

R0203



Customer-Focused Solutions

July 29, 2004

TRC Project No. 42016301

Mr. Don Hwang
Alameda County Health Services
1131 Harbor Bay Parkway
Alameda, California 94502-6577

ALAMEDA COUNTY
JUL 29 2004
PUBLIC WORKS DEPARTMENT

**RE: Quarterly Status Report - Second Quarter 2004
76 Station #0746, 3943 Broadway, Oakland, California
Alameda County**

Dear Mr. Hwang:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC is submitting the Second Quarter 2004 Quarterly Status Report for the subject site, shown on Figure 3 through 5.

PREVIOUS ASSESSMENTS

The subject site is situated on the western corner of the intersection of Broadway and 40th Street in Oakland, California. Station facilities include two 12,000-gallon double-wall glasteel gasoline underground storage tanks (USTs) in a common pit, one 520-gallon double-wall glasteel waste oil UST, two dispenser islands, one station building, and a car wash building.

August 1989: Two 10,000-gallon steel gasoline USTs and one 280-gallon steel waste oil UST were removed and replaced with the current USTs. A total of approximately 350 cubic yards of soil was removed from the site during UST removal activities. The confirmatory soil sample was reported as non-detect for all constituents. The product piping was also removed. Confirmation soil sampling beneath piping and the waste oil tank indicated low levels of petroleum hydrocarbons detected. During the tank removal activities, approximately 6,500-gallons of groundwater was pumped from the UST cavity. Concentrations of total petroleum hydrocarbons as gasoline (TPH-g) and benzene were reported as 1,200 micrograms per liter ($\mu\text{g/l}$) and 12 $\mu\text{g/l}$, respectively.

October 1989: Three monitoring wells were installed at the site to depths ranging from 20 to 22.5 feet below ground surface (bgs).

January 1990: Two additional monitoring wells were installed at the site to a depth of 20 feet bgs.

October 1990: Four additional monitoring wells were installed at and in the vicinity of the site at depths ranging from 20 to 22 feet bgs. Groundwater recovery tests were performed on four wells to determine potential locations for placement of recovery wells.

January 1992: Two offsite monitoring wells were installed in the vicinity of the site at depths ranging from 19 to 22 feet bgs.

June 1992: One recovery well and one additional offsite monitoring well were installed at the site to depths of 17.5 feet bgs.

February 1998: The product piping and associated dispenser islands were replaced at the site. Four soil samples were collected from beneath the dispenser islands. Petroleum hydrocarbons were reported at low to moderate levels. A total of 30.20 tons of stockpiled soil was transported from the site to the Forward Inc. Landfill in Stockton, California.

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

Currently, eight onsite and five offsite groundwater wells are monitored semi-annually. Eleven wells were sampled this quarter. The groundwater gradient and flow direction were 0.06 foot/foot to the southwest.

REMEDIATION STATUS

In 1989, approximately 350 cubic yards of soil was removed from the site during UST removal activities. During the tank removal activities, approximately 6,500-gallons of groundwater was pumped from the UST cavity.

In 1990, groundwater recovery tests were performed on four wells to determine potential locations for placement of recovery wells.

In 1993, a pilot vapor extraction test was performed at the site on well RW-1. A maximum concentration of 8.6 µg/l TPH-g was reported in the influent vapor stream. The calculated maximum hydrocarbon extraction rate during the test was 0.00049 lbs/hr. Based on the low extraction rate, high groundwater levels, and fine-grained soil beneath the site, vapor extraction was determined to not be a feasible remedial option. Well RW-1 was initially installed to perform a groundwater recovery test, but due to lack of groundwater recharge, the test was not performed.

In 1998, the product piping and associated dispenser islands were replaced at the site. A total of 30.20 tons of stockpiled soil was transported from the site by Denbeste Transportation, Inc. of Windsor, California to the Forward Inc. Landfill in Stockton, California for disposal on March 3, 1998.

CHARACTERIZATION STATUS

Hydrocarbon impacts to groundwater are not fully delineated. The highest offsite concentrations are 450 µg/l total purgeable petroleum hydrocarbons (TPPH), 750 µg/l methyl tertiary butyl ether (MTBE), and 1.8 µg/l for benzene.

TPPH were detected in four of ten monitoring wells sampled, with a maximum concentration of 10,000 µg/l in onsite well MW-3.

Benzene was detected in three of ten monitoring wells sampled, with a maximum concentration of 20 µg/l in onsite well RW-1.

MTBE was detected in nine of ten monitoring wells sampled, with a maximum concentration of 1,200 µg/l in onsite well MW-3.

RECENT CORRESPONDENCE

No correspondence this quarter.

CURRENT QUARTER ACTIVITIES

May 24, 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.

Perform a dual-phase vacuum extraction pilot test on onsite well MW-3.

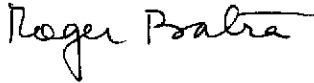
Continue semi-annual monitoring and sampling to assess plume stability and concentration trends at key wells.

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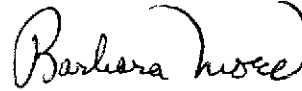
If you have any questions regarding this report, please call Roger Batra at (925) 688-2466.

Sincerely,

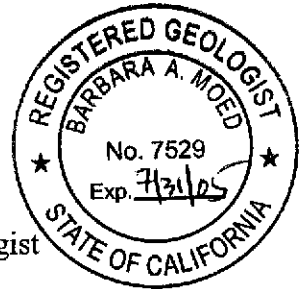
TRC



Roger Batra
Senior Project Manager



Barbara Moed, R.G.
Senior Project Geologist



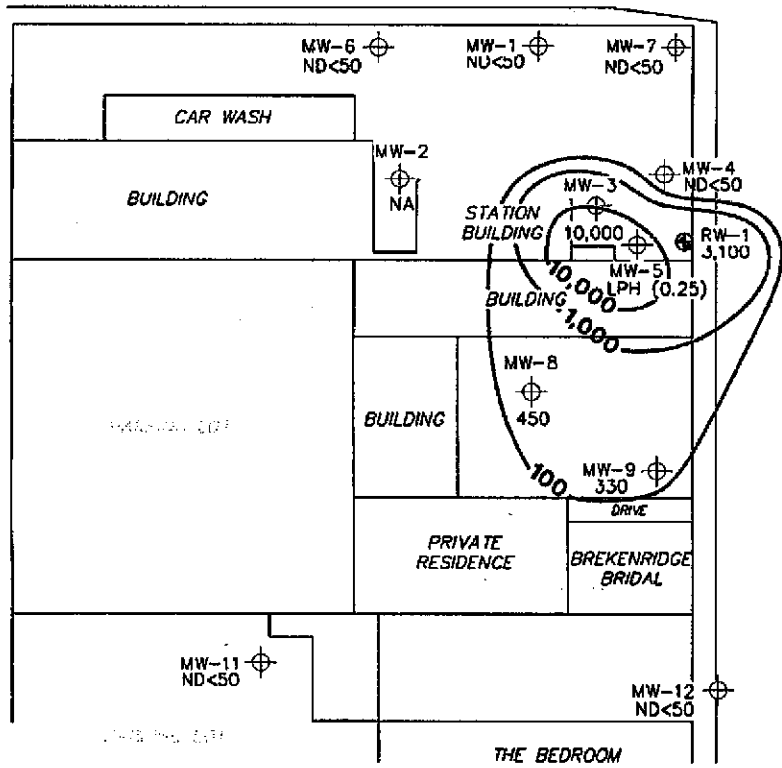
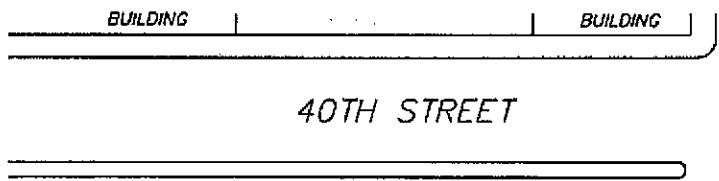
Attachments:

Figure 3 – Dissolved-Phase TPHH Concentration Map, May 24, 2004, from Second Quarter 2004 Fluid Level Monitoring and Sampling Report, dated June 25, 2004 by TRC.

Figure 4 – Dissolved-Phase Benzene Concentration Map, May 24, 2004, from Second Quarter 2004 Fluid Level Monitoring and Sampling Report, dated June 25, 2004 by TRC.

Figure 5 – Dissolved-Phase MTBE Concentration Map, May 24, 2004, from Second Quarter 2004 Fluid Level Monitoring and Sampling Report, dated June 25, 2004 by TRC.

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



LEGEND

MW-12 ⊕ Monitoring Well with Dissolved-Phase TPPH Concentration ($\mu\text{g}/\text{l}$) or LPH Thickness (feet)

RW-1 ⊕ Recovery Well with Dissolved-Phase TPPH Concentration ($\mu\text{g}/\text{l}$) or LPH Thickness (feet)

-10,000- Dissolved-Phase TPPH Contour ($\mu\text{g}/\text{l}$)

NOTES:

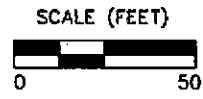
Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPPH = total purgeable petroleum hydrocarbons. $\mu\text{g}/\text{l}$ = micrograms per liter. ND = not detected at limit indicated on official laboratory report. Results obtained using EPA Method 8260B. NA = not analyzed, measured or collected. LPH = liquid-phase hydrocarbons.

**DISSOLVED-PHASE TPPH
CONCENTRATION MAP
May 24, 2004**

76 Station 0746
3943 Broadway
Oakland, California

FIGURE 3

PS=1:1 0746-003

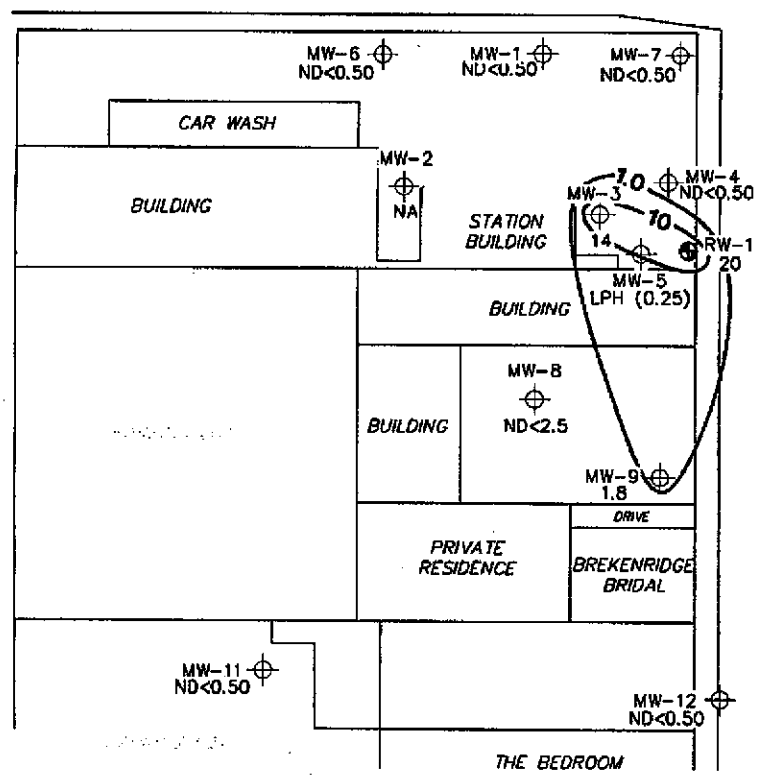




BUILDING

BUILDING

40TH STREET



BUILDING

VAL STROUGH MAZDA DEALER

BROADWAY

MW-10 ND<0.50

LEGEND

- MW-12 ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration ($\mu\text{g/l}$) or LPH Thickness (feet)
- RW-1 ⊕ Recovery Well with Dissolved-Phase Benzene Concentration ($\mu\text{g/l}$) or LPH Thickness (feet)
- 10 — Dissolved-Phase Benzene Contour ($\mu\text{g/l}$)

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. $\mu\text{g/l}$ = micrograms per liter. ND = not detected at limit indicated on official laboratory report. NA = not analyzed, measured or collected. LPH = liquid-phase hydrocarbons.

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
May 24, 2004

76 Station 0746
 3943 Broadway
 Oakland, California

TRC

SCALE (FEET)

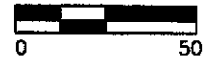


FIGURE 4

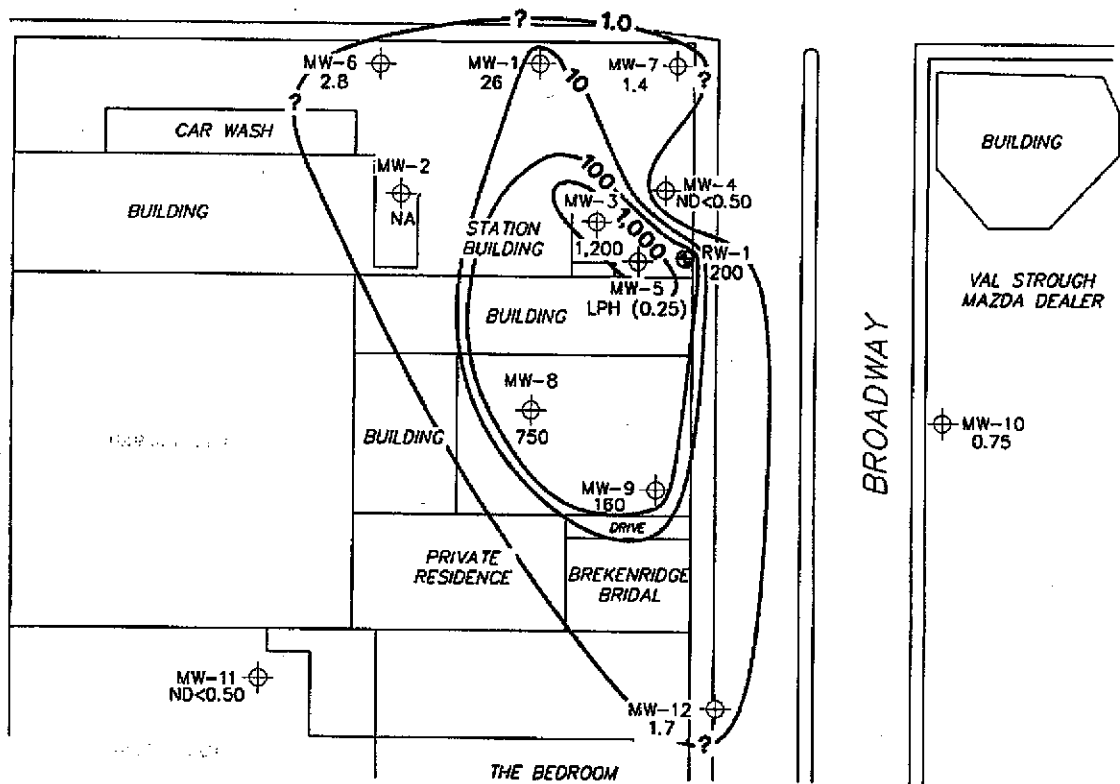
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BUILDING

BUILDING

40TH STREET



LEGEND

MW-12 ⊕ Monitoring Well with Dissolved-Phase MTBE Concentration ($\mu\text{g/l}$) or LPH Thickness (feet)

RW-1 ⊕ Recovery Well with Dissolved-Phase MTBE Concentration ($\mu\text{g/l}$) or LPH Thickness (feet)

-10,000- Dissolved-Phase MTBE Contour ($\mu\text{g/l}$)

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. MTBE = methyl tertiary butyl ether. $\mu\text{g/l}$ = micrograms per liter. ND = not detected at limit indicated on official laboratory report. Results obtained using EPA Method 8260B. NA = not analyzed, measured or collected. LPH = liquid-phase hydrocarbons.

**DISSOLVED-PHASE MTBE
CONCENTRATION MAP
May 24, 2004**

76 Station 0746
3943 Broadway
Oakland, California

FIGURE 5

PS-1:1 0746-003



SCALE (FEET)

