ConocoPhillips
76 Broadway
Sacramento, California 95818

August 4, 2006

Mr. Jerry Wickham
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, California 94502

Re: **Report Transmittal**
**Quarterly Report**
**Second Quarter – 2006**
**76 Service Station #6034**
**4700 First Street**
**Livermore, CA**

Dear Mr. Wickham:

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

**Delta**
**Environmental**
**Consultants, Inc.**

*Solving environment-related business problems worldwide*

*www.deltaenv.com*

*3164 Gold Camp Drive • Suite 200*
*Rancho Cordova, California 95670 USA*

*916.638.2085 800.477.7411*
*Fax 916.638.8385*

August 7, 2006

Mr. Jerry Wickham
Alameda County Health Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

**Re: Quarterly Summary Report – Second Quarter 2006**
Delta Project No. C106034031

Dear Mr. Wickham:

On behalf of ConocoPhillips (COP), Delta Environmental Consultants, Inc. (Delta) is forwarding the quarterly summary report for the following location:

| **Service Station** | **Location** |
|---|---|
| 76 Service Station No. 6034 | 4700 First Street<br>Livermore, California |

Sincerely,
**Delta Environmental Consultants, Inc.**

Ben Wright
Staff Geologist

Daniel J. Davis, R.G.
Senior Project Manager

REGISTERED GEOLOGIST
DANIEL J. DAVIS
No. 6435
STATE OF CALIFORNIA

Forward: TRC - Semi-Annual Monitoring Report

cc: Ms. Shelby Lathrop, ConocoPhillips (electronic copy)

**QUARTERLY SUMMARY REPORT**
**Second Quarter 2006**
**76 Service Station No. 6034**
**4700 First Street**
**Livermore, California**

## PREVIOUS ASSESSMENT

Two underground storage tanks (UST)s, one waste oil UST, and the product piping were removed from the site in August 1989. Petroleum hydrocarbon concentrations in soil samples collected beneath the fuel USTs were non-detect to moderate. The fuel UST pit was subsequently over excavated to a depth of 17.5 feet below ground surface (bgs), where groundwater was encountered, to remove hydrocarbon impacted soil. Petroleum hydrocarbon concentrations in soil samples collected from beneath the waste oil UST were non-detect.

In October 1989, four monitoring wells (MW-1 through MW-4) were installed to depths ranging from 26 to 29 feet bgs. Groundwater was encountered at depths ranging from 14.5 to 17.5 feet bgs.

In April 1991, three additional monitor wells (MW-5 through MW-7) were installed to an average depth of 25 feet bgs. Groundwater was initially encountered at a depth of approximately 16 feet bgs.

In August 1995, an oxygen-releasing compound (magnesium peroxide) was placed in well MW-2 to enhance biodegradation of petroleum hydrocarbons. Also, a non-attainment zone status was sought from the regulatory agencies.

On October 30, 2003, five soil borings (SB-1 though SB-5) were completed to depths of 20 feet bgs. Methyl tertiary butyl ether (MTBE) was detected in two of the four samples analyzed at concentrations ranging from 0.042 to 0.064 mg/kg, which exceed the applicable Tier 1 environmental screening level (ESL) of the San Francisco Bay Regional Water Quality Control Board of 0.023 mg/kg. In addition, MTBE in the groundwater sample collected from SB-3 was detected at 13 micrograms per liter (µg/l), above the applicable ESL of 5 µg/l.

Groundwater samples collected from MW-2 over the past two years have detected MTBE concentrations ranging from 1.1 to 5.9 µg/l.

## SENSITIVE RECEPTORS

The site is located adjacent to and northwest of Arroyo Seco, an intermittent drainage stream.

## GROUNDWATER MONITORING AND SAMPLING

Groundwater at the site is currently monitored and sampled on a semi-annual basis during the second and fourth quarters of each year. During the most recent groundwater monitoring event conducted on June 23, 2006, depth to groundwater ranged from 13.68 feet (MW-4) to 15.49 feet (MW-1) below top of casing (TOC). The groundwater flow

direction was northwest at a gradient of 0.008 foot per foot (ft/ft), consistent with historic events. Historic groundwater flow directions are shown in Attachment A.

During the June 2006 groundwater sampling event, maximum detectable hydrocarbon concentrations were as follows: total petroleum hydrocarbons with gasoline distinctions (TPH-G) (160 µg/l, MW-2), ethylbenzene (3.1 µg/l, MW-2), total xylenes (8.1 µg/l, MW-2), and MTBE (1.1 µg/l, MW-2). Overall, the dissolved hydrocarbon concentrations are decreasing for MW-2 and MW-4.

## REMEDIATION STATUS

Remediation is not currently being conducted at the site.

## CHARACTERIZATION STATUS

Dissolved hydrocarbon concentrations have been present primarily in groundwater samples from monitoring wells MW-2 and MW-4. Groundwater samples from monitoring well MW-2 contained the highest TPH-G (160-3,300 µg/l) and MTBE (1.1-2.5 µg/l) concentrations during the last three monitoring events. Groundwater in the site area is designated as a possible drinking water source.

## RECENT CORRESPONDENCE

Delta received technical comments regarding the submitted Soil Boring Assessment Work Plan dated March 29, 2006 and Fourth Quarter 2005 Quarterly Report dated February 10, 2006. Alameda County Environmental Health concurred with the proposed work plan provided the depth of the CPT boring be advanced to approximately 50 feet bgs, and laboratory analysis includes TBA. If results substantiate that such discussions are applicable, site closure requirements will be requested of the agency upon completion of the proposed work.

## THIS QUARTER ACTIVITIES (Second Quarter 2006)

1. TRC conducted the semi-annual monitoring and sampling event at the site.

## WASTE DISPOSAL SUMMARY

No waste was generated during this reporting period.

## NEXT QUARTER ACTIVITIES (Third Quarter 2006)

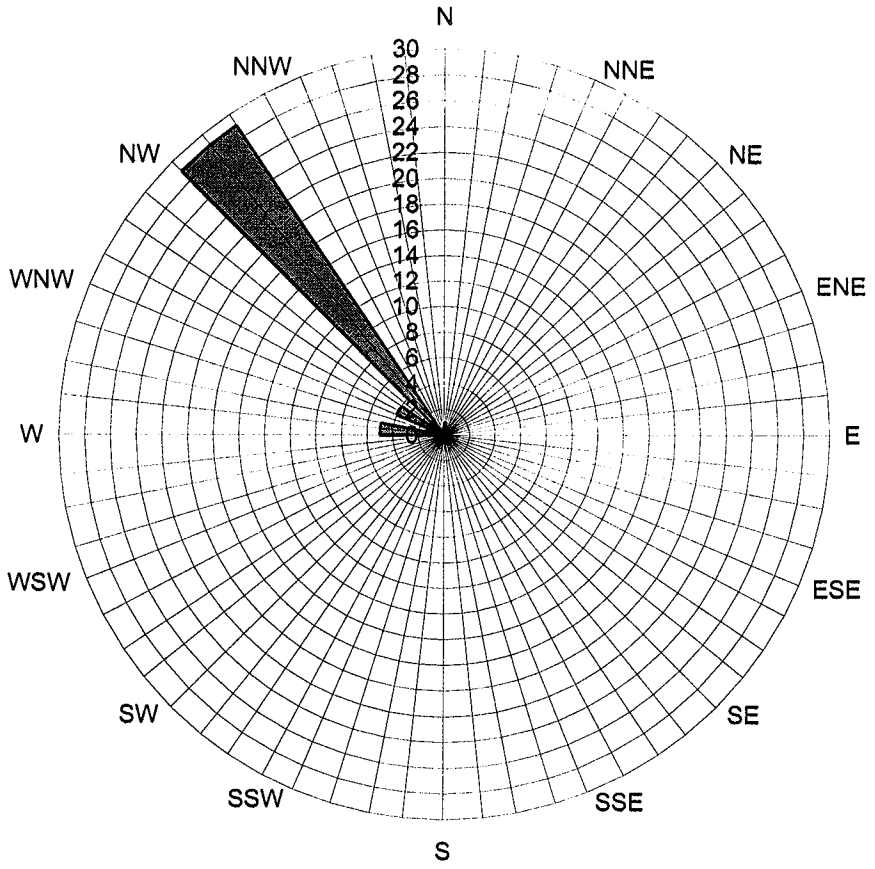
1. Delta will implement work plan to delineate vertical hydrocarbon contamination at the site.

**CONSULTANT:** Delta Environmental Consultants, Inc.

Attachment A – Historic Groundwater Flow Directions

# Attachment A
# Historic Groundwater Flow Directions

**Historic Groundwater Flow Directions**
**ConocoPhillips Site No. 6034**
4700 First Street
Livermore, California




Groundwater Flow Direction

Legend
Concentric circles represent quarterly montoring events
First Quarter 1990 through Second Quarter 2006
39 data points shown