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June 18, 2004

TRC Project No. 42013801

Mr. Amir Gholami  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

Alameda County  
JUN 29 2004  
Environmental Health

**RE: Quarterly Status Report - First Quarter 2004**  
**76 Station #3135, 6535 San Leandro Street, Oakland, California**  
**Alameda County**

Dear Mr. Gholami:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC is submitting the First Quarter 2004 Status Report for the subject site, shown in the attached Figures 3 through 5.

**PREVIOUS ASSESSMENTS**

The subject site is situated on the northwest corner of San Leandro Street and 66<sup>th</sup> Avenue in Oakland, California. Station facilities currently include two gasoline underground storage tanks (USTs), a 550-gallon waste oil UST, three dispenser islands under canopies, and a service station building. The product dispensers utilize a balanced vapor recovery system.

Historical data indicate that the site has been a service station since 1947. Renovation of the site first occurred in 1967, when the size of the site expanded to its current configuration.

1989: Two 10,000-gallon gasoline USTs, one 280-gallon waste oil UST and product piping were removed from the site. Confirmation soil samples collected from the UST pit indicated low residual maximum concentrations of Total Petroleum Hydrocarbons as gasoline (TPH-g), benzene, and Total Oil and Grease (TOG). After confirmation soil sampling, approximately 5,000 gallons of groundwater was removed from the UST pit and disposed offsite. A groundwater sample was collected and analyzed after recharge of the UST pit and contained TPH-g at 7,900 parts per billion (ppb) and benzene at 850 ppb. Confirmation soil samples collected from the product piping trench indicated low maximum residual concentrations of TPH-g and benzene.

April 1990: Two shallow soil borings were advanced and three groundwater monitoring wells were installed to depths of approximately 22 feet below ground surface (bgs).

August 1990: Three groundwater monitoring wells (MW-4 through MW-6) were installed.

January 1991: A hydropunch survey was performed at the site.



March 1991: The pre-1967 UST pit was over-excavated, and two concrete slabs were removed from depths of approximately 8.5 and 10 feet bgs. Approximately 2,000 cubic yards of impacted soil was removed from the site and properly disposed of. Over-excavation was limited by existing product piping. Confirmation soil samples from the former UST pit indicated low to moderate residual concentrations of TPH-g. Approximately 20,000 gallons of groundwater were pumped from the former UST pit prior to backfilling and properly disposed of.

September 1992: Three groundwater monitoring wells were installed in the streets adjacent to the site.

April 1993: One groundwater monitoring well was installed at the site.

August 1998: Oxygen Releasing Compound (ORC) was installed in monitoring well MW-6 to assist with biological attenuation of hydrocarbon compounds. Starting in 1999, the following bio-attenuation parameters have been measured at the site: nitrate; sulfate; ferrous iron; dissolved oxygen; and, oxidation-reduction potential. According to Gettler-Ryan, Inc.'s (GR) Annual Monitoring and Sampling Report dated April 19, 2001, review of these parameters indicate that bio-attenuation is occurring at the site.

July 2001: One offsite well boring was installed to a depth of 20 feet bgs.

October 2003: Site environmental consulting responsibilities were transferred to TRC.

### **SENSITIVE RECEPTORS**

A sensitive receptor survey has not been performed for this site.

### **MONITORING AND SAMPLING**

Groundwater monitoring and sampling has been ongoing at the site since 1990. Historical groundwater flow directions have varied from northeast, northwest, southwest and southeast. A historical groundwater flow directions figure was prepared by GR as part of the *Site Conceptual Model*, dated May 19, 2000.

Currently, eight onsite and three offsite wells are monitored semi-annually. Ten wells were sampled this quarter. The groundwater gradient and flow direction were 0.01 foot/foot to the south.

### **CHARACTERIZATION STATUS**

Petroleum hydrocarbon impacts to groundwater are not fully delineated. The highest offsite concentrations are 320 µg/l of Total Purgeable Petroleum Hydrocarbons (TPPH), non-detect benzene, and 300 µg/l MTBE.

TPPH were detected in three of the ten monitoring wells sampled, with a maximum concentration of 8,400 µg/l in MW-6.

Benzene was detected in one of the ten monitoring wells sampled, with a maximum concentration of 100 µg/l in MW-6.

MTBE was detected in six of the ten monitoring wells sampled, with a maximum concentration of 300 µg/l in MW-10.

### **REMEDIATION STATUS**

March 1991: The pre-1967 UST pit was over-excavated. Approximately 2,000 cubic yards of impacted soil was removed from the site and properly disposed offsite. Approximately 20,000 gallons of groundwater were pumped from the former UST pit prior to backfilling and properly disposed offsite.

Remediation is not currently being conducted at the site.

### **RECENT CORRESPONDENCE**

No correspondence this quarter.

### **CURRENT QUARTER ACTIVITIES**

February 5, 2004: TRC performed groundwater monitoring and sampling. Wastewater generated from well purging and equipment cleaning was stored at TRC's groundwater monitoring facility in Concord, California, and transported by Onyx to the ConocoPhillips Refinery in Rodeo, California, for treatment and disposal.

### **NEXT QUARTER ACTIVITIES**

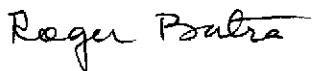
Await agency directives for additional assessment work, if any.

Increase monitoring and sampling frequency from annual to semi-annual to assess plume stability and concentration trends at key wells.

If you have any questions regarding this report, please call Roger Batra at (925) 688-2466.

Sincerely,

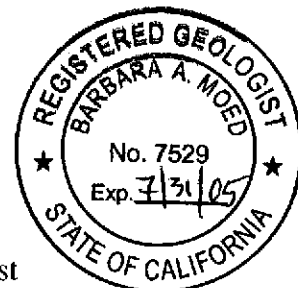
TRC



Roger Batra  
Senior Project Manager



Barbara Moed, R.G.  
Senior Project Geologist



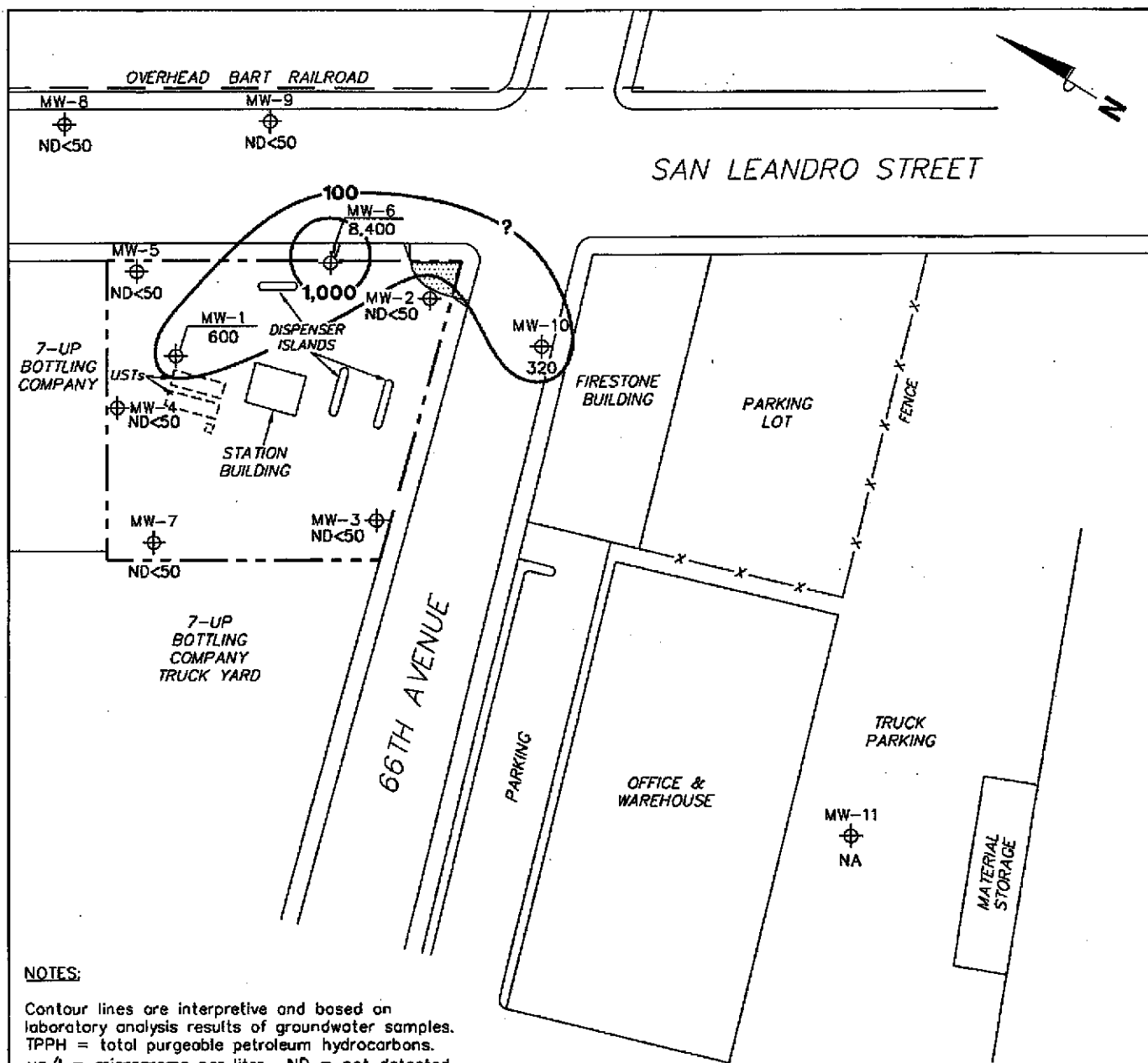
Attachments:

Figure 3 – Dissolved-Phase TPPH Concentration Map, February 5, 2004, from First Quarter 2004 Fluid Level Monitoring and Sampling Report, dated April 26, 2004 by TRC.

Figure 4 – Dissolved-Phase Benzene Concentration Map, February , 2004, from First Quarter 2004 Fluid Level Monitoring and Sampling Report, dated April 26, 2004 by TRC.

Figure 5 – Dissolved-Phase MTBE Concentration Map, February 5, 2004, from First Quarter 2004 Fluid Level Monitoring and Sampling Report, dated April 26, 2004 by TRC.

cc: Thomas Kosel, ConocoPhillips (hard copy and electronic upload)



**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPPH = total purgeable petroleum hydrocarbons. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. NA = not analyzed, measured, or collected. UST = underground storage tank. Results obtained using EPA Method 8260B.

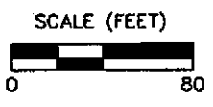
**LEGEND**

MW-11 ⊕ Monitoring Well with Dissolved-Phase TPPH Concentration (µg/l)

—1,000— Dissolved-Phase TPPH Contour (µg/l)

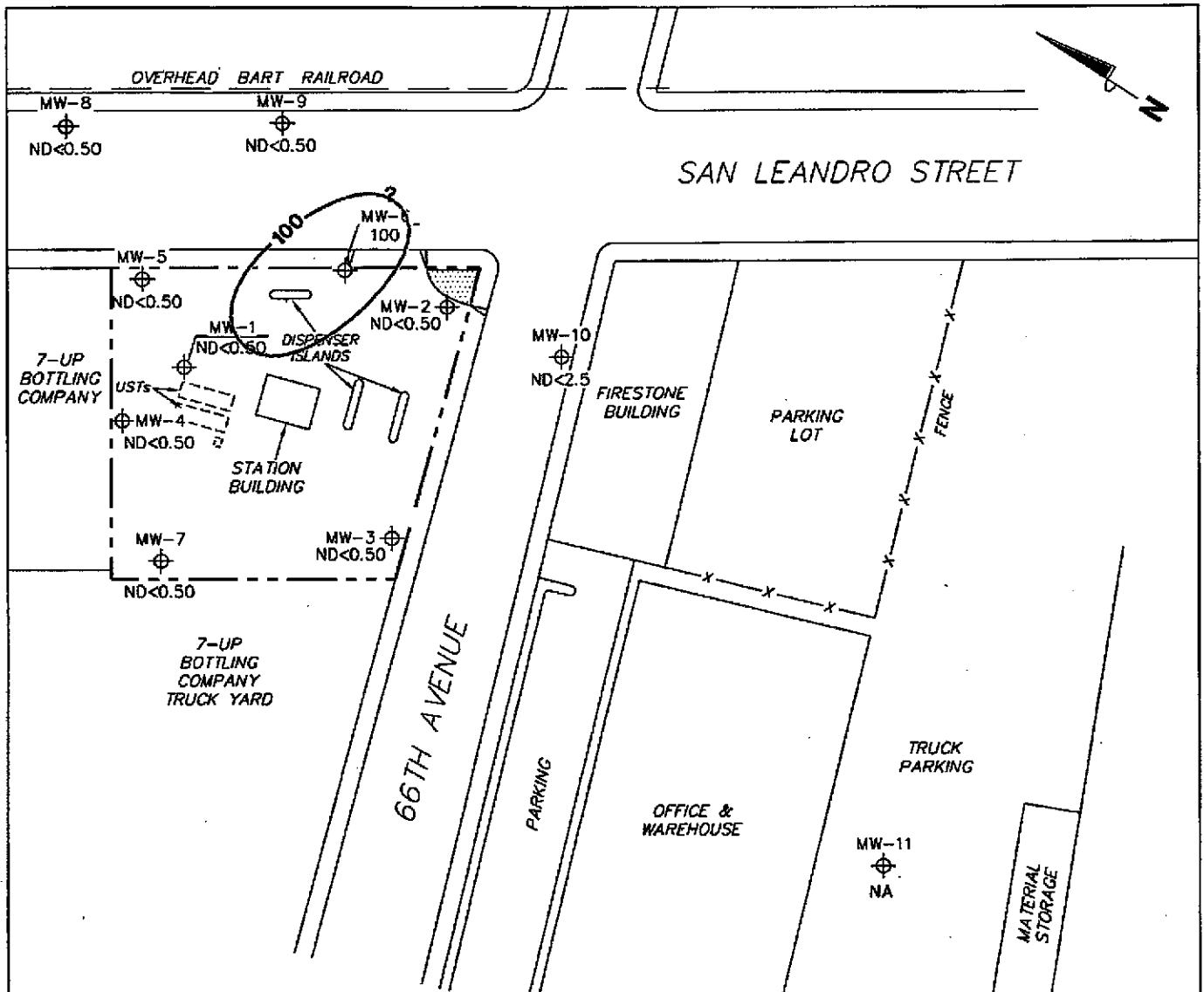
**DISSOLVED-PHASE TPPH CONCENTRATION MAP**  
February 5, 2004

76 Station 3135  
845 66th Avenue  
Oakland, California



**FIGURE 3**

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**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. NA = not analyzed, measured, or collected. UST = underground storage tank.

**LEGEND**

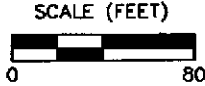
MW-11 ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)

—100— Dissolved-Phase Benzene Contour (µg/l)

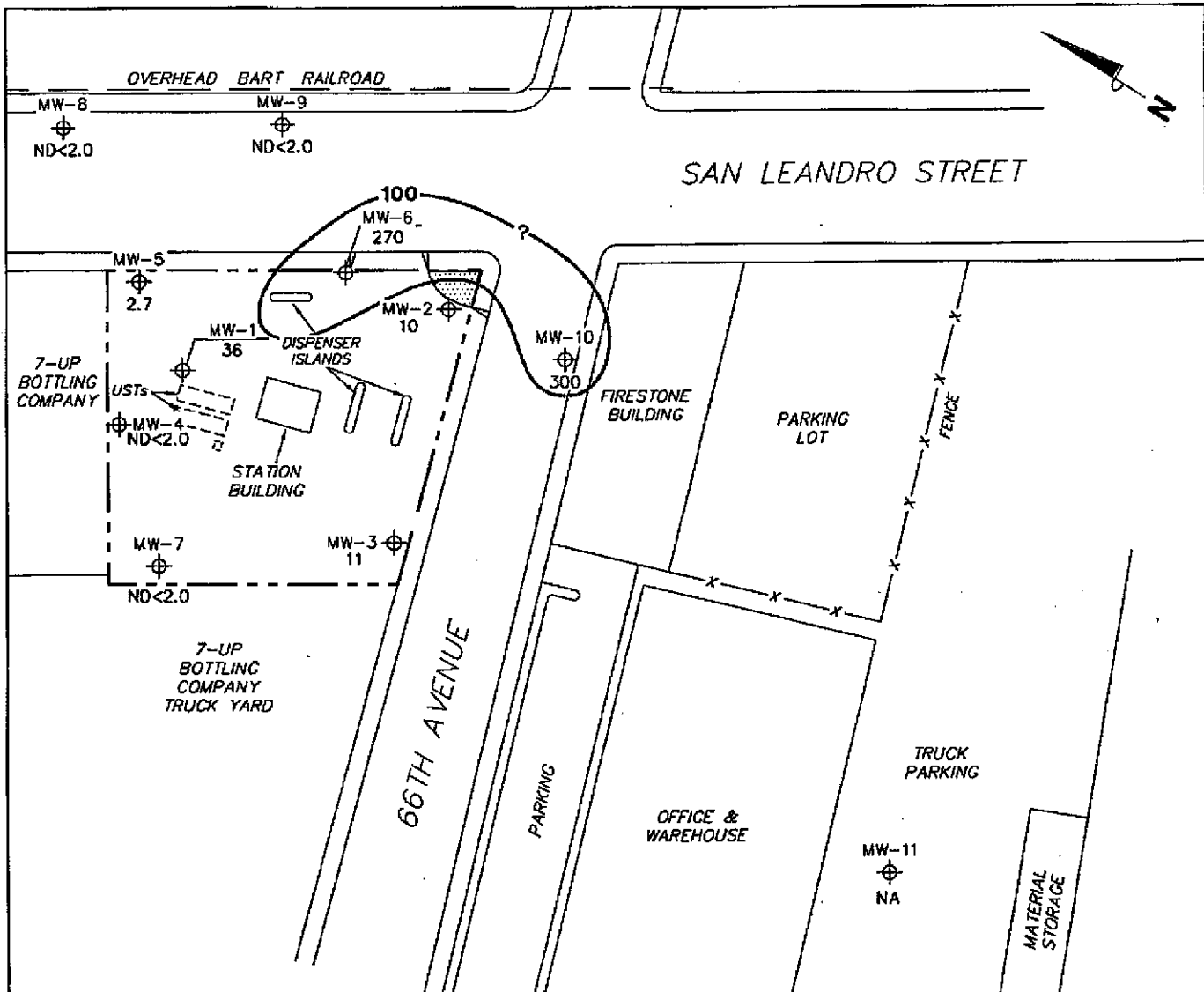
**DISSOLVED-PHASE BENZENE CONCENTRATION MAP**  
February 5, 2004

76 Station 3135  
845 66th Avenue  
Oakland, California

**FIGURE 4**



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**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. MTBE = methyl tertiary butyl ether. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. NA = not analyzed, measured, or collected. UST = underground storage tank. Results obtained using EPA Method 8260B.

**LEGEND**

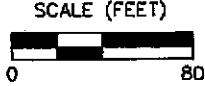
MW-11 ⊕ Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)

—100— Dissolved-Phase MTBE Contour (µg/l)

**DISSOLVED-PHASE MTBE CONCENTRATION MAP**  
February 5, 2004

76 Station 3135  
845 66th Avenue  
Oakland, California

**FIGURE 5**



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