Uriah Environmental Services Inc.

2401 East Orangeburg Avenue #675-218, Modesto, CA 95355

(510) 455-4991 San Francisco/Bay Area | (209) 551-3591 Central Valley | (209) 551-1200 FAX

March 25, 1993

Mr. Ed Ferrar
P.O. Box 525
Menlo Park, CA 94025

RE: **The Installation of Three Groundwater Monitoring Wells at 1435 Webster Street, Alameda, CA**

Dear Ms. Shin:

Uriah, Inc. is pleased to submit this report concerning the installation of three, 2-inch inside-diameter, groundwater monitoring wells at the referenced site on January 11 and 12, 1993. The tasks described herein were performed in accordance with protocol set forth in Uriah's approved workplan of December 20, 1991 and under the authority of Zone 7 Water Resources Management Agency Permit #92664. All work is also intended to comply with general guidelines set forth by the Alameda County Health Care Services Agency Hazardous Materials Program (ACoHCSA) and the San Francisco Bay Regional Water Quality Control Board (RWQCB).

SITE LOCATION AND DESCRIPTION

The site, located in the northwest part of the City of Alameda (Alameda County), CA, occupies Alameda County Assessor's Parcel 74-427-51. It is currently a City of Alameda public parking lot (street level only). Property use in the area is multi-purpose in nature with commercial, residential, and light-industrial usage (Figures 1-4).

SITE GEOLOGY AND GEOHYDROLOGY

1435 Webster Street is located on bay plain deposits approximately $\frac{1}{4}$-mile east of the San Francisco Bay...a drowned valley which is thought to have originally been formed by erosion of the ancestral Sacramento River and subsequently widened by subsidence and rise in the level of the sea. Quarternary (Pleistocene to recent) sediments deposited in what is now the (San Francisco) Bay include both shallow marine and continental deposits known as "Bay Mud".

The geologic deposits encountered during the January, 1993 drilling consisted primarily of fine to medium, loose to medium-dense, poorly-sorted, brown sand with some gravel. Groundwater was encountered at 11.5 feet below ground surface (bgs).

OVERVIEW OF RELEVANT ENVIRONMENTAL COMPLIANCE ACTIVITIES

On October 11, 1988, CHIPS Environmental Consultants, Inc. performed a soil gas analyses at the site at the request of Accutite Tank Testing and Maintenance Services, a division of Olympian Oil Company. The CHIPS study was specific to the area occupied by two 10,000 gallon underground gasoline storage tanks, one 7,500 gallon underground diesel storage tank, and one 500 gallon waste oil tank. High soil gas readings were obtained on the east side of one of two gasoline pump islands, between the islands, and from the backfill between the two gasoline storage tanks at both eight and eleven feet below ground surface. Soil gas concentrations on the west side of the tank pits were relatively low.

All underground storage tanks were removed during September of 1989. Soil samples acquired for certified laboratory analyses attendant to the removal of the tanks contained concentrations of Total Petroleum Hydrocarbons as Gasoline (TPH-G) to 220 parts per million (ppm), Total Petroleum Hydrocarbons as Diesel (TPH-D) to 430 ppm, and 650 ppm Total Oil and Grease (TOG).

On January 11, 15, and 23, 1991, a Uriah staff geologist and employees of AAA Tank Removal/Forcade Excavation Services (California licensed contractors) undertook the exploratory/remedial excavation of the fuel hydrocarbon contaminated soil in accordance with a workplan previously submitted to, and approved by, the Alameda County Health Care Services Agency.

Approximately 550 cubic yards of contaminated soil was removed from the area of the pit(s) previously occupied by the underground storage tanks. At such time as the excavation measured 34' (W) x 40' (L) x 18' (D), discrete soil samples for certified analyses were acquired from the western wall, northern wall, and floor. Each of the samples was obtained from an undisturbed block of soil brought to grade within the excavator bucket. After removing the upper 1"-2" of soil from the bucket, a clean brass sample tube 1.9 inches in diameter by 6.0 inches in length was driven into the soil until such time as it was completely filled with consolidated material. The tube was then removed from the soil and its ends were covered with teflon sheeting, fitted with plastic caps, and wrapped with black electrical/duct tape. Each tube was then marked and placed on blue ice for transport to a California-state certified hazardous waste

analytical laboratory under chain of custody where it was analyzed for TPH-D, TPH-G, BTEX, and TOG using EPA Methods 3550/8015, 5030/8015-8020, and SM 5520F, respectively.

No further excavation was undertaken at this time as the surface of the site was fully occupied by treatment beds constructed for biological detoxification of previously excavated soil.

On September 23, 24, and 25, 1991 (following the bioremediation of the previously excavated soil), a Uriah staff hydrogeologist and employees of W.A. Craig, Inc. (a California licensed contractor) resumed excavation activities. The excavation was expanded to 34' (W) x 55' (L) x 18' (D) with an additional 300 cubic yards of contaminated soil removed. During the course of the expanded excavation, contamination was observed to be confined to sandy clay lenses which were present at various depths along the south wall of the pit.

On September 27, 1991, four discrete soil samples were acquired from the expanded excavation in the manner described above. These samples (designated WEB1, WEB2, WEB3, and WEB4) were acquired from native soil at points approximately 15 feet below ground surface (i.e. at the depth appropriate to site lithology) and submitted for certified analyses for TPH-D, TPH-G, BTEX, and TOG. These samples were free of detectable concentrations of TPH-G, BTEX, and TOG but contained 21-24 ppm TPH in the diesel range. The "non-standard diesel pattern" reported by the laboratory was previously compared to a tar wrap fabric by running comparative chromatographic standards. This comparative study appeared to confirm the hypothesis that the "non-standard" TPH-D range material detected was composed of partially-degraded, extractable hydrocarbons which comprise a portion of the tar wrap material.

The results of certified analyses performed on excavation boundary samples acquired from the locations are presented in Table 1, below:

Table 1

Analytical Results of Soil Samples Acquired from the Boundaries of the Remedial Ecavation (September, 1991)

Sample Number	Sample Location	TPH-D (ppm)	TPH-G (ppm)	B	T	X	E
				(ppb)			
WEB1	S. Wall	23	N.D.	N.D.	N.D.	N.D.	N.D.
WEB2	E. Wall	21	N.D.	N.D.	N.D.	N.D.	N.D.

Table 1, continued

WEB3	N. Wall	23	N.D.	N.D.	N.D.	N.D.	N.D.
WEB4	W. Wall	24	N.D.	N.D.	N.D.	N.D.	N.D.
FS-18	Floor	N.D.	N.D.	120	16	23	N.D.
Method Detection Limit		10 ppm	1 ppm	3 ppb	3 ppb	3 ppb	3 ppb

TPH-D...Total Petroleum Hydrocarbons as Diesel
TPH-G...Total Petroleum Hydrocarbons as Gasoline
BTEX...Benzene, toluene, ethylbenzene, total xylenes
N.D....Below laboratory detection limits
ppm...Parts per million
ppb...Parts per billion (1 ppm = 1,000 ppb)

*All boundary samples were also submitted for certified analysis for Total Oil and Grease (TOG) using SM 5520F. None of the samples contained detectable concentrations of TOG (detection limit 50 ppm)

Following the excavation of approximately 550 cubic yards of contaminated soil during January, 1991, this material and about 50 cubic yards of stockpiled soil remaining from the underground storage tank excavation was configured in quadrilateral beds atop bermed, hydrocarbon resistant liners in accordance with protocol set forth within an approved workplan. The treatment beds were inoculated with a bio-nutrient solution containing common, non-pathogenic, hydrocarbon-utilizing soil bacteria and a dilute commercial fertilizer solution. During the course of treatment, the soil was monitored to determine rates of degradation, soil temperature, moisture, pH, and nutrient levels.

On September 20, 1991, soil samples were acquired and submitted for uncertified analyses. Levels of TPH-G were found to be below the detection limit of 10 ppm, while concentrations of TPH-Oil had been reduced to below the detection limit of 50 ppm. Based upon the results of the uncertified analyses, 12 discrete samples, one for every 50 cubic yards of soil under treatment, were obtained for certified analyses. Each of these samples was acquired within a clean brass tube 1.9 inches in diameter by 6.0 inches in length driven into the soil at various depths at randomly selected points. The ends of each tube were promptly covered with teflon sheeting, fitted with plastic caps, and sealed with duct tape. Each tube was then marked and placed

on dry ice for transportation under chain of custody to a California-state certified hazardous waste analytical laboratory for analyses for TPH-D, TPH-G, BTEX, and TOG. All samples were free of detectable concentrations of TPH-G, BTEX, and TOG. Ten (10) of twelve (12) samples were found to be free of detectable concentrations of TPH-D, with the two remaining samples containing 16 ppm TPH-D and 44 ppm TPH-D, respectively. As previously discussed, these levels of "TPH-D" were not represented by a chromatographic pattern typical of diesel fuel and represent, instead, partially degraded tar wrap.

After reviewing the results of field monitoring and uncertified analyses of samples acquired from approximately 200 cubic yards of contaminated soil remaining under treatment, samples for certified analysis for TPH-D, TPH-G, BTEX, and TOG were acquired on December 2, 1991. Each of the ten discrete samples (one for every 20 cubic yards of soil under treatment) was acquired in a clean brass tube in the manner described above. All samples were found to be free of detectable concentrations of the referenced analytes.

WELL INSTALLATIONS

On January 11 and 12, 1993, each of the three soil borings were advanced with a truck-mounted hydraulic drive drill rig equipped with 8-inch outside-diameter, continuous flight, hollow-stem augers. Each of the borings was logged in accordance with the Unified Soil Classification System to the total depth drilled (24 feet bgs- 12.5 feet below the point at which groundwater was first encountered). Discrete soil samples were collected at five-foot intervals between the ground surface and the top of the capillary fringe (i.e. at 5 and 10 feet bgs) employing a California Modified Split Spoon sampler driven 18 inches into undisturbed soil with a standard 30 inch drop of a 140-pound hammer. The sampler was fitted with clean brass sample sleeves 6.0 inches long by 1.9 inches in diameter. Promptly upon retrieval of the sampler, the tubes contained within were removed. The ends of each tube would then be covered with teflon sheeting, fitted with plastic caps, and wrapped with duct tape. Each tube was then be labeled and placed on blue ice for transportation to a California-state certified hazardous waste analytical laboratory under chain of custody. The samples were subsequently be analyzed for TPH-D, TPH-G, BTEX, and TOG using EPA Methods 3550/8015, 5030/8015-8020, and SM 5520 D&F, respectively, and for Organic Lead using The LUFT Method.

Following completion of the drilling and soil sampling, each boring was converted into a 2-inch inside-diameter groundwater monitoring well. The wells were constructed of two-inch inside

diameter, threaded, Schedule 40 PVC risers attached to 0.020-inch slotted PVC well screen. Each well screen was extended more than 5 feet above the water surface to account for fluctuations in groundwater elevations. Grade #3 Monterey silica sand was used to pack annular space and a one foot of bentonite seal (consisting of $\frac{1}{4}$-inch pellets hydrated with distilled water) was placed above the screened interval to preclude surface water infiltration. The wells were finished with a neat cement grout to six inches below grade followed by concrete gravel aggregate to grade. A traffic box was then mounted over each well head. Well construction details are enclosed within Appendix A.

All drilling and sampling equipment was steam cleaned or thoroughly scrubbed with Alconox solution and rinsed with distilled water prior to use and between all sampling. All cuttings and auger spill from the drilling process were placed in marked DOT drums and stored on site pending receipt of the reports of laboratory analysis and the development of an appropriate disposal protocol.

RESULTS OF LABORATORY ANALYSES

A copy of the laboratory report as received from Priority Environmental Labs of Milpitas are enclosed within Appendix B and are summarized in Table 2, below:

Table 2

Analytical Results of Soil Samples Acquired from Soil Borings Advanced on January 11-12, 1993

Sample No/Depth	TPH-G (ppm)	TPH-D (ppm)	B	T	E	X	TOG (ppm)
				(ppb)			
MW-1-5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-1-10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2-5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2-10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-3-5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-3-10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Method Detect Limit	1.0	1.0	5.0	5.0	5.0	5.0	10

TPH-G...Total Petroleum Hydrocarbons as Gasoline
TPH-D...Total Petroleum Hydrocarbons as Diesel
BTEX...Benzene, toluene, ethylbenzene, total xylenes
TOG...Total Oil and Grease
ppm...Parts per million
ppb...Parts per billion (1 ppm = 1,000 ppb)

* All samples were also analyzed for Organic Lead. Organic Lead was present in all samples except MW-1-10 at between 0.6 and 1.1 ppm.

CONCLUSIONS AND RECOMMENDATIONS

All soil samples were found to be free of detectable concentrations of fuel hydrocarbons, oil and grease, and contained only low levels of organic lead. This appears to confirm the success of previous soil remediation efforts.

Due to the influx of storms that have deposited heavy rains in the area, development and sampling of the wells has been postponed so that sampling might occur at a time when depth to water would be most representative if meaningful changes have occurred as a result of significant recharge. Uriah proposes to develop and sample the wells prior to April 5, 1993.

Depth to static groundwater will be measured with an electrical tape and the wells developed, surveyed, and groundwater flow direction and gradient value calculated. Following the calculation of casing volume, a vented surge block will be used to surge the wells. Each well will then be purged until conductivity, pH, and temperature readings stabilize and the water is observed to be relatively non-turbid. Development will be with a Waterra brand hand pump, peristaltic pump, or clean disposable polyethylene bailer.

A water sample will be acquired from each well within a clean disposable polyethylene bailer lowered to a point just below the surface of the water. Upon returning the sample to grade, it will be immediately transferred into two (2) one-liter amber-glass sample bottles and four (4) 40-ml Volatile Organic Analysis (VOA) vials. Each container will be promptly fitted with a teflon-lined screw cap, labeled, and placed on blue ice for transport to a California-state certified hazardous waste analytical laboratory under chain of custody. The samples will subsequently be analyzed for TPH-D, TPH-G, BTEX, and TOG using EPA Methods 3510/8015, 5030/8015-8020 (602), and SM 5520 B&F, respectively, and for Organic Lead using ICAP or AA.

All sampling equipment will be steam cleaned or thoroughly scrubbed with Alconox solution and rinsed with distilled water prior to being brought on site and between all samplings.

Water generated as a result of development and sampling activities will be labeled and stored on site pending development of an appropriate disposal protocol.

It is proposed that the frequency of sampling for certified analyses be quarterly for a period of one year. The results of these analyses will be submitted in the form of a Quarterly Environmental Compliance Summary Document.

As requested, copies of this report have been submitted to the following regulatory agencies for their review and comment:

Alameda County Health Care Services Agency
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621
Attention: Ms. Juliett Shin

San Francisco Bay Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, CA 94612
Attention: Mr. Randy Lee

Should you have any questions, or if we may otherwise be of assistance, please contact Uriah at (209) 551-3591.

Sincerely,

Valentin Constantinescu

Valentin Constantinescu, M.Sc.
Hydrogeologist

Robert Oldham

Robert Oldham, P.E.
Registered Civil Engineer

VC/RO:ms
enc. Figures 1-6
Appendix A... Soil Boring Logs, Well Construction Details, Zone 7 Permit
Appendix B... Reports of Laboratory Analyses

cc: Mr. John Trump- Trump, Alioto & Trump
Mr. Ed Summerauer- City of Alameda

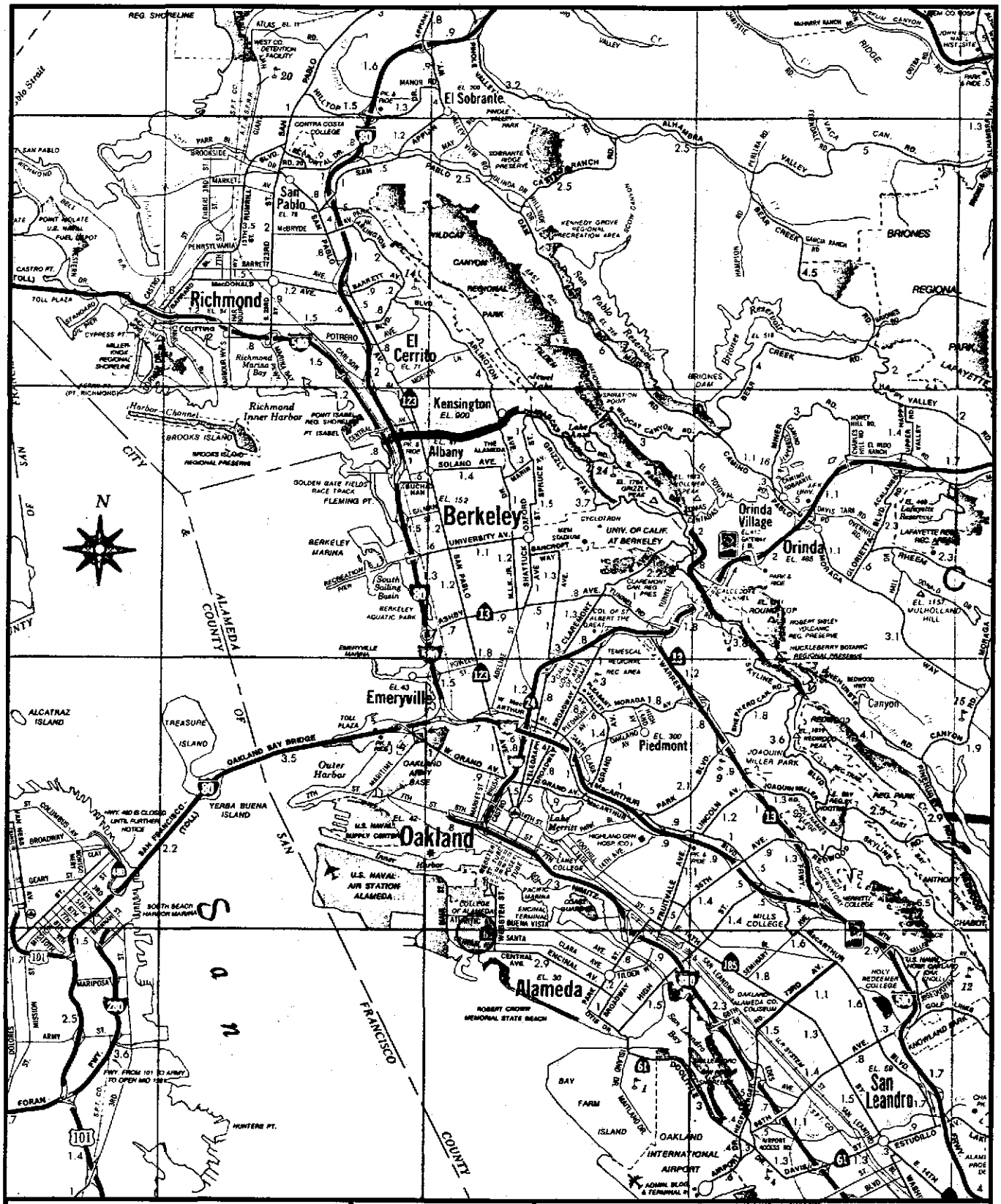


Figure 1 - Regional Map

Colored circle denotes location of 1435 Webster Street, Alameda, CA

0 2

Scale (miles)

Uriah Environmental Services Inc.

2401 East Orangeburg Avenue #675-218, Modesto, CA 95355

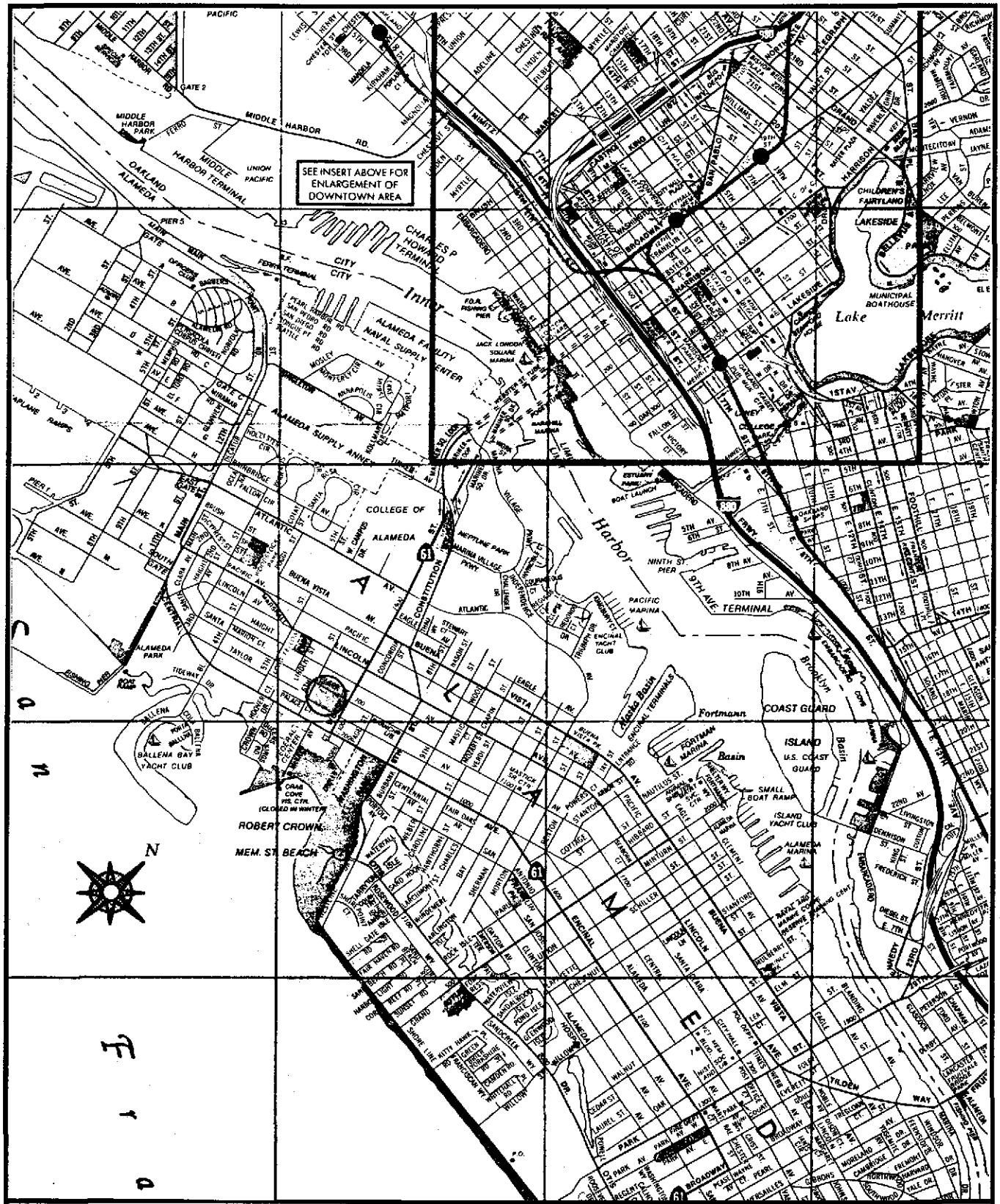


Figure 2 - Locality Map

Colored circle denotes location of 1435 Webster Street, Alameda, CA

0 0.5

Scale (miles)

Uriah Environmental Services Inc.

2401 East Orangeburg Avenue #675-218, Modesto, CA 95355

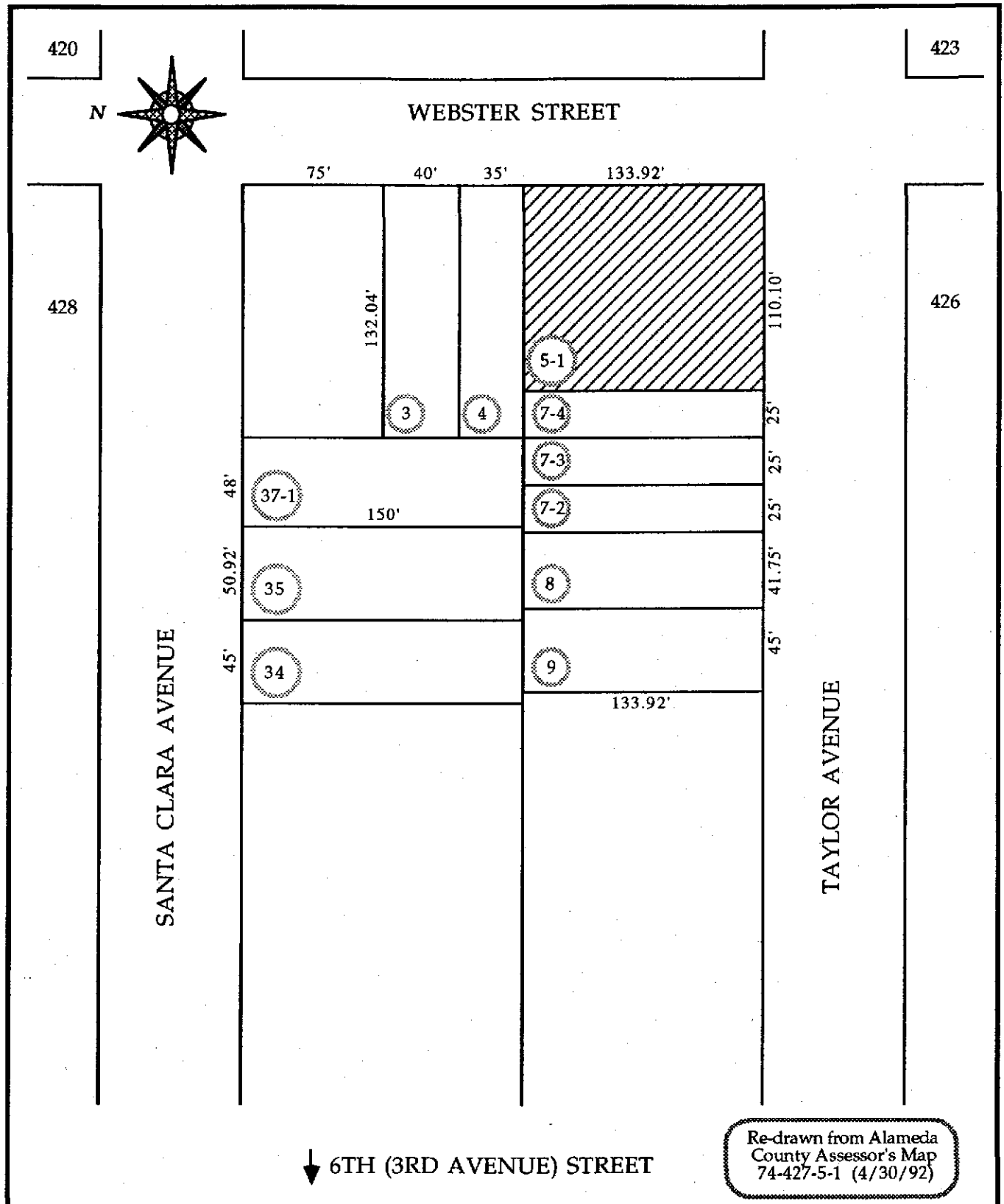


Figure 3 - Detail Map

Location and shape of subject site at 1435 Webster Street, Alameda, CA

0 75

Scale (feet)

CONSILIO ET PRUDENTIA

Uriah Environmental Services Inc.

2401 East Orangeburg Avenue #675-218, Modesto, CA 95355

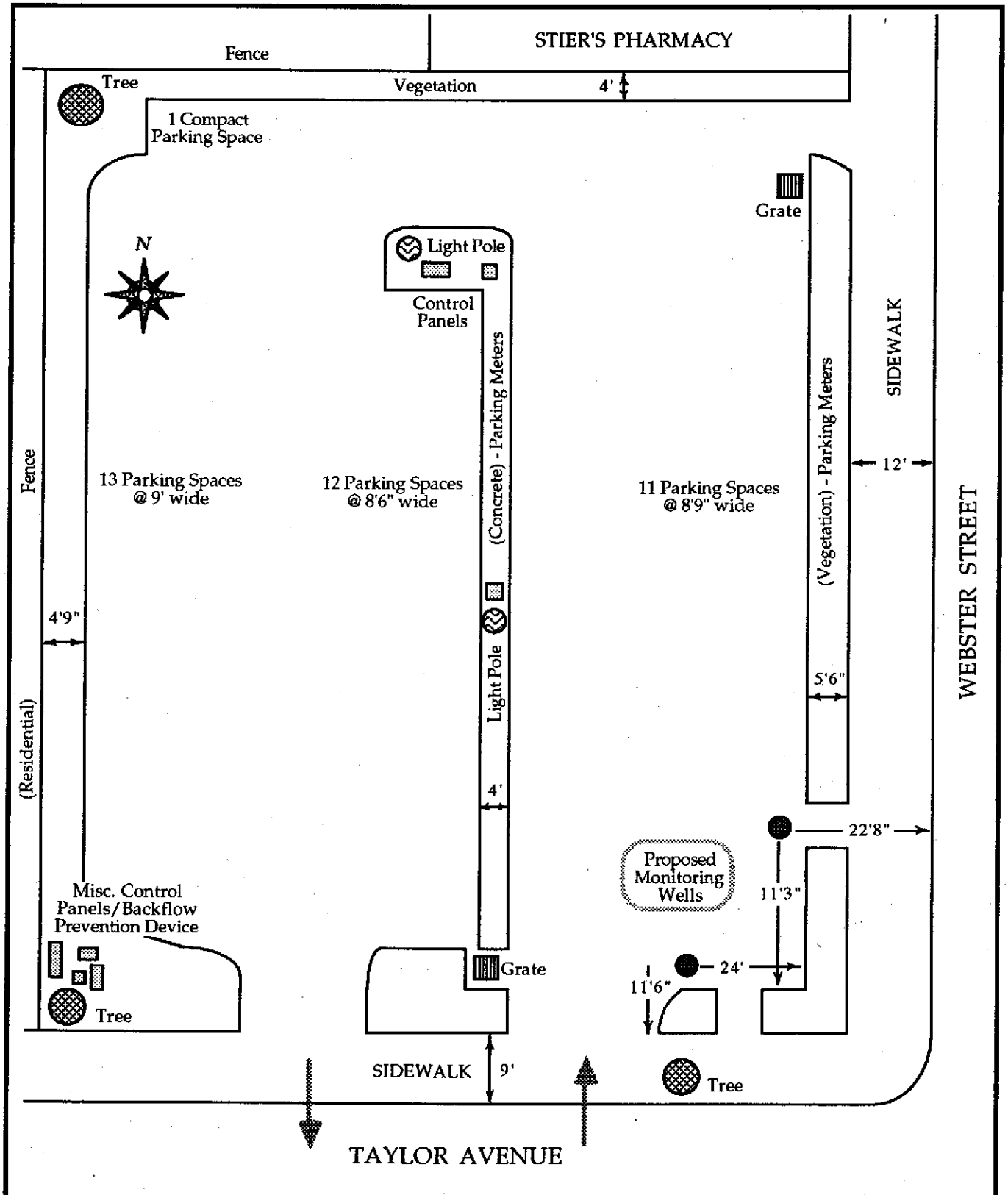


Figure 4 - Detail Map

Location and shape of subject site at 1435 Webster Street, Alameda, CA

(Map not to Scale)

Uriah Environmental Services Inc.
2401 East Orangeburg Avenue #675-218, Modesto, CA 95355

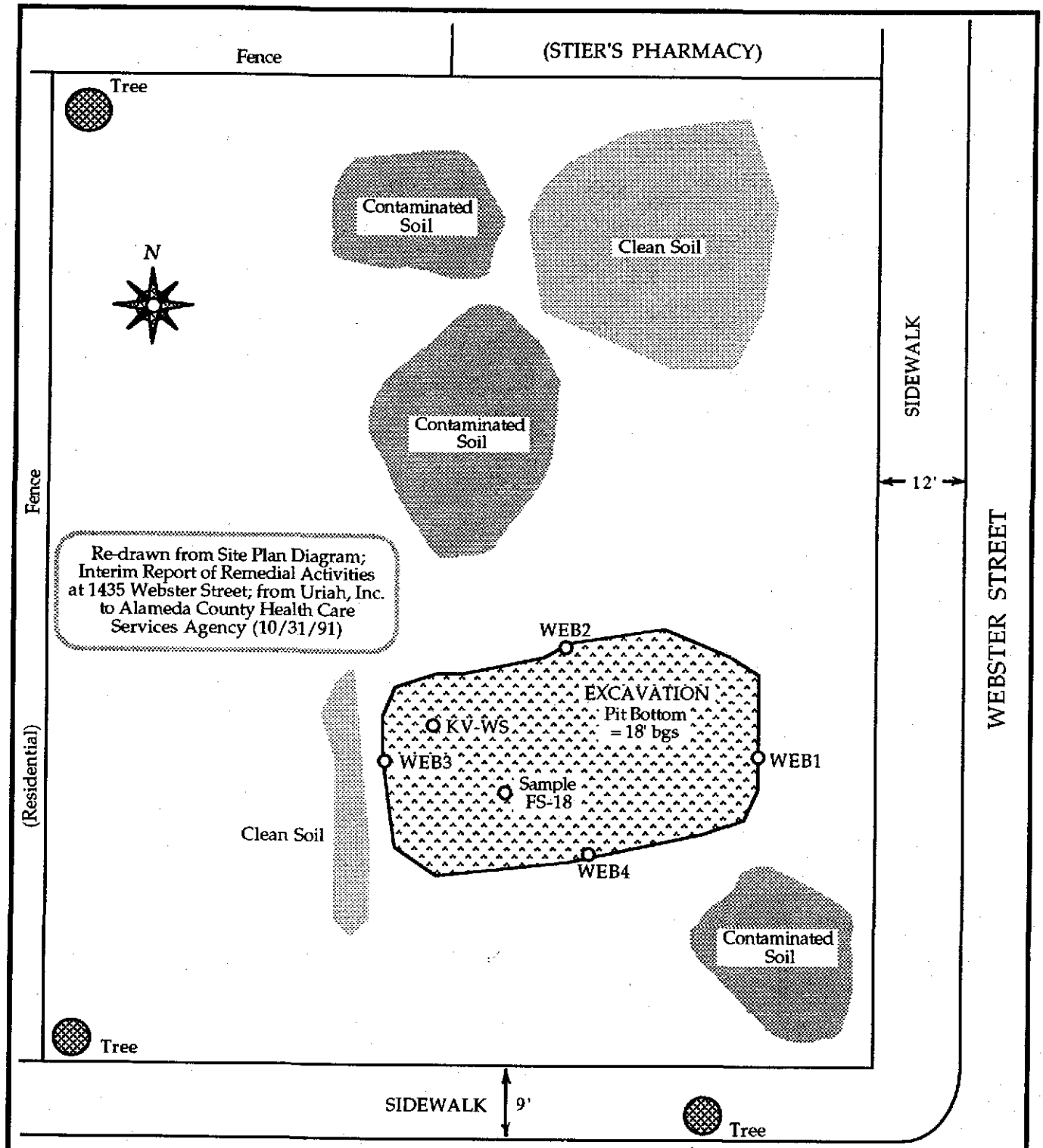


Figure 5 - Detail Map

Stockpiles Position after 9/23/91 at 1435 Webster Street, Alameda, CA

0 25

Scale (feet)

Uriah Environmental Services Inc.

2401 East Orangeburg Avenue #675-218, Modesto, CA 95355

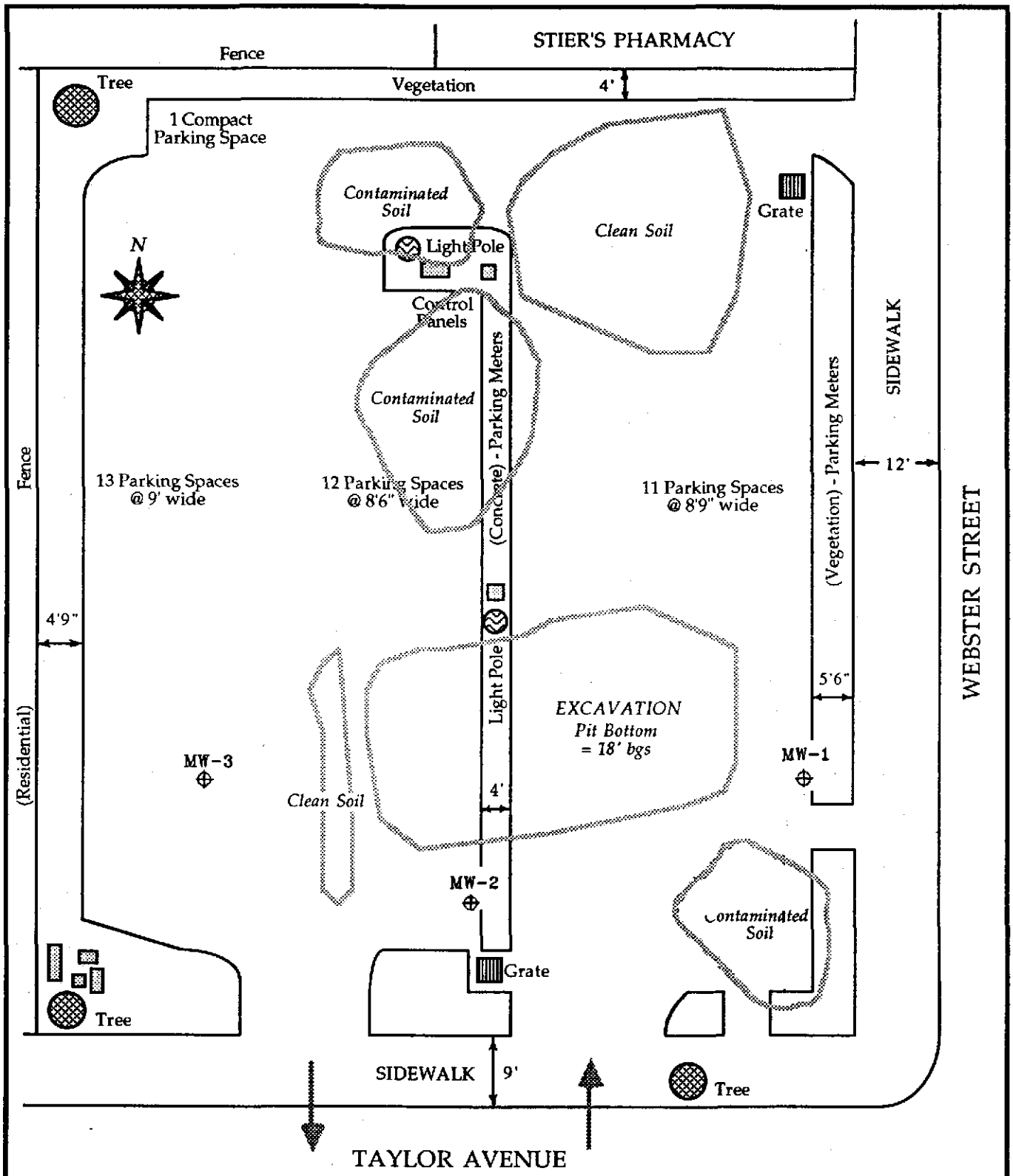


Figure 6 - Overlay

Location of previous excavation and stockpiled soils relative to present conditions and proposed monitoring wells at 1435 Webster Street, Alameda, CA

0 25

Approx. Scale (feet)

Uriah Environmental Services Inc.

2401 East Orangeburg Avenue #675-218, Modesto, CA 95355

Appendix A

Soil Boring Logs, Well Construction Details, Zone 7 Permit

SOIL BORING LOG

LOCATION: *1435 Webster Street, ALAMEDA, CA.*
CLIENT: *John E. Ferrar*
MONITORING WELL: *MW-1*
DATE DRILLED: *1/11/93*
DRILLED BY: *S. E. S.*
DRILLING METHOD: *H.S.Augers*
SAMPLE METHOD: *Split Spoon*
LOGGED BY: *Adi Constantinescu*

Depth Below Surface	Samples Collected INT	Samples Collected Sample No.	SOIL DESCRIPTION Color, Grain size, Texture, Moisture, Consistency, Odor	Unified Soil Classification	Log	Penetration Collected Blows / 18"	Comments
			Asphalt 2".				
5		MW1-5	Brown, medium SAND, well graded, loose, moist, no hydrocarbon odor;	SW		3, 4, 6	
10		MW1-10	Same as above, wet, no hydrocarbon odor;			10, 14, 14	
15			Brown, fine SAND, medium dense, poorly graded, water saturated, no hydrocarbon odor;	SP		10, 10, 12	
20			Light brown, fine to medium SAND, well graded, dense, water saturated, no hydrocarbon odor.	SW		10, 14, 21	
25			Same as above.			10, 20, 28	Hole bottom at 24'. Monitoring well completed at 24' bgs.
30							

SOIL BORING LOG

LOCATION: *1435 Webster Street, ALAMEDA, CA.*
CLIENT: *John E. Ferrar*
MONITORING WELL: *MW-2*
DATE DRILLED: *1/11/93*
DRILLED BY: *S. E. S.*
DRILLING METHOD: *H.S.Augers*
SAMPLE METHOD: *Split Spoon*
LOGGED BY: *Adi Constantinescu*

Depth Below Surface	Samples Collected: INT	Samples Collected: Sample No.	SOIL DESCRIPTION: Color, Grain size, Texture, Moisture, Consistency, Odor	Unified Soil Classification	Log	Penetration Collected: Blows / 18"	Comments
			Asphalt 2".				
5		MW2-5	Brown, medium SAND, well graded, medium dense, moist, no hydrocarbon odor;			5, 5, 6	
10		MW2-10	Gray-brown, mottled, medium gravelly SAND, medium dense, wet, well graded, no hydrocarbon odor;	SW		4, 5, 7	
15			Brown, medium SAND, well graded, medium dense, water saturated, no hydrocarbon odor;			7, 11, 13	
20			Brown, fine to medium SAND, well graded, medium dense, water saturated, no hydrocarbon odor;			10, 13, 20	
25			Same as above.			11, 18, 25	Hole bottom at 24'. Monitoring well completed at 24' bgs.
30							

SOIL BORING LOG

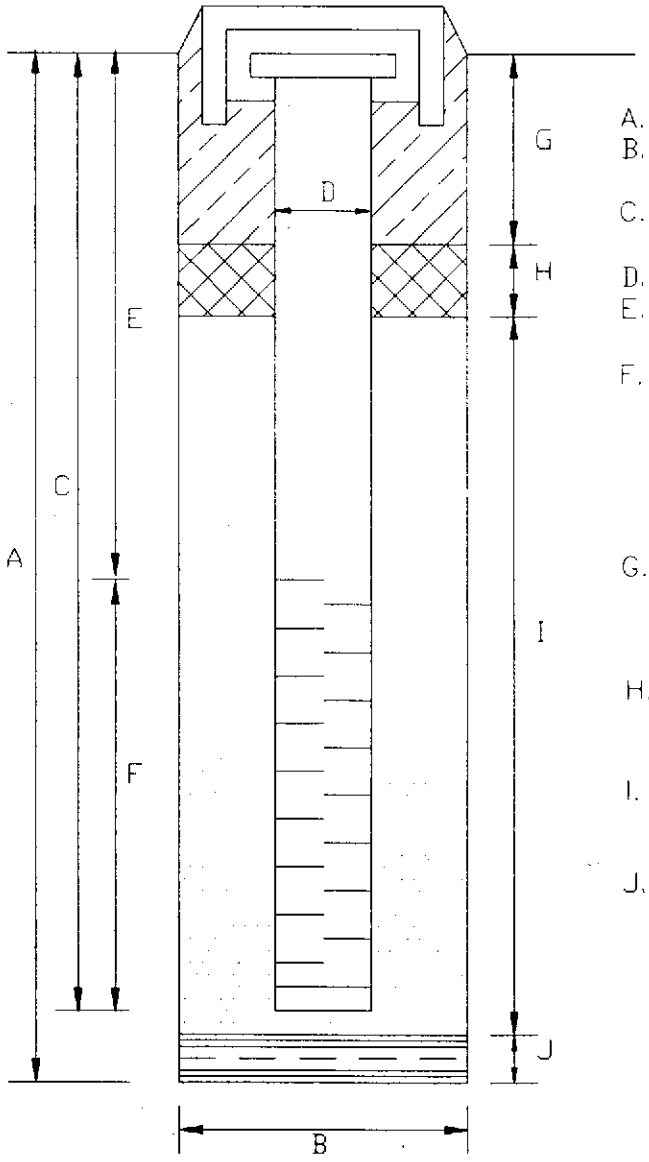
LOCATION: *1435 Webster Street, ALAMEDA, CA.*
CLIENT: *John E. Ferrar*
MONITORING WELL: *MW-3*
DATE DRILLED: *1/12/93*
DRILLED BY: *S. E. S.*
DRILLING METHOD: *H.S.Augers*
SAMPLE METHOD: *Split Spoon*
LOGGED BY: *Adi Constantinescu*

Depth Below Surface	Samples Collected: INT	Samples Collected: Sample No.	SOIL DESCRIPTION: Color, Grain size, Texture, Moisture, Consistency, Odor	Unified Soil Classification	Log	Penetration Collected: Blows / 18"	Comments
			Asphalt 2".				
5		MW3-5	Brown, medium SAND, well graded, medium dense, moist, no hydrocarbon odor;			3, 5, 7	
10		MW3-10	Brown, fine to medium SAND, medium dense, well graded, wet, no hydrocarbon odor;	SW		14, 14, 15	
15			Brown, fine SAND, well graded, medium dense, no hydrocarbon odor;			10, 11, 12	
20			Light brown, fine to medium SAND, well graded, water saturated, no hydrocarbon odor;			11, 13, 23	
25			Same as above.			11, 19, 23	Hole bottom at 24'. Monitoring well completed at 24' bgs.
30							

WELL DETAILS

Project Address: *1435 Webster St., Alameda*

Well Number: *MW-1, MW-2, MW-3*



A. Total Depth: 24.0' bgs
B. Boring diameter: 8"
Drilling Method: HSA
C. Casing Length: 24'
Material: Schedule 40 PVC
D. Casing Diameter: 2.0"
E. Depth to Perforations: 4.0' bgs
F. Perforated Length: 18'
Perforated Interval: 6'–24' bgs
Perforation Type: .02" slotted screen PVC
Perforation Size: .02"
G. Surface Seal: 0.0'–4.0' bgs
Seal Material: Portland Cement & Aggregate Concrete
H. Seal: 4.0'–5.0' bgs
Seal Material: 1/4" Pelletized Bentonite
I. Gravel Pack: 5.0'–24.0' bgs
Pack Material: #3 grade Monterey Silica Sand
J. Bottom Seal: None

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588 VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1435 WEBSTER St. ALAMEDA, CA

CLIENT
Name JOHN E. FERRAR
Address P.O. BOX 525 Phone (415) 325-5881
City MENLO PARK Zip CA - 94025

APPLICANT
Name URIAH ENVIRONMENTAL SERVICES Inc.
Address 2401 East Orangeburg Phone (209) 557-3591 ~~(510) 455-1821~~
City # 675-218 ~~MODESTO~~ Zip 95355

TYPE OF PROJECT
Well Construction
- Cathodic Protection ___
- Water Supply ___
- Monitoring ✓

Geotechnical Investigation
- General ___
- Contamination ___
- Well Destruction ___

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger ✓
Cable ___ Other ___

DRILLER'S LICENSE NO. C-57 582 696

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 25 ft.
Surface Seal Depth 5 ft. Number 3

GEOTECHNICAL PROJECTS
Number of Borings ___ Maximum
Hole Diameter ___ in. Depth ___ ft.

ESTIMATED STARTING DATE January 7, 1993
ESTIMATED COMPLETION DATE January 8, 1993

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Monica Constantino Date 12/28/92

FOR OFFICE USE

PERMIT NUMBER 92664
LOCATION NUMBER ___

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

(B.) WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 28 Dec 92
Wyman Hong

31992

TOTAL P.02

Appendix B

Reports of Laboratory Analyses

PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

January 15, 1993 PEL # 9301021

URIAH, INC.

Attn: Adi Constantinescu
Re: Six soil samples for Gasoline/BTEX, Diesel, and Oil & Grease analyses.

Project name: 1435 Webster St., -Alameda

Date sampled: Jan 11, 1993 Date submitted: Jan 13, 1993
Date extracted: Jan 13-14, 1993 Date analyzed: Jan 13-14, 1993

RESULTS:

SAMPLE I.D.	Gasoline (mg/Kg)	Diesel (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)	Oil & Grease (mg/Kg)
MW-1-5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-1-10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2-5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2-10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-3-5	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-3-10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Blank	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	82.9%	94.6%	84.1%	85.5%	94.2%	91.8%	---
Duplicate Spiked Recovery	93.5%	92.7%	96.4%	98.9%	93.0%	94.8%	---
Detection limit	1.0	1.0	5.0	5.0	5.0	5.0	10
Method of Analysis	5030 / 8015	3550 / 8015	8020	8020	8020	8020	5520 D & F

David Duong
Laboratory Director

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 408-946-9663

PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

January 18, 1993 PEL # 9301021

URIAH, INC.

Attn: Adi Constantinescu
Re: Six soil samples for Organic Lead analysis.

Project name: 1435 Webster St. -Alameda

Date sampled: Jan 11, 1993 Date submitted: Jan 13, 1992
Date extracted: Jan 15-18, 1993 Date analyzed: Jan 15-18, 1993

RESULTS:

SAMPLE I.D.	Organic Lead (mg/Kg)
MW 1-5	0.6
MW 1-10	N.D.
Mw 2-5	0.8
Mw 2-10	0.6
MW 3-5	1.1
MW 3-10	0.9
Blank	N.D.
Detection limit	0.5
Method of Analysis	LUFT

David Duong
Laboratory Director

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 408-946-9663

Uriah, Inc.

An Environmental Services Company
(510) 455-4991 OFFICE (510) 455-4995 FAX

CHAIN OF CUSTODY

DATE: 1-12-93 PAGE: 1 OF 1

PROJ. MGR. ADI CONSTANTINESCU
COMPANY Uriah, Inc.
ADDRESS 2456 Armstrong Street
Livermore, CA 94550

SAMPLER'S SIGNATURE
PHONE NO. (510) 455-4991

ANALYSIS REQUEST

SAMPLE I.D.	DATE	TIME	MATRIX	TPHG	TPHG & BTEX	TPHD	BTEX	O&G	METALS Cd,Cr Pb,Zn Ni	PURGEABLE HALOCARBONS	VOLATILE ORGANICS	ORGANIC LEAD	TOTAL LEAD	SOLUBLE LEAD					NUMBER OF CONTAINERS
MW1-5	1-11-93		SOIL / WATER		*	*		*				*							1
MW1-10	1-11-93		SOIL / WATER																
MW2-5	1-11-93		SOIL / WATER																
MW2-10	1-11-93		SOIL / WATER																
MW3-5	1-12-93		SOIL / WATER																
MW3-10	1-12-93		SOIL / WATER																

PROJECT I.D./ADDRESS
1435 Webster St.
ALAMEDA

LABORATORY INSTRUCTIONS/COMMENTS:
Turn Around Time (Circle One)
Same Day 24 Hrs 48 Hrs
72 Hrs (Normal)
Soil samples hold in dedicated freezer

ANALYTICAL LABORATORY PRIORITY ENV. LAB
CITY MILPITAS

RELINQUISHED BY:
Signature: Viorica Constantinescu
Printed Name: VIORICA CONSTANTINESCU
Company: URIAH, Inc
Time 13:10 Date 01/13/93

RECEIVED BY:
Signature: [illegible]
Printed Name: VICTOR DUONG
Company: PEL
Time 13:10 Date 01/13/93

RELINQUISHED BY:
Signature
Printed Name
Company
Time Date

RECEIVED BY:
Signature
Printed Name
Company
Time Date

RELINQUISHED BY:
Signature
Printed Name
Company
Time Date

RECEIVED BY:
Signature
Printed Name
Company
Time Date