indicated concentrations of TPHg ranging from 140 ppm to 1,100 ppm, while concentrations of TPH as diesel (TPHd) ranged from below the laboratory's indicated reporting limits to 280 ppm. The analytical results also indicated non-detectable levels of Environmental Protection Agency (EPA) Method 8010 constituents and total oil and grease (TOG) for three of the four samples, with the one sample containing TOG at 210 ppm. Soil excavation in the vicinity of monitoring well MW-2 was completed in April of 1990. Monitoring well MW-2 was then replaced with a new monitoring well (MW-2A) in March 1991.

1997 - Water sampled from monitoring well MW-1 continued to indicate the highest concentrations of fuel hydrocarbons throughout the duration of the investigation. Monitoring well MW-1 is the most down-gradient of the monitoring wells at the site. An off-site study was conducted in March 1997 to assess any impacts in the down-gradient direction.

Three Geoprobe® borings (EB-3, EB-4, and EB-5) were advanced through E. 14th Street in a northerly transect from the site. The three borings were each advanced to total depths ranging from 11 to 15 feet below grade. Ground water was encountered at depths ranging from 10.5 to 15 feet below grade during drilling. All constituents tested in the soil and the groundwater were below the laboratory's indicated reporting limits.

1998 – A "Case Closure Summary" was prepared by the Alameda County Environmental Protection Department. This document concluded that drinking water wells are not affected. It also documented the maximum contaminant concentrations – before and after cleanup as follows:

Contaminant	Soil (ppm)			Water (ppb)	
	Before	After		Before	After
TPHg	3500	1100		19,000	510
TPHd	ND	6.2		NA	NA
Benzene	40	8		230	72
Toluene	280	43		79	ND
Total Xylenes	600	230		1300	17
Ethyl-benzene	100	37		ND	ND
MTBE	NA	NA		NA	390
Oil & Grease	7700	1300		NA	NA
Heavy Metals	NA	NA		NA	NA
Other HVOC TCE	0.063	ND	TCE	4.4	ND
			PCE	110	950
			1,2-DCA	2.8	ND

The "Case Closure Summary" concluded that "there are no known municipal or residential water wells or surface water bodies within 750 feet down-gradient of the subject site that would be impacted by shallow groundwater from this site".

December 26, 2000 – Alameda County Health Care Services Agency (ACHCSA) issued a "Case Closure" letter.

2003 - Six groundwater monitoring wells destroyed. Groundwater was at 6-11 ft below ground surface (bgs).

2007 - On September 25 and 26, 2007, six soil borings (ATC-1, ATC-2, ATC-3, ATC-4, ATC-5, and ATC-6) were advanced in the vicinity of the existing fuel and waste oil USTs and dispensers. The borings were advanced to total depths of approximately 20 feet bgs (ATC-2, ATC-3, ATC-4 and ATC-5) and 25 feet bgs (ATC-1 and ATC-6). Groundwater was initially encountered at depths ranging from 14 feet bgs to 24 feet bgs during drilling activities.

Groundwater samples were collected from borings ATC-1, ATC-2, ATC-3, ATC-4, ATC-5, and ATC-6 after each boring was advanced approximately less than one to seven feet into groundwater. A duplicate groundwater sample designated as "Duplicate B-1" was collected from boring ATC-1.

The lithology underlying the site generally consists of clay, silty clay and sandy clay from the ground surface to approximately 25 feet bgs, the maximum extent of exploration. Photo ionization detector (PID) readings from the screened soil samples ranged from 1.4 ppm to 2,272 ppm.

Laboratory analytical results for the **soil samples** selected for analysis indicate the following:

- Toluene was reported at a concentration of 1.2 milligrams per kilogram (mg/kg) in the soil sample collected at approximately five feet bgs from boring ATC-5

- Ethyl-benzene was report at concentrations of 0.016 mg/kg, 8.8 mg/kg, 0.82 mg/kg, 11 mg/kg, and 6.2 mg/kg in the soil samples collected at approximately 12 feet bgs from borings ATC-1, ATC-2, and ATC-3 and five feet bgs from borings ATC-4 and ATC-5, respectively.

- Total xylenes were reported at concentrations of 0.029 mg/kg, 48 mg/kg, 2.93 mg/kg, 43 mg/kg, 25.2 mg/kg, and 0.007 mg/kg in the soil samples collected at approximately 12 feet bgs from borings ATC-1, ATC-2, and ATC-3, five feet bgs from borings ATC-4 and ATC-5 and 20 feet bgs from boring ATC-5, respectively.

• Tetrachloroethene (PCE) was reported at concentrations of 0.013 mg/kg and 0.033 mg/kg in the soil samples collected at approximately 20 feet bgs from borings ATC-4 and ATC-5, respectively.

• Methyl tert butyl ether (MTBE) was reported at concentrations of 0.024 mg/kg, 0.83 mg/kg, 0.011 mg/kg, and 0.015 mg/kg in the soil samples collected at approximately 12 feet bgs from borings ATC-1 and ATC-2 and 20 feet bgs from borings ATC-2 and ATC-4, respectively.

• t-Butyl alcohol was reported at a concentration of 0.19 mg/kg in the soil sample collected at approximately 12 feet bgs from boring ATC-1.

• Semi-volatile organic compounds (SVOCs) were also reported.

• TPHg was reported at concentrations of 100 mg/kg, 560 mg/kg, 27 mg/kg, 59 mg/kg, 1,000 mg/kg, and 220 mg/kg in the soil samples collected at 12 feet bgs from borings ATC-1, ATC-2, ATC-3, and ATC-6 and five feet bgs from borings ATC-4 and ATC-5, respectively.

• TPHd was reported at concentrations of 57 mg/kg, 51 mg/kg, 310 mg/kg, 18 mg/kg, and 170 mg/kg in the soil samples collected at 12 feet bgs from borings ATC-1, ATC-2, and ATC-3, 18 feet bgs from boring ATC-3 and five feet bgs from boring ATC-4, respectively.

• Chromium was reported at concentrations of 58.2 mg/kg and 44.8 mg/kg in the soil samples collected at approximately 12 and 15 feet bgs from boring ATC-6, respectively.

• Lead was reported in each of the soil samples submitted for analysis. Nickel was reported at concentrations of 57.8 mg/kg and 45.5 mg/kg in the soil samples collected at approximately 12 and 15 feet bgs from boring ATC-6, respectively.

• Zinc was reported at concentrations of 52.9 mg/kg and 42.2 mg/kg in the soil samples collected at approximately 12 and 15 feet bgs from boring ATC-6, respectively.

Laboratory analytical results from the **groundwater samples** collected from borings ATC-1 (including duplicate B-1), ATC-2, ATC-3, ATC-4, ATC-5, and ATC-6 indicated the following:

• Benzene was reported at concentrations of 39 micrograms per liter (µg/L), 60 µg/L, and 33 µg/L in the groundwater samples collected from borings ATC-2, ATC-4, and ATC-5, respectively.

• Toluene was reported at concentrations of 120 µg/L and 64 µg/L in the groundwater samples collected from borings ATC-4 and ATC-5, respectively.

• Ethylbenzene was reported at concentrations of 27 µg/L, 160 µg/L, 300 µg/L, and 110 µg/L in the groundwater samples collected from borings ATC-2, ATC-3, ATC-4, and ATC-5, respectively.

• Total xylenes were reported at concentrations of 7 µg/L, 12 µg/L, 117 µg/L, 630 µg/L, 1,040 µg/L, and 400 µg/L in the groundwater samples collected from borings ATC-1 (including duplicate B-1), ATC-2, ATC-3, ATC-4, and ATC-5, respectively.

• TCE was reported at concentrations of 12 µg/L, 11 µg/L, 15 µg/L, 9 µg/L, 14 µg/L, 16 µg/L, and 12 µg/L in the groundwater samples collected from borings ATC-1 (including duplicate B-1), ATC-2, ATC-3, ATC-4, ATC-5, and ATC-6, respectively.

• PCE was reported at concentrations of 100 µg/L, 96 µg/L, 100 µg/L, 29 µg/L, 230 µg/L, 240 µg/L, and 100 µg/L in the groundwater samples collected from borings ATC-1 (including duplicate B-1), ATC-2, ATC-3, ATC-4, ATC-5, and ATC-6, respectively.

• cis-1,2-dichloroethene was reported at a concentration of 8 µg/L in the groundwater sample collected from boring ATC-2.

• MTBE was reported at concentrations of 7 µg/L, 13 µg/L, 210 µg/L, 37 µg/L, and 6 µg/L in the groundwater samples collected from borings ATC-1 (including duplicate B-1), ATC-2, ATC-4, and ATC-5, respectively.

• Phenanthrene was reported at a concentration of 5 µg/L in the groundwater sample collected from boring ATC-6.

• Total TPH was reported at a concentration of 2,500 µg/L in the groundwater sample collected from boring ATC-6.

• TPHg was reported at concentrations of 140 µg/L, 140 µg/L, 860 µg/L, 3,700 µg/L, 6,400 µg/L, 2,500 µg/L, and 93 µg/L in the groundwater samples collected from borings ATC-1 (including duplicate B-1), ATC-2, ATC-3, ATC-4, ATC-5, and ATC-6, respectively.

• TPHd was reported at concentrations of 15,000 µg /L, 1,100 µg /L, 5,200 µg /L, 8,100 µg /L, 1,900 µg /L, 810 µg /L, and 910 µg /L in the groundwater samples collected fron1 borings ATC-1 (including duplicate B-1), ATC-2, ATC-3, ATC-4, ATC-5, and ATC-6, respectively.

• TPH-ORO was reported at a concentration of 1,600 µg/L in the groundwater sample collected from boring ATC-6.

AGENCY RECEPTOR SURVEY

The agency receptor survey was completed to identify all water supply wells within a half-mile radius of the site. The survey entailed a request to the California Department of Water Resources (DWR) office in Sacramento to provide well log records. DWR well log records were reviewed in order to determine the location of any water-supply wells in the vicinity of the subject site. Using the DWR well logs, a total of 5 wells had verifiable addresses within a half-mile radius of the site.

GROUNDWATER MONITORING AND SAMPLING

No groundwater monitor wells are present at the site.

REMEDIATION STATUS

Remediation is not currently required at this site by the ACHCSA.

CHARACTERIZATION STATUS

As indicated above, in 2007, groundwater was encountered at depths ranging from 14 feet bgs to 24 feet bgs during drilling activities. Delta proposes to define the vertical and lateral extent of TPHg and MTBE in the soil and the groundwater by advancing a series of exploratory borings. Based on the September 2007, ATC report, TPHd was reported at a maximum concentration of 15,000 µg/L in the groundwater sample collected from ATC-1. TPHg and benzene were reported at maximum concentrations of 6,400 µg/L and 60 µg/L, respectively in the groundwater sample collected from ATC-4. MTBE was reported at a maximum concentration of 210 µg/L in the groundwater sample collected from ATC-2.

RECENT CORRESPONDENCE

January 15, 2009 - Additional Site Assessment Work Plan dated October 29, 2008 was posted on Geotracker.

March 6, 2009 - ACHCSA requested a "Soil and Water Investigation Work Plan Addendum".

THIS QUARTER ACTIVITIES (First Quarter 2009)

No site activities were conducted during the first quarter 2009.

NEXT QUARTER ACTIVITIES (Second Quarter 2009)

1. The Soil and Water Investigation Work Plan Addendum was submitted on April 6, 2009. Pending approval of the Work Plan Addendum Delta will complete the proposed work and ask for site closure if appropriate.

CONSULTANT: Delta Consultants