January 16, 1991

Mr. Ian Weber
1150 Ballena Blvd.
Alameda, CA 94501

RE: Fowler Anderson Mortuary
2244 Santa Clara Street
Alameda, CA

Mr. Ian Weber

Zaccor Corporation is pleased to submit the following work plan characterizing potential hydrocarbon contamination in soil and shallow ground water beneath the property of 2244 Santa Clara Street, Alameda, California.

SITE OVERVIEW

The subject property is located in the City of Alameda, County of Alameda, California. A site location map is included in Figure 1. The site is operated as a mortuary which performs funeral services, body preparation and administrative functions. The property is presently owned by Fowler-Anderson Mortuary.

Mr. Ian Weber, Real Estate Agent for Pacific Financial Corp., who represents Fowler-Anderson Mortuary, contracted Zaccor Corporation to remove three (3) underground storage tanks located on site. Environmental Technical Services was retained to perform Third Party Confirmatory Sampling. Tank removal and subsequent soil sampling was performed in accordance with local and regional guidelines, under the auspices of the Alameda County Department of Environmental Health, and the Alameda Fire Prevention Bureau.

On January 8, 1991, three (3) underground storage tanks (UST's) were removed, including; one (1) 350 gallon motor oil tank, one (1) 50 gallon motor oil tank, and one (1) 50 gallon hydraulic oil reservoir tank (as diagramed in Figure 2). One soil interface sample was obtained from beneath the center of each tank.

No contamination was detected beneath the 350 gallon motor oil tank orthe 50 gallon motor oil tank. Total Petroleum Hydrocarbons as Hydraulic Oil was detected at a concentration of 1,400 ppm beneath the hydraulic oil reservoir tank.

WORK PLAN

Environmental Technical Services has been retained by Zaccor Corporation to perform the following task:

Based on the above background information, the following work plan has been prepared for the excavation of hydraulic oil contamination in the area of the hydraulic oil reservoir tank and to determine the impact, if any, on the first encountered aquifer beneath the site. A phased approach has been developed for the placement of one (1) ground water monitoring well. In the placement of this well, information will be obtained regarding subsurface soil lithologies and characteristics such as color, moisture, density, hydrocarbon content, ground water gradient, and ground water quality.

EXCAVATION OF CONTAMINATED SOILS

Zaccor Corporation will attempt to excavate soils contaminated with Total Petroleum Hydrocarbons as Hydraulic Oil in the site garage. Throughtout the excavation of contaminated soil from the hydraulic oil tank pit soil samples will be acquired from the sidewalls and floor of the excavation with backhoe bucket. The first 3 to 4 inches of soil will be removed from the backhoe bucket and the clean brass sleeve (1.92 inches in diameter by 6.0 inches in length) will be driven into the soil most representative of the sample location desired. The sample tube will be withdrawn, the ends wrapped with aluminum foil, covered with plastic caps, sealed with duct tape, labeled, placed on dry ice, and transported to a Certified Hazardous Waste Analytical Laboratory under chain of custody. Five (5) soil samples collected from the tank pit excavtion floor and sidewalls will be analyzed for Total Petroleum Hydrocarbons as Hydraulic Oil using a Hydraulic Oil standard and one soil sample will be analyzed for ignitability, corrosivity, and reactivity.

As such time as the boundaries of excavation have been defined, clean imported fill material will be placed within the tank pit excavation.

Excavated contaminated soil will be placed on visqueen and covered with visqueen. A composite soil sample will be acquired to be analyzed for Total Petroleum Hydrocarbons as hydraulic oil pending receipt of laboratory analysis. A comprehensive work plan will then be developed for the remediation or disposal of contaminated soil.

MONITORING WELLS

One monitoring well will be placed down gradient and within 10' of the original tank pit. The drilling of the monitoring well will be accomplished using a hydraulic driven truck-trailer mounted drill rig, equipped with 8-1/4 inch outside diameter hollow-stem augers. A California Modified Split Spoon Sampler will be driven 18 inches into the soil using a 140 pound hammer dropped a standard 30 inch fall into relatively undisturbed soils to collect samples.

Soil samples will be obtained at depths of 5 feet, and at five foot intervals thereafter, or at changing lithologies, and/or where apparently contaminated soil intervals are encountered.

Three clean brass sleeves (2 inch diameter, 6 inch length) will be placed in the sampler. Immediately upon retrieval the sampler will be opened and the bottom brass sleeve will be removed, each end covered with aluminum foil, fitted with plastic caps, sealed with duct tape, labeled with project number, name and time of sampling, under chain of custody, and placed on dry ice for transport to a certified hazardous waste laboratory for analysis. The remaining brass sleeves will be used in completing a boring log. Soils will be classified using the Unified Soil Classification System (USCS). The boring log will include soil lithology according to the USCS, data on soil color, moisture, density, hydrocarbon content, and miscellaneous characteristics and such as; organic content and blow counts at six inch increment for the 18 inch sampler drive.

Ground water gradient has previously been determined, as monitoring wells are present on several sites in the adjacent area. Ground water gradient will be determined in Regional Water Quality Control Board file review.

Prior to arriving on site the drill rig and augers will be decontaminated using a hot high-pressure wash at a temperature of 248 degrees Fahrenheit. Augers will be cleaned in the same manner between borings. Sampling equipment will be decontaminated between samples using a trisodium phosphate wash, tap water rinse and a deionized water rinse. All lubricated drill rig parts that may approach boring will be lubricated using PAM.

Drill cuttings will be placed within Department of Transportation Drums, (DOT 17) pending laboratory analysis.

Upon completion of soil boring and sampling, the boring will be converted to monitoring well according to local and state criteria via the Luft Manual guidelines.

To establish groundwater quality, the monitoring well will be developed by pumping 4 to 5 well volumes of water. Measurements of pH, temperature, and conductivity will be recorded at consistent intervals and a sample of ground water will be obtained only after these parameters have stabilized. Water samples will then be obtained using a clean bailer. Water will be decanted into three one liter amber bottles to positive meniscus. Bottles will be labeled, placed on blue ice, and transported to a certified laboratory under chain of custody.

All ground water developed during well purgings will be stored in 55 gallon capacity Department of Transportation drums, sealed and labeled, pending laboratory analysis.

The water sample will be analyzed as Total Petroleum Hydrocarbons as Hydraulic Oil using a hydraulic oil standard.

For your convenience Environmental Technical Services original tank removal report dated January 15, 1991 is attached. If you have any further questions, please do not hesitate to contact my office at (415) 363-2181.

Sincerely,
ZACCOR CORPORATION

Gary A. Zaccor

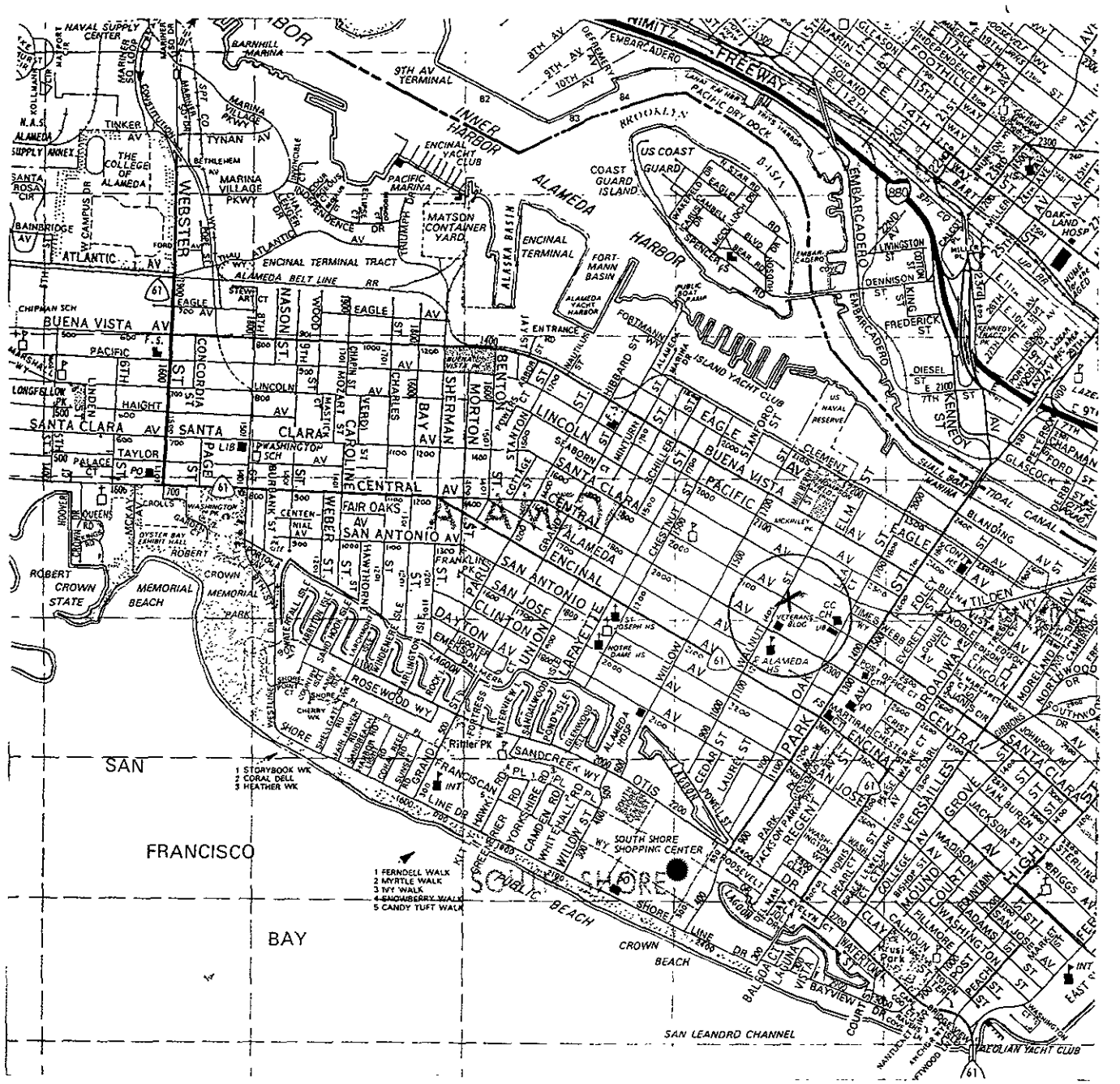
Gary A. Zaccor
Project Manager

GAZ/ls

Enclosure

ZACCOR CORPORATION:

2244 Santa Clara, Street
Alameda, California



North

0 1/2 1 mile

SCALE