

ENVIRONMENTAL
POLYMERIZATION

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Epigene International
CONSULTING GEOLOGISTS

May 7, 1995

Mr. John K. Kao, Esq.
John K. Kao & Company
650 California Street, 29th Floor
San Francisco, CA 94108

RECEIVED
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JKK

Subject: Proposed Workplan for Subsurface Investigation of Potential
Soil and Groundwater Contamination for Site Located at 2417
Broadway, Oakland

Dear Mr. Kao;

This workplan for the subject site has been prepared as per our discussions and the written request from Ms. Jennifer Eberle of the Alameda County Department of Environmental Health. The site location is shown on Figure 1. One leaded gasoline tank and one waste oil tank plus two hydraulic lift rams were removed from the site on July 28, 1994. Soil samples collected at the time of the removal of the tanks indicates the presence of soil contamination below both the gasoline and waste oil tanks. Hydraulic oil was also encountered from below the hoists. The results of the soil sampling were included in a report by Epigene International, dated October 10, 1994. Because of the relatively high levels of soil contamination encountered, it is necessary to evaluate the potential for groundwater contamination below the site.

Prior to selection of the proposed locations of monitoring wells and soil borings, a search was made of the available data at the library of the State Regional Water Quality Control Board to assess the direction of the groundwater gradient and extent of groundwater contamination in the site area. Discussions were also carried out with Ms. Eberly of the County who conducted an independent review of the available data and provided input to the proposed workplan.

The proposed Workplan consists of the following tasks:

- 1) Carry out a site reconnaissance to identify and mark locations for **three** monitoring wells and three soil borings based on tank and hydraulic lift locations, regional hydrogeologic setting and logistical constraints; **proposed well locations are shown on Figure 3.**
- 2) Obtain well permits from Zone 7, notify Underground Service Alert, prepare Health and Safety Plan, arrange for drilling subcontractor and laboratory, coordinate field schedule with County and/or other regulatory agencies. Two of the proposed wells and two borings are to be located on City of Oakland property. The City requires both an encroachment permit and an excavation permit for the site. The encroachment permit must be obtained by the property owner or an agent for the owner. The excavation permit will be obtained by the consultant / drilling contractor.
- 3) Oversee the drilling of three monitoring wells and soil borings, compile geologic logs of the units encountered, collect and preserve selected soil samples for analysis. The estimated depths of the wells is 25 feet. The estimated depth of the soil borings is 12 feet. It is estimated that two soil samples will be preserved for analysis from each soil boring and well boring.
- 4) Supervise the installation of the three monitoring wells.
- 5) Transport soil samples under chain-of-custody control to a State Certified Laboratory for analysis as per the list as shown on Table 1. Estimated costs should be based on those listed, any requested modification would result in a modification of costs.
- 6) Development, purging and sampling of groundwater from each well,

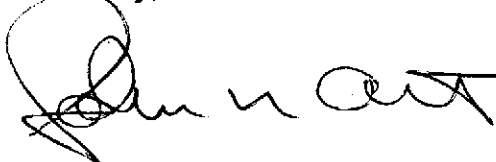
transporting water samples to a State Certified Laboratory for analysis as listed in Table 1.

7) Survey the elevation of the top of the well casings based on City of Oakland benchmark and gauging depth to groundwater for each well. Calculate the direction and slope of the groundwater gradient.

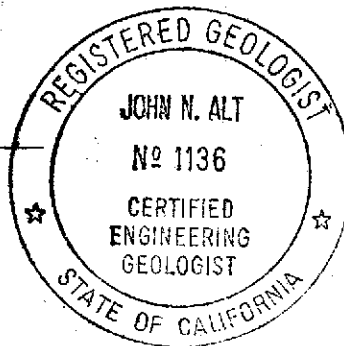
8) Review of data and preparation of a report to document the results of the investigation.

We are prepared to initiate the investigation upon receiving your authorization to proceed. The estimated costs are itemized in a separate letter. Should you have any questions or require additional information, please contact the undersigned.

Sincerely,



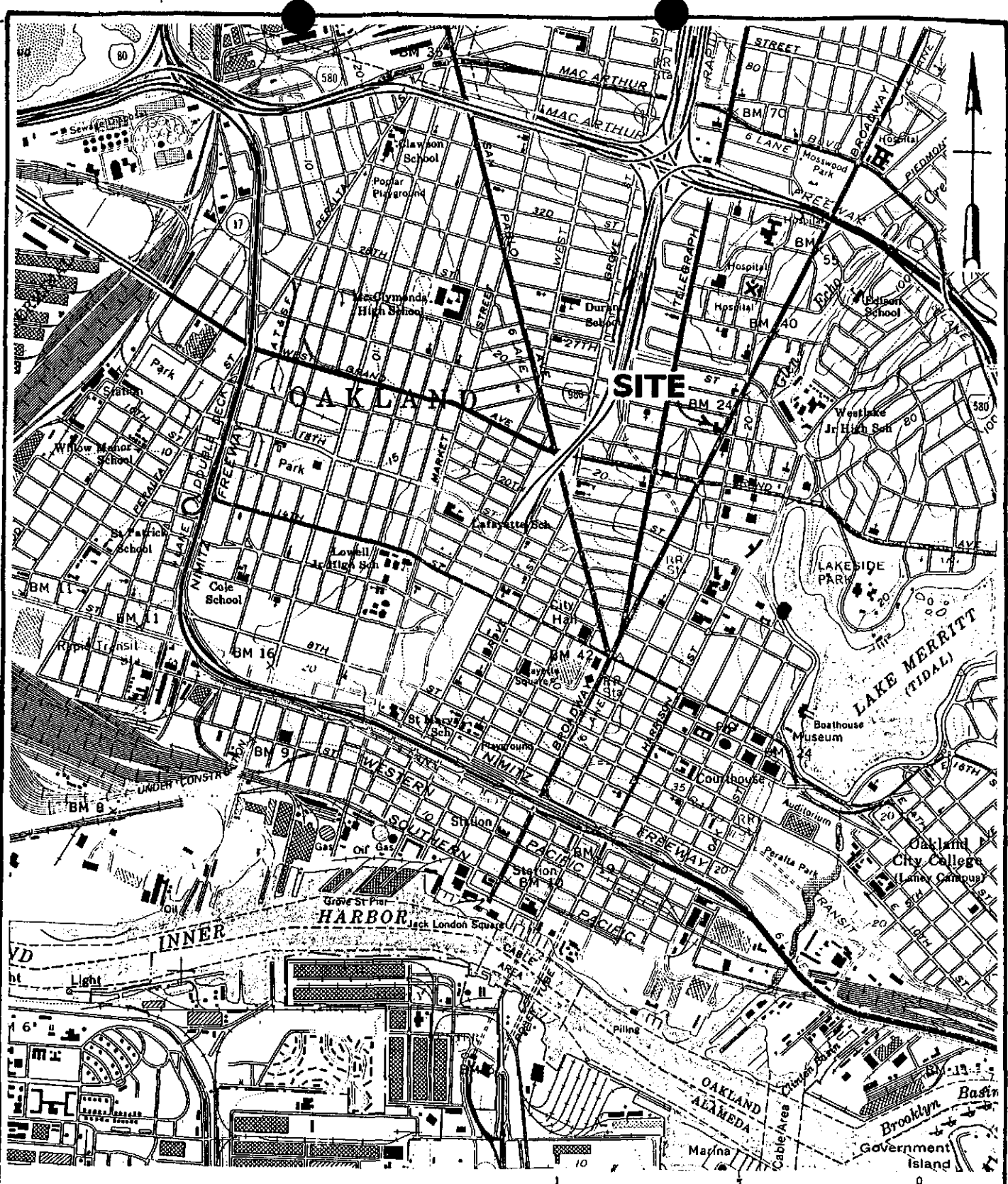
John N. Alt, CEG No. 1136



Attachments

Table 1 Summary of Proposed Analysis

TANK AREA	PROPOSED SOIL AND WATER ANALYSIS
WASTE OIL TANK	TPH as gasoline ✓
	TPH as diesel fuel ✓
	BTEX ✓
418.1 w/silica gel - 5520	Total Oil and Grease <i>method?</i>
	LUFT Metals <i>no need</i>
	EPA 8010 ✓
	EPA 8270 (?) <i>no need</i>
GASOLINE TANK	TPH as gasoline ✓
	BTEX ✓
	Total Lead <i>no need</i>
HYDAULIC LIFTS	TPH as hydraulic oil ✓



Base map from USGS 7 1/2 minute series
Oakland West quadrangle.

EPIGENE INTERNATIONAL	Project #94-084 2417 Broadway, Oakland, California.
<p>Fig. 1</p> <h2 style="text-align: center;">SITE LOCATION MAP</h2>	

Broadway

to city center >



2417 Broadway

Commercial Space

Parking Lot

Curb
Sidewalk

Sidewalk

24th Street

Curb

Sidewalk

Pole

Lexus Dealership

Property Line

Masonry Pillars

Masonry Walls

Roll-up Door, 8 1/2-foot clearance

Concrete Ramp
< Up

3-foot rise

Hydraulic Lift Excavations

Tank #1 Excavation

Parking Lot

Roll-up Doors, 12-foot clearance

Tank #2 Excavation

Spoil Pile

Pole

Power

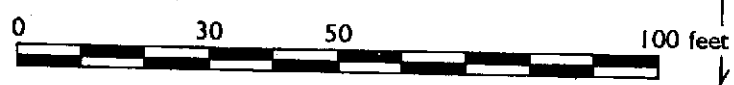
Overhead

Broadway Motors Autobody Shop

Parking Lot

Gate

Driveway

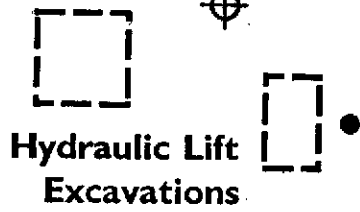


EPIGENE INTERNATIONAL

Project #94-084
2417 Broadway,
Oakland, California.

Fig. 2

SITE PLAN



Hydraulic Lift
Excavations

Roll-up Door,
12-foot Clearance

Driveway

Tank #1
(#14210)

Sidewalk

Curb

24th Street

Roll-up Door,
12-foot Clearance

Driveway

Tank #2
(#14211)



32 feet
< curb to curb >

Autobody Shop Parking Lot

Gate

Driveway



-  Proposed monitoring well.
-  Proposed soil boring.

EPIGENE
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Project #95-112
2417 Broadway,
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Fig. 3

**PROPOSED
MONITORING WELL
AND BORING LOCATIONS**