STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
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OAKLAND, CA 94623-0660
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RO 225

April 19, 2005
Mr. Amir Gholami
Alameda County Environmental Health Service
Environmental Protection
1131 Harbor Bay Pkwy; Suite 250
Alameda, California 94502-6577

SUBJECT: Submittal of Workplan and Health & Safety Plan for **two** sites in Oakland.

Dear Mr. Gholami:

Attached please find copies of Workplan and Health & Safety Plan for 2005 Ground Water Monitoring at the following sites in Oakland.

1- 555 Hegenberger Road, Oakland, Alameda County.
2- 1112 29th Avenue, Oakland, Alameda County.

If you have any questions or require additional information, please contact Bahram Sazegar at (510) 286-5643.

Ray Boyer

RAY BOYER
District Branch Chief
Office of Environmental Engineering

Attachments

Cc: Rboyer, File

R0225

GEOCON
CONSULTANTS, INC.
ENVIRONMENTAL ■ GEOTECHNICAL ■ MATERIALS

Project No. E8220-06-17
April 14, 2005

Bahram Sazegar
California Department of Transportation
District 4
111 Grand Avenue, 14th Floor
Post Office Box 23660
Oakland, California 94623-0660

Subject: WORKPLAN TO CONDUCT GROUNDWATER MONITORING
FORMER HEGENBERGER MAINTENANCE STATION
555 HEGENBERGER ROAD
OAKLAND, CALIFORNIA
CONTRACT No. 04A1862
TASK ORDER No. 17

Dear Mr. Sazegar:

As requested, Geocon has prepared this workplan to conduct groundwater monitoring at the Former Maintenance Station located 555 Hegenberger Road in Oakland, California. The site location is shown on the Vicinity Map, Figure 1.

BACKGROUND

In September 1994, four underground storage tanks (USTs) and the associated product piping and pump island were removed. The USTs consisted of two 2,000-gallon diesel and two 6,500-gallon gasoline tanks. During the tank removals, the UST areas were over-excavated and the soil was disposed. Soil samples collected from the tank excavation exhibited concentrations of total petroleum hydrocarbons as gasoline (TPHg), as diesel (TPHd), oil and grease (O&G), and benzene, toluene, ethylbenzene, and xylenes (BTEX).

To evaluate the potential impacts to groundwater and soil beneath the site, a soil and groundwater investigation was conducted by Geocon in September and October 1995. The investigation included the installation of five monitoring wells (MW1 through MW5) as depicted on the Site Plan, Figure 2. The investigation indicated that groundwater and soil beneath the site was impacted by petroleum hydrocarbons.

Based on the findings of the investigation, the Alameda County Department of Environmental Health Services (ACDEHS) requested quarterly groundwater monitoring. The five monitoring wells were monitored quarterly from October 1995 through November 1996. The wells were also sampled in February 1998.

Total petroleum hydrocarbons as motor oil (TPHmo) and O&G were not detected in groundwater samples and analysis of these compounds was discontinued. TPHg, TPHd, BTEX and MTBE have historically been detected in groundwater. Since these constituents have not attenuated over time, the ACDEHS has requested semi-annual monitoring of groundwater beneath the site. The requested semi-annual monitoring began in March 2001 and laboratory analysis indicated that MTBE was no

longer present in groundwater at the site. Subsequently, ACDEHS stated that MTBE was no longer a contaminant of concern.

As a result of semi-annual groundwater monitoring, the ACDEHS requested further site characterization. Additional soil and groundwater samples were collected from temporary boreholes installed upgradient, downgradient, and within the former UST pit. Results of the investigation indicated that low to non-detect contaminant concentrations were present in soil and groundwater both upgradient and downgradient of the former USTs.

Groundwater monitoring has continued at the site on a semi-annual basis since March 2001. Contaminant concentrations have remained relatively stable over that time period with the highest contaminant concentrations consistently reported in monitoring wells MW1, MW3 and MW5.

PURPOSE AND SCOPE OF WORK

The purpose of the work outlined in this workplan is to determine contaminant concentrations in groundwater. The last groundwater sampling event was conducted in January 2004. Analytical results from the groundwater sampling will be evaluated with respect to regulatory requirements and guidelines.

The scope of work will include the following:

- Collect groundwater samples from five monitoring wells;
- Submit samples for laboratory analysis; and
- Prepare report of findings.

TASK 1 – GROUNDWATER SAMPLE COLLECTION

Upon arrival at the site, the Geocon field technician will open the vault lids of each monitoring well and remove the well caps. Depths to groundwater will be collected a minimum of ten minutes after the well caps have been removed to allow the water levels in each well casing to stabilize before a water level measurement is collected. The depth to water measurements will be collected using an electronic sounding tape with marked increments to the nearest 0.01 foot. The sounding tape probe and cable will be decontaminated using an Alconox solution and deionized water rinse between each monitoring well location. Depth to water readings and the total depth of each well will be measured from the top of each well casing and recorded on the field data log sheets.

Each monitoring well will be purged using a disposable polyethylene bailer or electric submersible pump. A minimum of three well casing volumes will be evacuated from each well before a groundwater sample is collected for laboratory analysis. Water quality parameters will be measured in the field for pH, conductivity, and temperature after each well casing volume has been purged. The water quality parameters will be recorded in the field data log sheets.

Groundwater samples will be collected using a disposable polyethylene bailer after a minimum of three well casing volumes of groundwater have been purged and the water quality parameter readings are within ten percent of the previous reading.

Upon sample collection, groundwater from each bailer will be transferred into 40 milliliter glass vials preserved with hydrochloric acid (HCl). The sample containers will be labeled and placed in a chest cooled with ice for shipment to the analytical laboratory.

Purgewater generated during the groundwater sampling event will be transported back to Geocon's warehouse for storage pending disposal arrangements.

TASK 2 – LABORATORY ANALYSIS

All samples will be transported to Advanced Technology Laboratories, a State of California-certified laboratory located in Signal Hill, California. The samples will be analyzed for TPHg following EPA Test Method 8015M, and BTEX following EPA Test Method 8021B.

TASK 3 – REPORT PREPARATION

Following receipt of the laboratory analyses, the quarterly groundwater monitoring report will be prepared summarizing the field activities and the results of the analytical data. The reports will include the following:

- Scope of services performed;
- Site background;
- Groundwater sample methods and procedures;
- Results of field activities including laboratory results;
- Discussion of results;
- Conclusions and recommendations;
- Vicinity Map, Site Plan;
- Shallow groundwater contour map;
- Tabulated groundwater analytical data; and
- Laboratory reports and chain of custody documentation.

If you have any questions concerning the contents of this workplan, or if we may be of further service, please contact the undersigned at your convenience.

Sincerely,

GEOCON CONSULTANTS, INC.

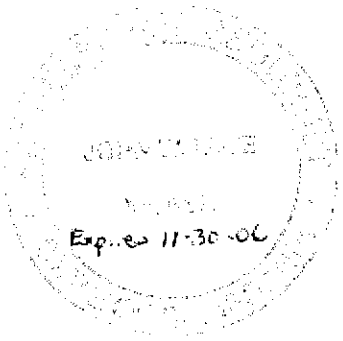
John Love, PG
Senior Project Geologist

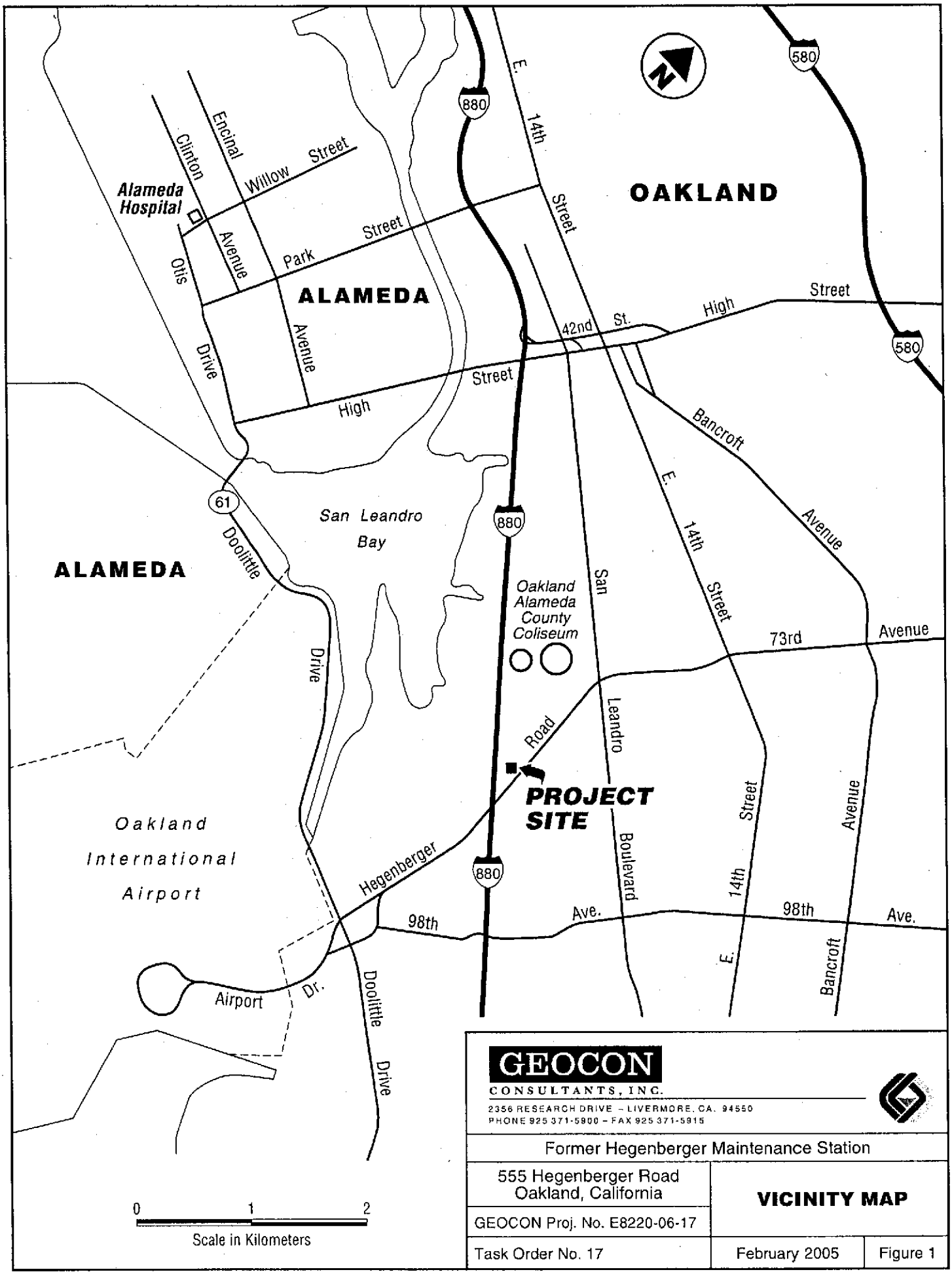
Richard Day, CEG, CHG
Regional Manager

JL:RWD:rjk

(1) Addressee

Attachments:
Figure 1 – Vicinity Map
Figure 2 – Site Plan





GEOCON
CONSULTANTS, INC.
2356 RESEARCH DRIVE – LIVERMORE, CA. 94550
PHONE 925 371-5900 – FAX 925 371-5915

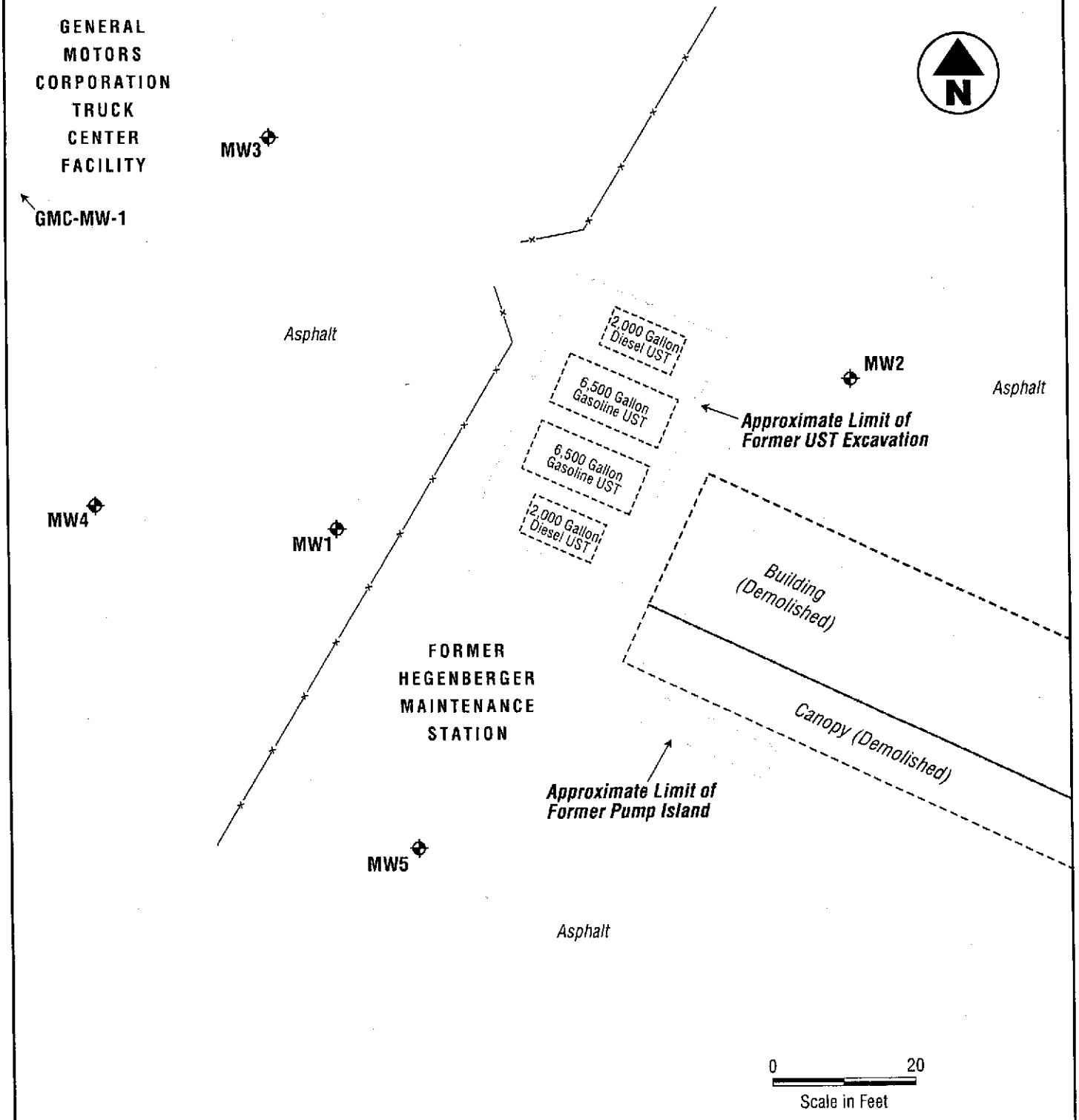
Former Hegenberger Maintenance Station

555 Hegenberger Road
Oakland, California

VICINITY MAP

GEOCON Proj. No. E8220-06-17

Task Order No. 17 | February 2005 | Figure 1



LEGEND:

Location of Former UST

MW1 Location of Groundwater Monitoring Well, GEOCON, Sept. 95

GEOCON
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5673 WEST LAS POSITAS BLVD. – SUITE 205 – PLEASANTON, CA. 94588
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Hegenberger Maintenance Station		
555 Hegenberger Road Oakland, California	**SITE PLAN**	
GEOCON Proj. No. E8000-06-63		
Task Order No. 04-987901-9A	April 2001	Figure 2