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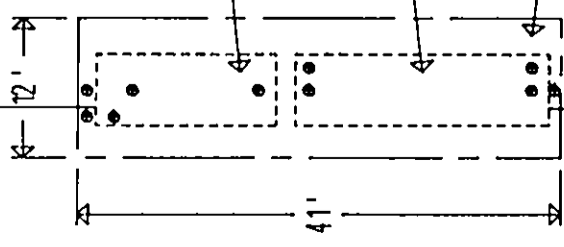
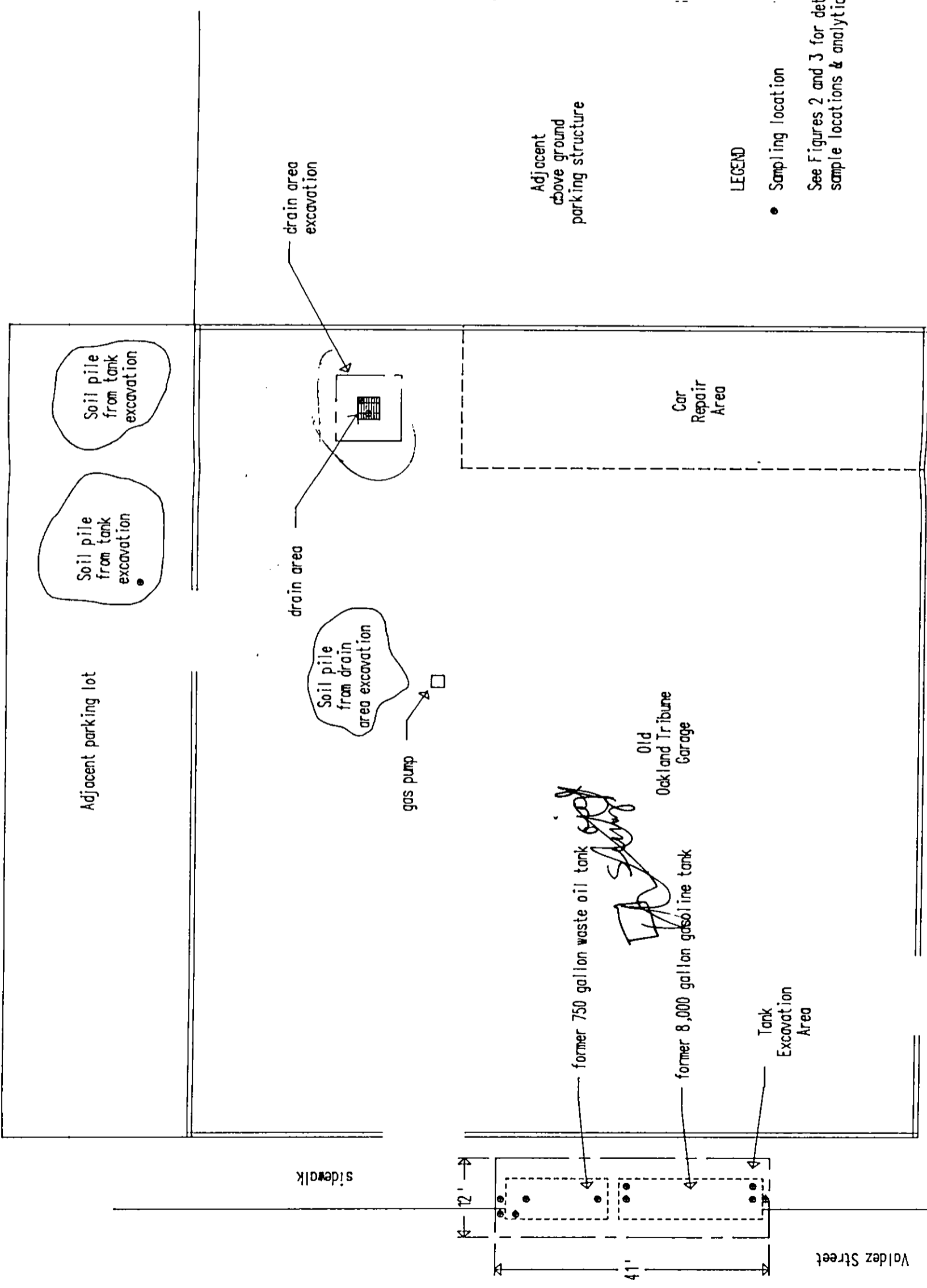
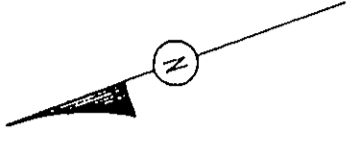
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Workplan
for
The Tribune
at
The Old Oakland Tribune Garage
23rd Street and Valdez Street
Oakland, California
prepared by
Clayton Environmental Consultants
Clayton Project No. 45561-70

May 17, 1988

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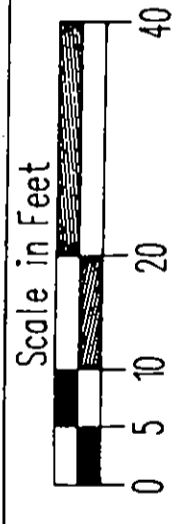


LEGEND

- Sampling location

See Figures 2 and 3 for detail of sample locations & analytical results.

sidewalk



23rd Street

Clayton Environmental Consultants, Inc.

Site and Soil Sampling Location Map
The Old Oakland Tribune Garage
Oakland, California

Figure

1

4585-00-17

TABLE 1

Soil Sampling
Summary of Laboratory Analysis

Clayton Project No. 45561-70

Laboratory Batch No.	Date of Sampling	Sample ID No. & Description	Analysis Requested	Detected Concentrations			
				TPH (ppm)	VOC (ppm)	O&G (ppm)	BTEX (ppm)
8802123	02/23/88	1. Gas @ 11'-fill 2. Gas @ 11'-vent 3. w/o @ 9'-fill 4. w/o @ 9'-vent	HOLD HOLD HOLD O&G, TPH, VOC	46	B-0.27 T- E-2.10 X-10.00	6000	---
8802128	02/24/88	5. Gas @ 12'-fill	TPH & BTEX	4000	---	---	B-2.3 T-17 E-5.6 X-67
		6. Gas @ 12'-vent	TPH & BTEX	ND	---	---	B-0.1 T-ND E-0.2 X-0.7
		7. w/o @ 10'-fill	TPH, O&G, VOC	100	ND	2400	---
		8. Excavation Pile	TPH	1100	---	---	---
8802150	02/26/88	9. West End Exca. @ 18-1/2'	TPH, BTEX	ND	---	---	B-ND T-0.04 E-ND X-ND
		10. East End Exca @ 18-1/2'	TPH, BTEX, O&G	ND	---	12,000	B-ND T-0.06 E-0.1 X-0.2
		11. East Exc. @ 16'	O&G			2400	
880303	02/29/88	12. Drain Area @ 15'	O&G, TPH	5500 as Gas 1800 as Oil	---	2100	---
		13. Drain Area @ 13'	O&G, TPH	440 as Gas 510 as Oil	---	610	---

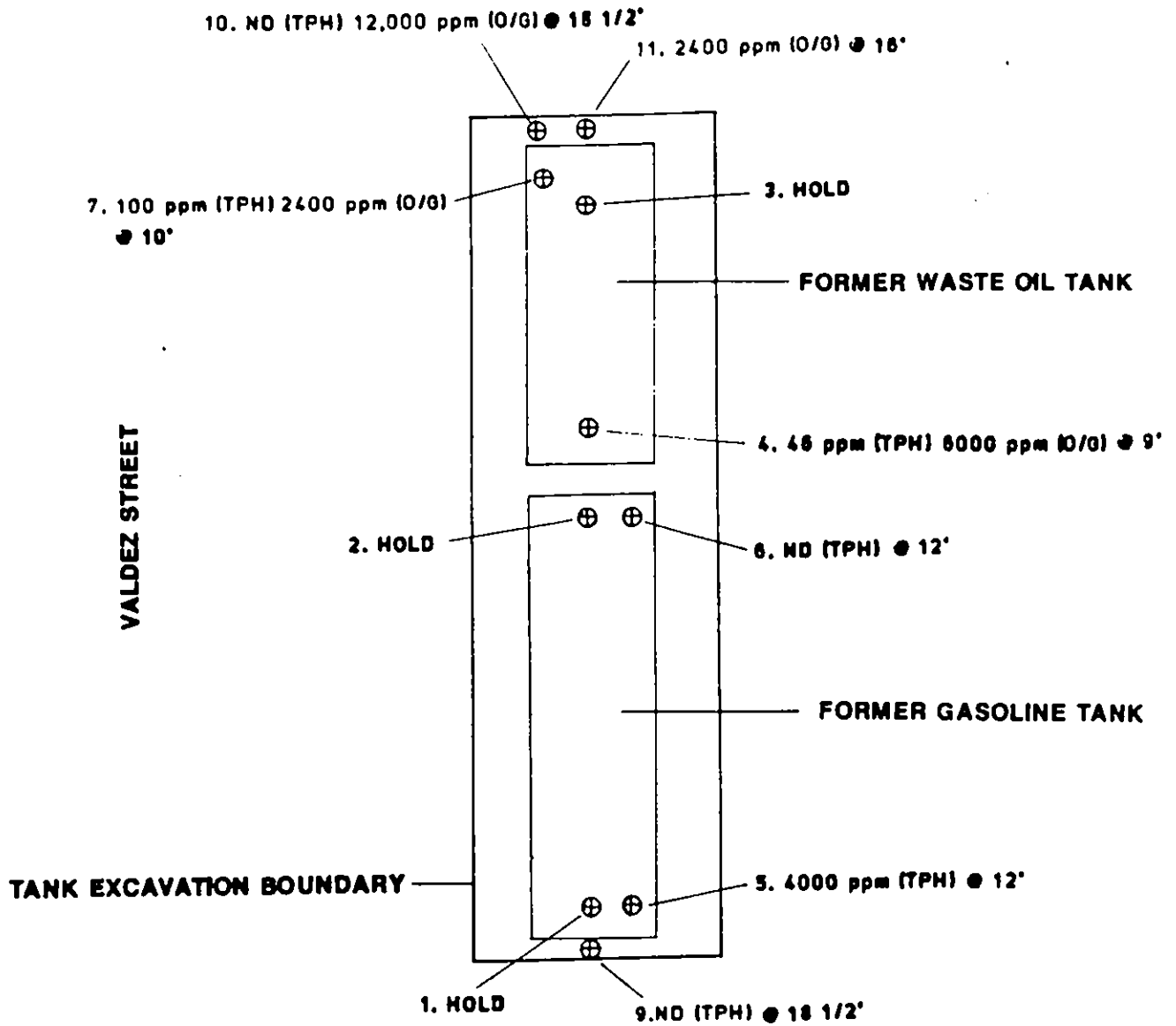
w/o Waste Oil

O/G Oil and Grease

TPH Total Petroleum Hydrocarbons

VOC Volatile Organic Compounds

BTEX Benzene, Toluene, Ethylbenzene & Xylene



LEGEND

(TPH) Total Petroleum Hydrocarbons

(O/G) Oil and Gas

1. Sample Identification Number

@ 12' depth



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FIGURE

DETAIL OF SAMPLE LOCATIONS FROM FORMER WASTE OIL AND GASOLINE TANKS

THE OLD OAKLAND TRIBUNE GARAGE

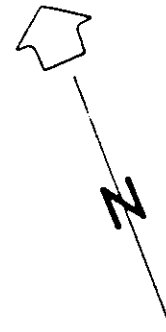
OAKLAND, CALIFORNIA

2

PARKING LOT

SOIL PILES FROM TANK EXCAVATION

8. 1100 ppm (TPH)



DRAIN AREA EXCAVATION

DRAIN AREA

SOIL PILE FROM
DRAIN AREA
EXCAVATION

13. 440 ppm as Gas (TPH)
510 ppm as Oil (TPH)
610 ppm (O/G) @ 13'

12. 5500 ppm as Gas (TPH)
1800 ppm as Oil (TPH)
2100 ppm (O/G) @ 15'

PUMP

OLD OAKLAND TRIBUNE GARAGE

LEGEND

(TPH) Total Petroleum Hydrocarbons

(O/G) Oil and Gas

1. Sample Identification Number

@ 12' depth

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FIGURE

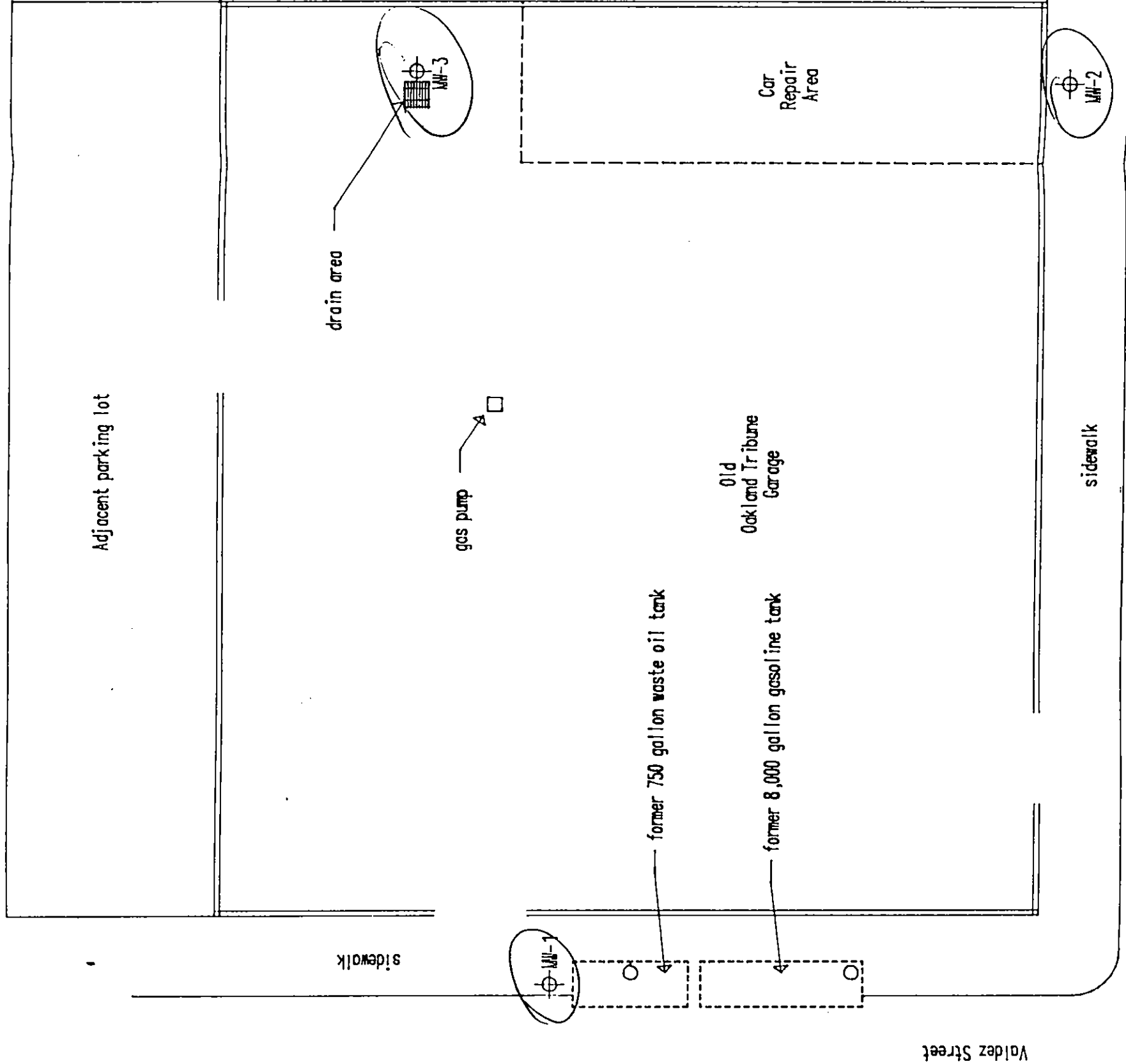
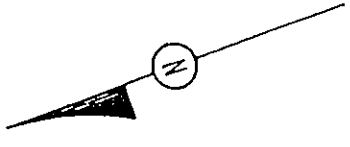
DETAIL OF SAMPLE LOCATIONS FROM INSIDE DRAIN AREA AND OUTSIDE SOIL PILE
THE OLD OAKLAND TRIBUNE GARAGE
OAKLAND, CALIFORNIA

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compound at a level generally considered to be a specific concern (67 mg/kg xylenes compound to a level of specific concern in a soil of 40 mg/kg). The fact that samples from the limits of excavation contain TPH and/or oil and grease at concern levels indicated that further site characterization is necessary.

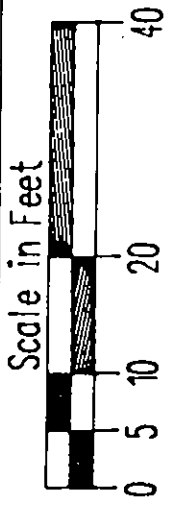
As part of Clayton's site investigation, we also excavated inside the building beneath the underground sump (Drain Area, Figure 1). The location of soil sampling is shown in Figure 3. The laboratory results from soil sampling inside the building are shown in Table 1. TPH and oil and grease are above concentrations of concern in the drain area samples indicating that further site characterization is necessary.

Clayton recommends further site characterization to define the lateral extent of soil contamination and investigate the possibility of groundwater contamination. Clayton proposes to initially install three groundwater monitoring wells (Figure 4) to determine the groundwater gradient and flow direction. Then, based on the analytical results of the soil and groundwater sampling, Clayton can provide recommendations for additional soil boring locations (as per the request of ACHCS) to determine the lateral extent of soil contamination onsite.



LEGEND
 Proposed groundwater monitoring well

Clayton Environmental Consultants, Inc.
 Location of Proposed Groundwater Monitoring Wells
 The Old Oakland Tribune Garage
 Oakland, California



23rd Street

2.0 TECHNICAL APPROACH

2.1 TASK A: PREFIELD ACTIVITIES, PROJECT MANAGEMENT, AND REGULATORY LIAISON

Clayton will obtain well permits and notify the appropriate regulatory agency prior to commencement of the subsurface investigation. In addition, a comprehensive site specific Health and Safety Plan will be prepared by Clayton to be used as a guidance document for all onsite operations.

2.2 TASK B: EXPLORATORY BORINGS AND GROUNDWATER WELLS

Clayton proposes to drill three borings (BH-1, BH-2 and BH-3) at the Old Oakland Tribune Garage, using a 10-inch diameter hollow stem auger drilling rig. These boring will be converted to Monitoring Wells MW-1, MW-2 and MW-3. The proposed boring locations are shown in Figure 4.

2.2.1 Exploratory Boring

The soil characteristics will be logged in the field by a Clayton geologist using the Unified Soil Classification System. The cuttings will be screened in the field using a photo-ionization detector (PID), which will provide a quantitative indication of hydrocarbon levels existing in the soil. Distinguishing features such as color, odor, and moisture content will also be noted.

The investigation activities will be conducted under the supervision of a geologist registered in the State of California. All drilling activities will be conducted in accordance with the Regional Water Quality Control Board (RWQCB) guidelines. Auger cuttings and sampling spoils will be separated into piles, depending on the concentration of hydrocarbons present in the materials., Analytical results will determine the appropriate disposal method.

Soil samples will be collected at 5-foot intervals, however, no soil samples will be collected below the water table.

Soil samples will be collected in brass liners, sealed with teflon-lined plastic caps, and taped for air tightness. Sealed samples will be labeled and immediately placed in an iced cooler for shipment to Clayton's state-certified laboratory for analysis. Proper chain of custody procedures will be followed.

2.2.2 Well Construction, Development, and Sampling

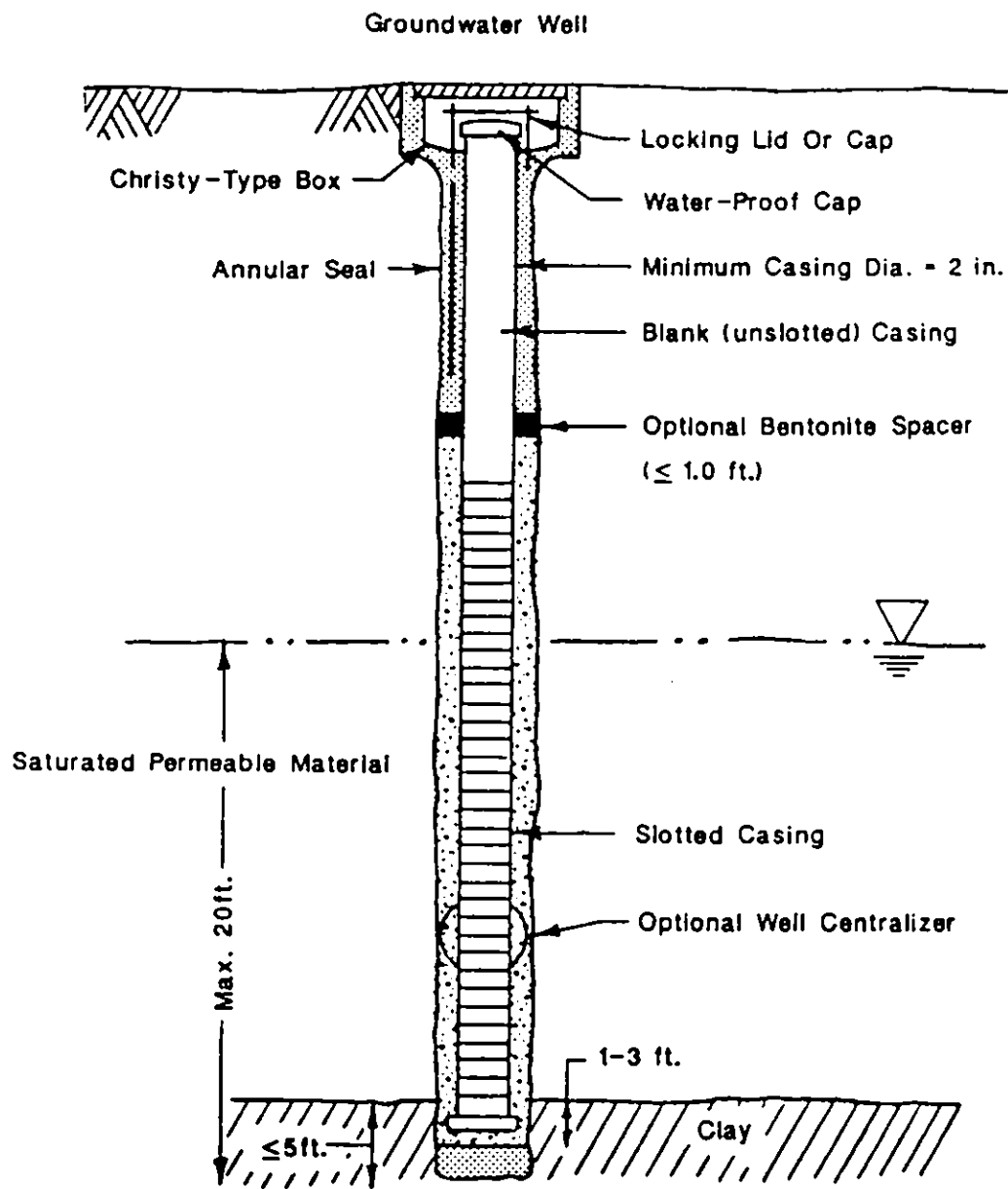
Groundwater wells will be constructed of clean 4-inch ID PVC casing with threaded joints and slotted screens. The slots will be 0.020-inch wide with four rows per inch. The wells will extend at least 20 feet into the first saturated aquifer. However, the wells shall not extend through any extensive clay layers 5-feet thick or greater that are below the water table. Figure 5 shows a typical groundwater monitoring well.

The wells will be properly developed until the water becomes clear to slightly cloudy (in accordance with the RWQCB guidelines).

Immediately after proper well development, field pH, specific conductance, and temperature measurements of water will be made at each well. Purging will continue until specific conductance stabilizes prior to sample collection, indicating that the sampled water is representative of the water in the aquifer.

Water samples collected from the groundwater wells will be collected in glass containers, placed in an iced cooler, and transported to Clayton's laboratory with one trip blank included to insure quality assurance/quality control (QA/QC). Proper chain of custody procedures will be followed.

If the location of MW-1, MW-2 or MW-3 is not in the down gradient direction of the sump and/or tank removal area, a fourth down-gradient well will be constructed, based on data from the first three wells, (if required). Clayton will also establish 6 additional soil borings to determine the lateral extent of soil contamination. The locations of these borings will be based on the findings from the first three wells.



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TYPICAL GROUNDWATER MONITORING WELL

FIGURE

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2.3 TASK C: LABORATORY ANALYSIS

Samples obtained from the groundwater wells investigation will be analyzed for the parameters shown in Table 2.

TABLE 2
Sample Parameters

<u>Matrix</u>	<u>Parameter</u>	<u>EPA Method</u>
Soil	Oil and Grease	503E
Soil	BTEX	8020
Water	BTEX	602

2.4 TASK D: SURVEYING AND GRADIENT DETERMINATION

Clayton will survey MW-1, MW-2 and MW-3, as well as obtain water level measurements to calculate the groundwater gradient and flow direction. This will enable Clayton to determine the possible transport direction of the contaminant, if appropriate. This will also indicate the best locations for establishing additional soil borings.

2.5 TASK E: DISPOSAL OF WELL SAMPLING WATER AS HAZARDOUS WASTE, (if needed)

Clayton will place the well development and sampling water from each groundwater well into individual barrels and await laboratory analysis to determine the appropriate disposal method. If the water is determined to be hazardous waste, the appropriate barrels will be hauled to an approved transport, storage and disposal (TS&D) facility.

2.6 TASK F: AERATE EXCAVATED MATERIALS

During the tank removal and sump excavation activities, approximately 50 to 70 cubic yards of soil was removed. The material from the tank removal was piled outside of the building on top of plastic as well as covered with plastic. The material from the sump excavation was piled inside the building, on the concrete pavement. Plastic was not used to cover the material inside the building. The building is no longer occupied and it remains locked at all times.

Clayton will collect two composite soil samples; one from the tank excavation soil stockpile, and one from the sump excavation soil stockpile. These samples will be analyzed for Total Petroleum Hydrocarbons, and oil and grease and will serve as a starting point to determine the present hydrocarbon levels. The quantity of materials which may be aerated will also depend on the preliminary analytical results. The materials will be aerated onsite in accordance with the Bay Area Air Quality Management District guidelines. Any materials that will not aerate will be hauled away as hazardous waste to an approved TS&D facility.

2.7 TASK G: PROJECT REPORT, CONCLUSIONS AND RECOMMENDATIONS

Upon completion of Tasks A through G, Clayton will submit a report to The Tribune, summarizing the findings of this investigation, and documenting the previous tank removal activities conducted by Clayton at the Old Oakland Tribune Garage. This report will include a brief description of the site's history, the hydrogeology of the area, a discussion of the data collected and conclusions. Any appropriate recommendations will also be included in the report.

3.0 PROJECT SCHEDULE

Upon receiving the Workplan approval from ACHSC Agency, Clayton will begin work to install the three proposed groundwater monitoring wells. Clayton estimates the project completion date to be 8 weeks after receiving the required authorization to proceed.