



Epigene International
CONSULTING GEOLOGISTS

December 10, 1996

Mr. J. W. Silveira
499 Embarcadero
Oakland, CA 94606

WP ap 1200

Subject: Proposed Workplan for Additional Site Characterization for Site Located at
1200 20th Ave., Oakland

INTRODUCTION

The site is located at the northeast corner of 20th Avenue and Solano Way in Oakland. A location map is shown on Figure 1. Two gasoline tanks were removed from the site on January 19, 1994. A report documenting the tank removal activities and soil sampling and analysis was prepared by Epigene International dated February 14, 1994.

Based on the presence of soil contamination below the tank, the Alameda County Department of Environmental Health requested a subsurface investigation to assess the possible impact of the contamination on groundwater. Three monitoring wells were installed at the locations shown on Figure 2 in February of 1995.

The wells have been monitored quarterly from February of 1994 through September of 1996. The results of the quarterly analysis are summarized in Tables 1 - 3 for MW-1, MW-2 and MW-3 respectively.

Based on the request of Mr. Barney Chan who is providing oversight for the Alameda County Department of Environmental Health, two hydropunches will be installed to the southwest of the former tank location. The hydropunches are in the topographic downslope direction of the tanks but in an up-gradient direction based on the results of gradient calculations since February of 1994. The proposed locations of the hydropunches are shown on Figure 3.

Each hydropunch will extend at least five feet into the saturated zone. The estimated depth to the top of the saturated zone for the area of the two hydropunches is 20 to 25 feet. Soil samples will be collected during the advancement of the hydropunches at intervals of five feet beginning at a depth of ten feet below the ground surface. It is estimated that three soil samples will be collected and preserved for analysis from each hydropunch. A water sample will be collected from the screened interval of five feet below the top of the saturated zone. The soil and groundwater samples will be analyzed for TPH as gasoline and BTEX compounds at a State-certified Laboratory. The collection, maintenance and transportation of the samples will follow standard QA/QC procedures including chain of custody control.

Based on the results of the sample analysis and the results on an additional monitoring of the three existing wells to be carried out at the end of December or the beginning of January, a risk assessment will be completed following modified ASTM standards. The focus of the risk assessment will be to assess whether or not the existing contamination present in the groundwater at MW-1 presents a risk to the public.

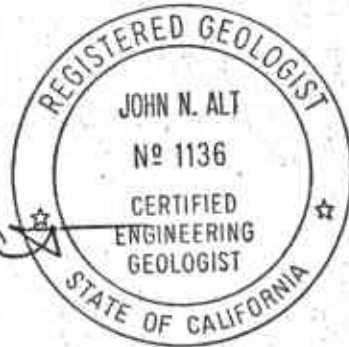

Conclusions and recommendations will be prepared at the completion of the risk analysis. A meeting with the County Department of Environmental Health will be held to discuss

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whether or not any additional investigations and/or remediation is required for the site.

It is a pleasure to work with you on this project. Should you have any questions, please contact the undersigned. With your permission, I will request a meeting with Mr. Chan of Alameda County to review the additional work requested for the site and the proposed Workplan. Estimated costs for the proposed work will be provided in a separate document. We are prepared to initiate the work upon receiving your authorization to proceed.

Sincerely,



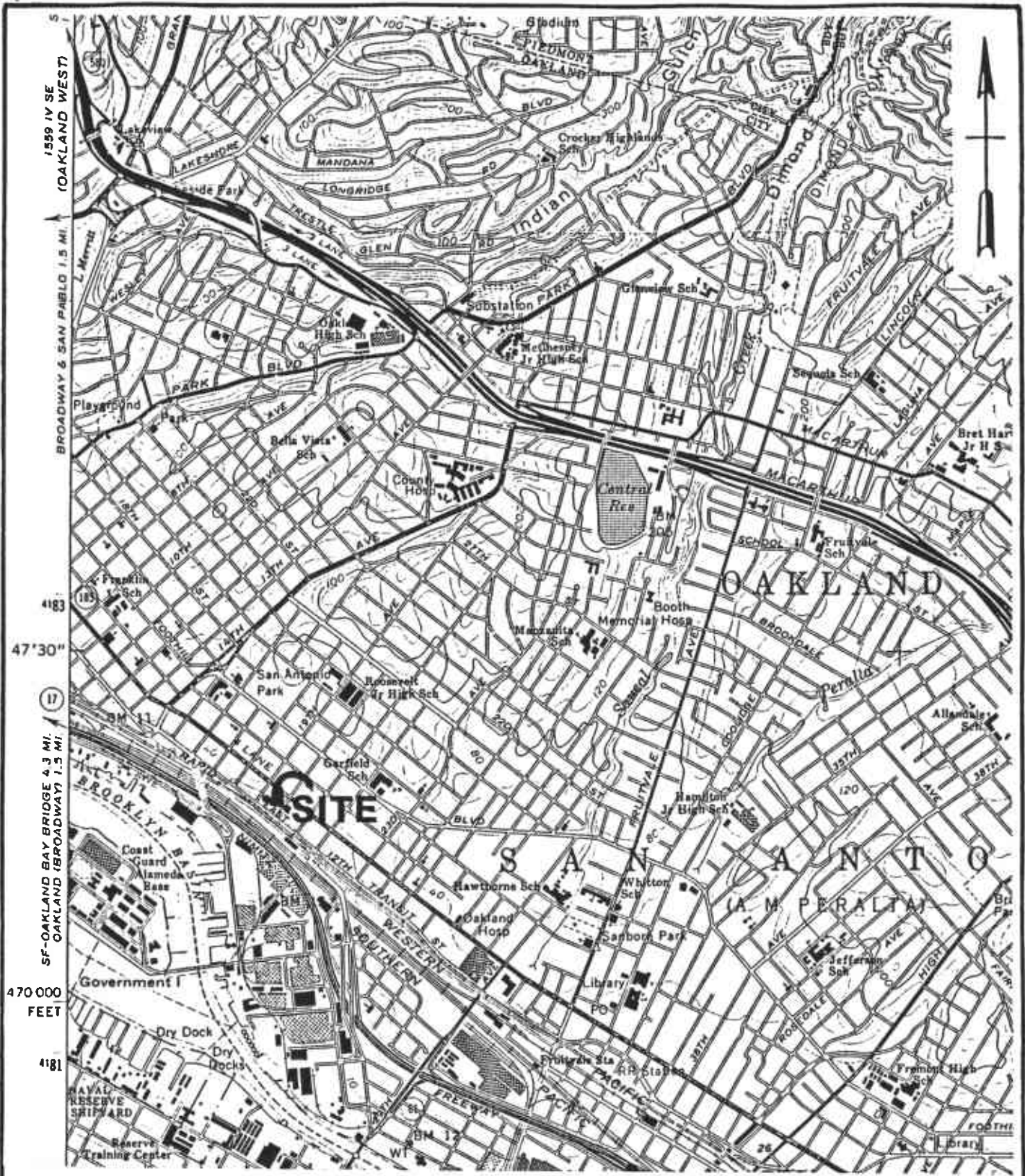
John N. Alt

Certified Engineering Geologist No. 1136

cc: Mr. Robert Shapiro, Esq.

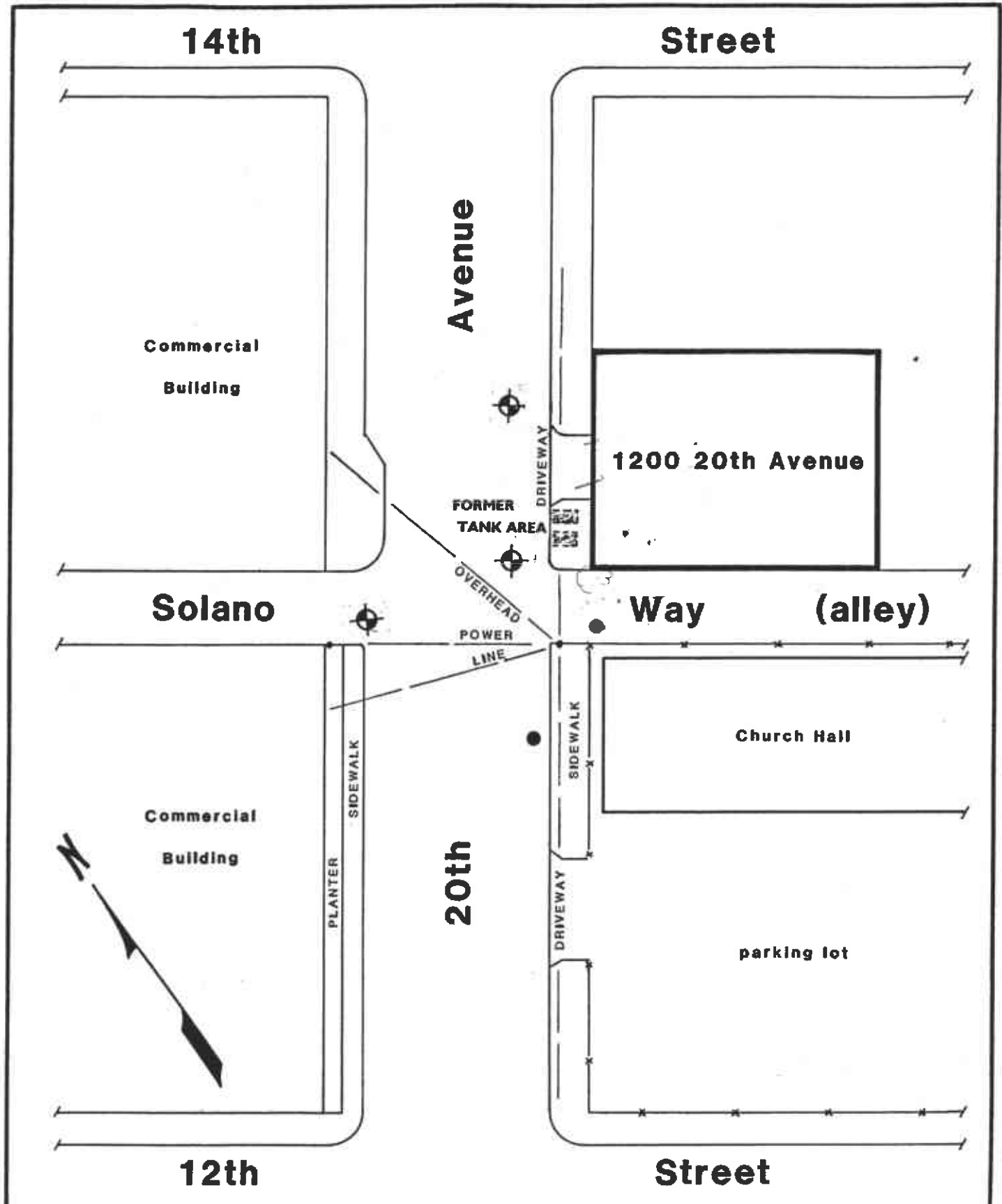
Mr. Barney Chan, Alameda County Dept. of Environmental Health

Attachments



Base map from U.S.G.S. 7 1/2" series
Oakland East quadrangle, 1980.

EPIGENE INTERNATIONAL Fig. 1	Project #98-067 1200 20th Avenue, Oakland, California.
	<h1>SITE LOCATION MAP</h1>



Monitoring well.
 Proposed hydropunch.

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Fig. 2 **PROPOSED
HYDROPUNCH LOCATIONS**