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December 16, 2004

Mr. Thomas Kosel  
ConocoPhillips  
76 Broadway Avenue  
Sacramento, CA 95818

RE: **Quarterly Summary Report-First Quarter 2004**  
Delta Project Number: C1ER-QSR-1

Dear Mr. Kosel:

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


**Service Station**

76 Service Station No. 5484

**Location**

18950 Lake Chabot Road  
Castro Valley, California

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

  
Steve W. Meeks, P.E.  
Project Manager  
California Registered Civil Engineer No. CO57461

A member of:



## QUARTERLY SUMMARY REPORT First Quarter 2004

76 Service Station No. 5484  
18950 Lake Chabot Rd.  
Castro Valley, California

City/County ID #: Castro Valley

County: Alameda

### PREVIOUS ASSESSMENT

The Site is located at 18950 Lake Chabot Road in Castro Valley, California.

In June, 1988 a leak was detected in the unleaded product system during an annual precision tank test. The Alameda County Health Care Services Agency requested and investigation be performed to document subsurface conditions. As a result, three wells were installed in July, 1988. Approximately one foot of product was detected in one well and the other two wells contained dissolved hydrocarbons above state action levels.

In October, 1989, three additional monitoring wells (MW-4 through MW-6) were installed (MW-4 and MW-5 are offsite and MW-6 is onsite)

In June, 1989, two gasoline Underground Storage Tanks (UST's) and one waste oil UST were removed from the site during UST replacement activities. During these activities two monitoring wells (MW-1 and MW-3) were property destroyed.

Following their removal, the gasoline and waste oil UST pits were subsequently over-excavated in order to remove hydrocarbon-impacted soil. A substantial amount of soil (an area measuring approximately 60 by 70 feet was excavated to depths of 10 to 15 feet below grade) was conducted in the vicinity of the former fuel UST's. Hydrocarbon-impacted soil detected in the waste oil UST pit was also over-excavated to a depth of approximately 11 feet below grade. Approximately 1,900 cubic yards of soil was excavated and hauled offsite for appropriate disposal.

Soil samples collected from the sidewalls of the fuel UST pit after over-excavation soil showed non-detectable levels (<2 parts-per-million) of TPH as gasoline (TPHg), except at the easterly sidewall, where access limitations prevented further lateral excavation.

Also in June, 1989 three additional wells were installed offsite to further characterize the plume..

In November 1989, five more borings were drilled to assess soil and groundwater. A Unocal contractor drilled into and exposed a section of the sanitary sewer near the station, which subsequently required repairs to a 30-foot section of the pipe.

In 1990, remediation options were evaluated which concluded that groundwater monitoring coupled with risk analysis should be appropriate for the site. SVE was deemed infeasible due to relatively impermeable soils and shallow bedrock.

In June, 1991 two additional borings were drilled in the southern portion of the site. Monitoring well MW-7 was installed in one of the borings.

Unocal (former owner) had requested that this site be included in the Regional Water Quality Control Board's NAA program. The ACHCS has agreed to an annual sampling program. The five existing monitoring wells (MW-2, MW-4, MW-5, MW-6 and MW-7) are monitored and wells MW-4, MW-5 and MW-7 are sampled in March.

## **SENSITIVE RECEPTOR SURVEY**

In September, 1998 a well search was performed by Gettler-Ryan, Inc. (GR). Based on available driller's logs on file with the California Department of Water Resources (DWR) there appears to be a number of wells located with  $\frac{1}{4}$  to  $\frac{1}{2}$  mile of the site and one well located within  $\frac{1}{4}$  mile of the site.

Based on the U.S. Geological Survey Topographic Map for this area (Santa Rosa quadrangle, photo revised 1980), the nearest surface water body is an unnamed drainage located approximately 2,000 feet north of the site. The drainage originates from a reservoir located about one mile to the northeast.

## **MONITORING AND SAMPLING**

MW-1 was sampled quarterly from July, 1988 through Jun 1989. MW-2 has been sampled since June, 1988. Wells MW-4 through MW-6 have been sampled since June, 1989.

Currently five wells (three onsite and two offsite) are monitored/sampled annually (MW-2, MW-4, MW-5, MW-6 and MW-7). Samples are analyzed for TPH-D, TPHg, BTEX, and fuel oxygenates.

## **CHARACTERIZATION STATUS**

Dissolved hydrocarbon impact in groundwater has been predominantly defined. The most recent groundwater samples collected from the down gradient monitoring wells located off-site showed non-detectable concentrations of TPHH, benzene and MTBE.

### **First Quarter, 2004 discussion:**

Groundwater elevation dropped 0.56 feet from March, 2003.

Gradient and flow direction was 0.1 ft/ft to the South

During the March, 2004 event, only MW-7 (onsite) and MW-5 (offsite) were sampled. MW-4 could not be located.

### **Chemicals of Concern discussion:**

TPHH: Concentration of 2,800  $\mu\text{g/l}$  in MW-7 and ND<50  $\mu\text{g/l}$  in MW-5

Benzene: Concentration of 34  $\mu\text{g/l}$  in MW-7 and ND <.5  $\mu\text{g/l}$  in MW-5

MTBE: Concentration of 1,200  $\mu\text{g/l}$  in MW-7 and ND <.5  $\mu\text{g/l}$  in MW-5

Note: Concentration of Chemicals of Concern have historically been at or below detection limits in MW-5. Concentrations in MW-7 are consistent with historical levels.

## **RECENT CORRESPONDENCE**

No correspondence received or sent during first quarter, 2004

## **THIS QUARTER ACTIVITIES (First quarter 2004)**

1. TRC performed annual monitoring/sampling event on March 26, 2004

## **NEXT QUARTER ACTIVITIES (Second quarter 2004)**

1. TRC to prepare and submit Annual Monitoring Report...

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