



PACIFIC
ENVIRONMENTAL
GROUP, INC.

April 29, 1993
Project 340-34.01

Mr. Robert Robles
Texaco Refining and Marketing, Inc.
10 Universal City Plaza, Suite 724
Universal City, California 91608

Re: Former Texaco Service Station
500 Grand Avenue
Oakland, California

Dear Mr. Robles:

The following letter presented by Pacific Environmental Group, Inc. (PACIFIC) on the behalf of Texaco Refining and Marketing (Texaco) outlines suggested groundwater monitoring activities at the site referenced above (Figure 1). PACIFIC has reviewed the site's subsurface investigation and remedial activities and has determined that the assessment is complete. Additionally, all contaminated soils underlying the site, with the possible exception of a very narrow band along Grand Avenue, have been removed by extensive soil excavation activities. Thus, the source of previously documented on-site groundwater contamination has been eliminated.

PACIFIC understands that after May 31, 1992, Texaco will no longer have any rights to enter this property, nor maintain monitoring wells within its boundaries.

SITE DESCRIPTION AND HISTORY

The station was operated by Texaco prior to October 31, 1988. Between November 1, 1988 and the fourth quarter 1991, the station was operated by Exxon Company U.S.A. All on-site structures, including underground storage tanks (USTs), product piping, and groundwater monitoring wells have been removed.

Unleaded and leaded gasoline and diesel fuels were dispensed by Texaco. Prior to its closure in the fourth quarter 1991, the station included three USTs, two fuel dispenser islands, and an underground waste oil storage tank. The waste oil storage tank was removed from the site on September 25, 1990. The three product USTs were removed on April 13 through 15, 1992.

The former Texaco service station is approximately 200 feet north of the eastern end of Lake Merritt in Oakland, California, and occupies an area approximately 110 feet wide by 135 feet long. Elevation of the site is approximately 20 feet above mean sea level. The topography of the surrounding area consists of gently rolling hills that slope toward Lake Merritt. The area is fully developed, and surface water runoff is intercepted by the municipal storm sewer system. The site is underlain by primarily fine-grained sediments (silt to clay) to shallow depths explored (approximately 15 feet).

Groundwater occurs at depths of less than 10 feet. The flow direction has been consistently to the southeast toward Lake Merritt. The approximate calculated groundwater gradient is 0.075 foot/foot.

Concentrations of total petroleum hydrocarbons (TPH) in groundwater have been found primarily in the vicinity of the former dispenser islands. Concentrations of total petroleum hydrocarbons calculated as diesel (TPH-d) and heavier hydrocarbons above the range of diesel have been reported consistently for former on-site Well MW-8E and intermittently for all site wells. TPH calculated as gasoline (TPH-g), and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), have been reported for Well MW-8E, and along the north side of Grand Avenue for off-site Wells MW-8H, MW-8I, and MW-8J. The concentrations of TPH-g in Well MW-8E have ranged from 15,000 to 56,000 parts per billion (ppb). Concentrations of TPH-d and the heavier hydrocarbons in Well MW-8E have ranged from non-detectable to 17,000 ppb. TPH-g concentrations in Well MW-8I have ranged from non detectable to 4,400 ppb. The next highest concentrations of TPH-g are found in Well MW-8H and have typically been below 320 ppb. Well MW-8J has been non-detectable for all constituents since October 1991.

Over 2,400 cubic yards of soil have been excavated from within the property boundaries. The areas found to have the highest concentrations of TPH were included in the excavation. The only remaining on-site high concentration in soils is TPH-g at 1,000 parts per million, located near the Grand Avenue sidewalk along the southern perimeter of the site.

GROUNDWATER MONITORING

PACIFIC recommends the continued monitoring of Wells MW-8H, MW-8I, and MW-8J to evaluate any changes in plume concentrations downgradient of the site. Should concentrations increase with time, additional wells along Grand Avenue would be proposed to further define plume conditions. Existing data indicates that the plume, which is being held in a clay/silt horizon, is relatively stagnant in its present configuration.

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PACIFIC does recognize the critical nature of Lake Merritt, which lies within a short distance downgradient of the site. Should significant levels of hydrocarbons be detected in either Well MW-8F or MW-8G, further actions would be triggered, including placement of additional monitoring wells and possibly migration control measures. However, it is understood that any further actions, such as installation of monitoring wells, would involve encroachment onto public right-of-ways and possibly other civic or private properties, and may be beyond the control of Texaco.

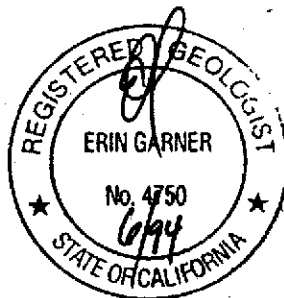
Please do not hesitate to call me if you should have any questions regarding the above recommendations.

Sincerely,

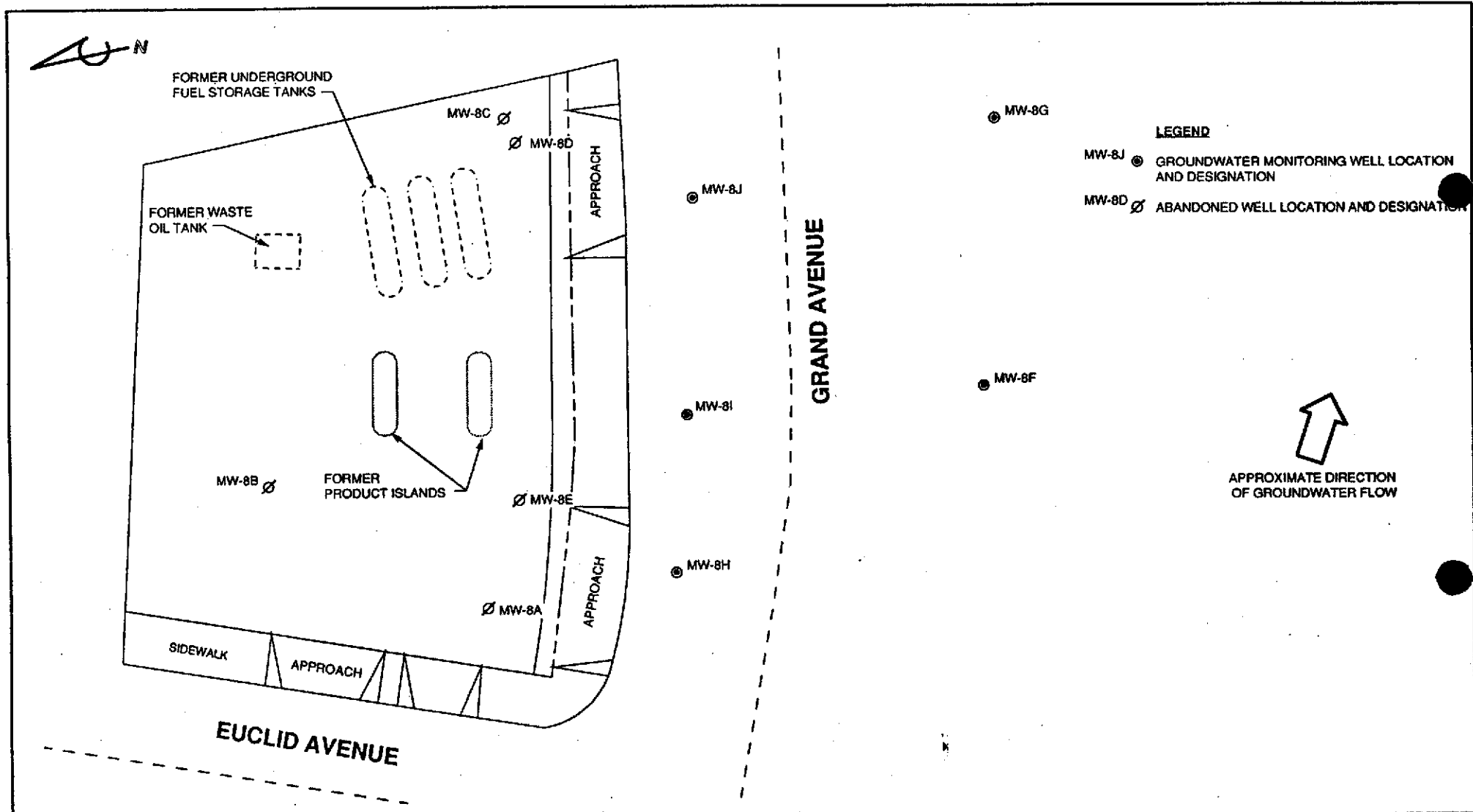
Pacific Environmental Group, Inc.



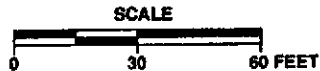
Erin Garner
Senior Geologist
RG 4750



Attachments: Figure 1 - Site Map



PACIFIC ENVIRONMENTAL GROUP, INC.



FORMER TEXACO SERVICE STATION
500 Grand Avenue at Euclid Avenue
Oakland, California

SITE MAP

FIGURE:
1
PROJECT:
340-34.01