Uriah Inc.

An Environmental Services Company

Interim Report Concerning
Assessment and Remediation
of

Stoddard Solvent Contamination
at

ST11D8/9

3516 Adeline Street
Oakland, CA

May, 1992

464 Lindbergh Avenue • Livermore, California 94550 • (415) 455-4991

Uriah Inc.

An Environmental Services Company

May 19, 1992

Ms. Susan Hugo
Alameda County Health Care Services Agency
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

RE: City of Paris Cleaners, 3516 Adeline Street, Oakland, CA

Dear Ms. Hugo:

This document is presented as an interim report concerning assessment and remediation of Stoddard Solvent contamination at the above referenced site. It is intended to comply with requirements for the work described which have been set forth by the Alameda County Health Care Services Agency (ACoHCSA) and to conform with guidelines promulgated by the San Francisco Bay Regional Water Quality Control Board (RWQCB).

SITE DESCRIPTION AND OVERVIEW OF ENVIRONMENTAL COMPLIANCE ACTIVITIES

3516 Adeline Street is located in the northwest portion of the City of Oakland (Alameda County), California. It is one mile east of the San Francisco Bay, 60 feet south of State Highway 580 (an elevated structure), and 3/4 mile west of the Highway 580-Highway 980 interchange (Figure 1). The site occupies the southeast corner of Adeline and 35th Streets at an elevation approximately 30 feet above sea level on an alluvial plain that slopes gently westward toward the Bay. The buildings which remain on site are unused at the present time, but they formerly housed the City of Paris Cleaners...a full service laundry and dry cleaning business.

Four underground Stoddard Solvent storage tanks were once present on site at those locations illustrated in Figure 2. Three of these tanks (one 750 gallon capacity tank and two 1000 gallon capacity tanks) were excavated and removed from the site on October 4, 1990 by the Semco Company of San Mateo (a California licensed contractor).

464 Lindbergh Avenue • Livermore, California 94550 • (415) 455-4991

Six soil samples were acquired attendant to the removal of the three tanks. These samples were obtained from apparently native soil underlying the three tanks at depths of 6.5 to 14 feet below ground surface (bgs)(Figure 3). Results of certified laboratory analyses of these samples are summarized in Table 1:

Table 1- Analytical Results of Soil Samples Acquired Attendant to the Removal of Underground Storage Tanks During October, 1990

Sample Number and Tank Capacity	TPH-G (ppm)	B	T	E	X
			(ppb)		
1- 750 gallons	290	<150	<150	400	5100
2- 750 gallons	560	<150	<150	<150	11000
3- 1K (1000) gallons	370	<150	<150	<150	4700
4- 1K (1000) gallons	1	<3	<3	<3	9
5- 1K (1000) gallons	170	<30	54	<30	2100
6- 1K (1000) gallons	1000	<150	<150	<150	19000
Method Detection Limit (MDLs elevated due to high concentrations of contaminants)	3	3-150	3-150	3-150	3-150

TPH-G...Total Petroleum Hydrocarbons as Gasoline Range compounds
BTEX...Benzene, toluene, ethylbenzene, total xylenes
ppm...Parts per million
ppb...Parts per billion

ASSESSMENT, REMEDIAL EXCAVATION, AND SOIL TREATMENT

On July 31, and August 1 and 2, 1991, Uriah personnel performed a soil vapor survey at the site in an effort to define the approximate boundaries of the area of soil contamination. Test locations, sample depths, and vapor concentrations encountered are presented in Figure 4. As indicated, vapors were found widely distributed across the site, however, plume boundaries could not be clearly defined due to the presence of obstructions (buildings, the public sidewalk, etc).

On August 30, 1991, employees of W.A. Craig, Inc., a California licensed contractor, overexcavated the eastern portion of the

tank pit to a depth of approximately 15 feet. While digging in the southeast corner of the pit, the excavator encountered a 250 gallon capacity underground Stoddard Solvent storage tank. A small volume of liquid was pumped from the tank and placed into a labeled, 55 gallon DOT drum for storage. On October 31, 1991, the 250 gallon tank was excavated by W.A. Craig, Inc. under authority of a permit issued by ACoHCSA. The tank was transported to Erickson, Inc. of Richmond, under hazardous waste manifest (copies of transportation and disposal documents are included within Appendix B). In accordance with requirements set forth by ACoHCSA Inspector Dennis Byrne, a single discrete boundary (soil) sample was taken at 7 feet bgs, 1 foot below the bottom of the tank. A sample was also taken of the liquid previously pumped from the tank and placed within a 55-gallon drum for on-site storage. Both samples were submitted to a California-state certified hazardous waste analytical laboratory for analyses for Total Petroleum Hydrocarbons as Diesel (TPH-D), and benzene, toluene, ethylbenzene, and total xylenes (BTEX). The laboratory reported that the soil sample contained 130 parts per million (ppm) TPH-D, 420 parts per billion (ppb) toluene, 270 ppb ethylbenzene, and 1500 ppb xylenes. The sample of the liquid pumped from the interior of the 250 gallon underground tank contained 130 ppm TPH-D, 6 ppb ethylbenzene, and 32 ppb xylenes (certificates of analyses and the chain of custody document are enclosed in Appendix B).

Due to the limited space available for above grade storage, only 44 cubic yards of soil were excavated on August 30. The soil, which was placed on polyethylene sheeting, was sampled at the request of ACoHCSA Inspector Byrne and analyses performed for ignitability and toxicity. The single four-point composite sample was found to have a flashpoint greater than 100 degrees C and to be non-toxic (fish bioassay and other analytical data are enclosed within Appendix B).

After performing initial soil chemistry analyses and confirming that passive aeration of the soil stockpile provided sufficient oxygen to support aerobic bacteria, an aqueous solution containing a dilute commercial fertilizer preparation and common, non-pathogenic, hydrocarbon-utilizing soil bacteria was added to the soil on September 11, 1991 in order to promote the thorough aerobic biological degradation (mineralization) of the hydrocarbon contaminants. During the next three months, the soil was monitored and samples acquired to determine the rate of contaminant degradation, levels of oxygen, moisture and primary nutrients (i.e. nitrogen, phosphorus, and potassium), soil temperature and pH, and numbers of hydrocarbon-utilizing bacteria. On December 23, 1991, the soil was sampled for certified laboratory analyses to confirm the success of treatment. In a manner approved by Inspector Byrne, and in his presence, Uriah staff collected two (2) four-point composite

samples by driving 1.9 inch diameter by 6.0 inch long clean brass sample tubes into the soil until each tube was completely filled with a consolidated volume of material. Promptly upon withdrawing a tube from the soil, the ends of the tube were covered with teflon sheeting, fitted with plastic caps, and sealed with black electrical/duct tape. Each tube was then marked and placed on blue ice for transportation to a California-state certified hazardous waste analytical laboratory under chain of custody. The results of analyses are summarized in Table 2:

Table 2- Results of Certified Analyses of Soil Samples Acquired from Bioremediated Soil, December, 1991

Sample Number	TPH-SS (ppm)	TPH-D (ppm)	B	T	E	X
			(ppb)			
E1-4	4.2	N.D.	N.D.	5.0	N.D.	N.D.
W1-4	7.3	N.D.	N.D.	N.D.	N.D.	N.D.
Method Detection Limit	1.0	10	5.0	5.0	5.0	10.0

TPH-SS...Total Petroleum Hydrocarbons as Stoddard Solvent
TPH-D...Total Petroleum Hydrocarbons as Diesel
BTEX...Benzene, toluene, ethylbenzene, total xylenes
N.D...Not present at or above laboratory detection limits
ppm...Parts per million
ppb...Parts per billion

On January 17, 1992, the data summarized in Table 2 was reported to Inspector Byrne who, in response, authorized use of the remediated soil to backfill a portion of the on-site excavation. On January 27, 1992, employees of W.A. Craig Inc. continued excavation of the sidewalls of the pit, removing approximately 15 cubic yards of additional soil- which ranged from a light brown silty gravel to a grey inorganic clay (Figure 5). At the direction of Inspector Byrne, four discrete samples were taken at depths of 7-9 feet bgs from the sidewalls of the pit (Figure 6). Each sample was acquired by driving 1.9 inch by 6.0 inch clean brass tubes into a consolidated volume of material brought to grade within the excavator bucket until each tube was completely filled. The tubes were sealed and transported as described above (see Appendix B for certificates of analyses and chain of custody documents). Results of the certified analyses performed are summarized in Table 3. No samples

were acquired from the floor of the excavation due to the influx of groundwater at a depth of 12 feet.

Table 3- Results of Certified Analyses of Soil Samples Acquired from The Pit Excavation Boundaries, January, 1992

Sample Number and Depth	TPH-SS (ppm)	TPH-D* (ppm)	B	T	E	X
			(ppb)			
N1-9'	14	15	N.D.	N.D.	N.D.	N.D.
S1-9'	9.8	N.D.	N.D.	N.D.	N.D.	N.D.
E1-7'	140	110	N.D.	N.D.	N.D.	410
W1-9'	47	55	N.D.	22	N.D.	16
Method Detection Limit	1.0	10	5.0	5.0	5.0	5.0

* Stoddard Solvent range peaks predominate
TPH-SS...Total Petroleum Hydrocarbons as Stoddard Solvent
TPH-D...Total Petroleum Hydrocarbons as Diesel
BTEX...Benzene, toluene, ethylbenzene, total xylenes
N.D...Not present at or above laboratory detection limits
ppm...Parts per million
ppb...Parts per billion

Although the boundary samples indicated that some residual hydrocarbon contamination remains within the soil, ACoHCSA Inspector Byrne advised that his office would require no additional excavation as the integrity of significant structures (both on site and upon contiguous properties) could be jeopardized if further excavation was attempted. Uriah concurs with Mr. Byrne's position both with regard to the potential for risk to surface structures and in consideration of the low negative public health and/or environmental impact potentials associated with the levels of residual contamination present. Uriah will include an impact assessment statement in its final report.

The 44 cubic yards of bioremediated soil was used to backfill the pit to within four feet of grade. The newly excavated soil was placed on polyethylene sheeting and the bioremediation process previously described repeated. On March 31, 1992, a four-point composite soil sample was taken from the soil in

the manner described above (Figure 6). Certified laboratory analyses showed that the soil sample was free of detectable concentrations of TPH-D, benzene, toluene, and ethylbenzene and contained only 6.1 ppm TPH-SS and 12 ppb xylenes. Certificates of analyses and the chain of custody document appear in Appendix B.

As you will recall, upon being informed of the results of sample analyses, you approved the use of the 15 cubic yards of additionally bioremediated soil as backfill. On April 21, 1992, employees of W.A. Craig, Inc. partially backfilled and compacted the pit with this soil and clean, imported fill.

INSTALLATION, DEVELOPMENT, AND SAMPLING OF A GROUNDWATER MONITORING WELL

In order to determine if groundwater has been impacted by product loss from the underground storage tank system formerly in place at the Adeline Street site and determine on-site hydraulic gradient, Uriah proposes to install three 2-inch diameter groundwater monitoring wells, one of which will be within ten feet of the downgradient side of the pit formerly occupied by the underground storage tanks, as illustrated in Figure 2. Although we believe that the hydraulic gradient at the site is approximately N-70°-W, we are unable to confirm this based solely on information acquired from groundwater monitoring wells previously installed at sites within a $\frac{1}{4}$-mile radius of 3516 Adeline Street (i.e. at 3400 San Pablo Avenue and 3420 San Pablo Avenue, Oakland) as there have been significant fluctuations in the gradients calcuated for these sites. Therefore, Uriah believes that the installation of three on-site wells is necessary.

Each soil boring for the on-site groundwater monitoring wells will be advanced to a point between 10 and 15 feet below first encountered groundwater (i.e. to a depth of approximately 30 feet bgs) with truck-mounted, 8-inch outside diameter, continuous-flight, hollow stem augers and logged using the Unified Soil Classification System. Soil samples will be acquired at five-foot intervals beginning at 5 feet bgs, at significant lithologic contacts, and at the top of the capillary fringe within a Modified Split Spoon Sampler driven through the hollow stem of the drilling augers. Immediately upon the opening of the sampling unit, the ends of the distal 1.9 inch diameter by 6.0 inch long clean brass tube contained within will be covered with teflon sheeting, fitted with plastic caps, and sealed with duct tape. Each tube will be labeled and placed on blue ice pending transportation to a California-state certified hazardous waste analytical laboratory under chain of custody. Subsequent analyses will be performed for TPH-D

and BTEX using EPA Methods 3550/8015-8020 and for TPH-SS using EPA Methods 5030/8015.

The soil borings will be converted into 2"-diameter groundwater monitoring wells and constructed as illustrated in the graphic labeled "Well Construction Details" which appears in Appendix A. Either a cuttingless drilling method will be used or drill cuttings will be placed on polyethylene sheeting, covered, and stored on site pending receipt of the report of laboratory analyses and development of an appropriate treatment/disposal protocol. After a stabilization period of not less than 48 hours, the newly installed well will be surged using a vented surge block, and purged with a clean, disposable polyethylene bailer or peristaltic pump until temperature, pH, and electrical conductivity readings stabilize and the water is observed to be relatively non-turbid and free of grit and other extraneous material. Fluids produced during the development process will be stored on site within a marked, DOT-approved drum until laboratory data is received and a treatment/disposal protocol is developed.

Water samples will be acquired from the developed wells within a clean, disposable polyethylene bailer lowered into the well to a point immediately below the surface of the water. Promptly upon returning the bailer to grade, its contents will be filtered into three (3) 40-ml Volatile Organic Analysis (VOA) vials containing sufficient Hydrochloric Acid (HCl) preservative to reduce the pH to less than 2.0, and two (2) one-liter amber glass bottles. Each container will then be fitted with a teflon-lined screw cap, labeled, and placed on blue ice pending transport to a California-state certified hazardous waste analytical laboratory under chain of custody. Analyses will be conducted for TPH-D, BTEX, and TPH-SS using EPA Methods 3510/8015-8020 (602), and 5030/8015, respectively. The casing elevation of the on-site wells will be surveyed to Mean Seal Level Datum.

Sample blanks and/or duplicates will be acquired as specified by ACoHCSA. Work will be performed in accordance with procedures referenced within the Health and Safety Plan attached hereto as Appendix C.

All sampling equipment will be steam cleaned and/or thoroughly scrubbed with Alconox solution, rinsed with tap water, and then rinsed with distilled water prior to, and between, all samplings.

Work will be performed by a qualified geologist and sub-contractors under the direction of a Registered Civil Engineer.

It is proposed that compliance monitoring of the most down-gradient well be performed quarterly for one year with analyses

performed for TPH-D, BTEX, and TPH-SS. Data thus acquired will be reported in the form of a quarterly activity summary document to be submitted to ACoHCSA and the RWQCB.

If you have any questions regarding this document, or if we may otherwise be of assistance, please contact any of the undersigned at (510) 455-4991.

Sincerely,

Adrian Ilie
Project Microbiologist

Casey Long
Geologist
and

Robert Oldham, P.E.
Registered Civil Engineer

AI/CL/RO:dr
enc. Figures 1-6
Appendix A...Proposed Well Construction Details
Appendix B...Reports of Laboratory Analyses, Transportation and Disposal Documents
Appendix C...Health and Safety Plan

cc: Ms. Leah Champion
San Francisco Bay Regional Water Quality Control Board

AREA LOCATION MAP

FIGURE 1

City of Paris Cleaners
3516 Adeline Street
Oakland, California

Uriah, Inc.

An Environmental Services Company

Uriah Inc.

An Environmental Services Company

June 3, 1992

Ms. Susan Hugo
Alameda County Health Care Services Agency
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

RE: City of Paris Cleaners, 3516 Adeline Street, Oakland, CA

Dear Ms. Hugo:

It has come to my attention that the Site Map which appeared as Figure 2 in Uriah's May 19, 1992 interim report concerning assessment and remediation activities at the above referenced site pictured only one of three proposed groundwater monitoring wells.

I enclose a corrected Figure 2 which shows all three proposed well locations. Please insert the enclosed figure within the previously submitted report.

Thank you for your assistance and please accept my apologies for any inconvenience.

Sincerely,

Denise A. Rapp
Vice-President, Uriah Inc.

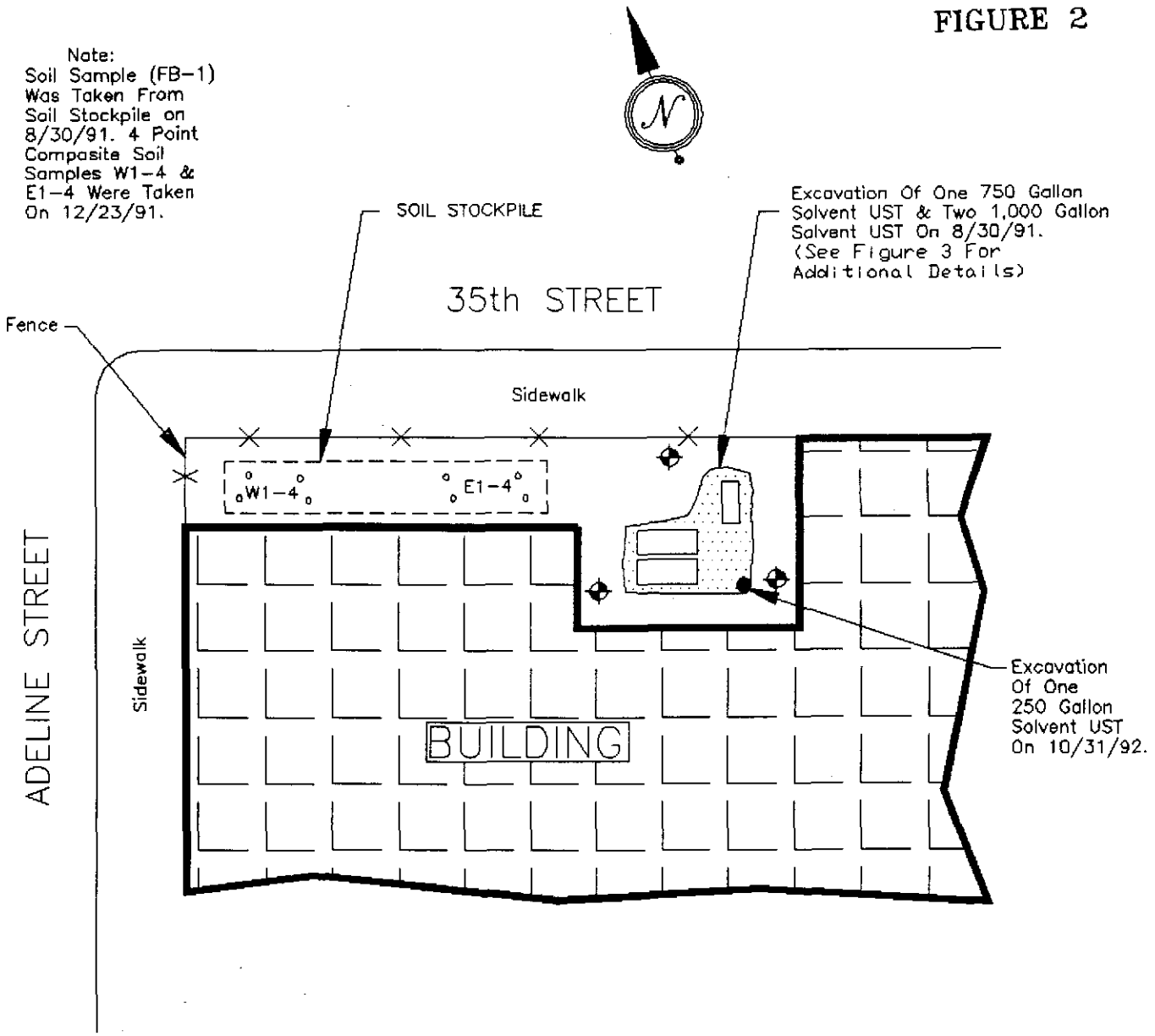
DAR:gr

cc: Mr. Vijay Patel, RWQCB
Ms. Leah Champion

464 Lindbergh Avenue • Livermore, California 94550 • (415) 455-4991

FIGURE 2

Note:
Soil Sample (FB-1) Was Taken From Soil Stockpile on 8/30/91. 4 Point Composite Soil Samples W1-4 & E1-4 Were Taken On 12/23/91.



SCALE:

0 10 20

1" =20'

◦ Composite Soil Sample Locations.

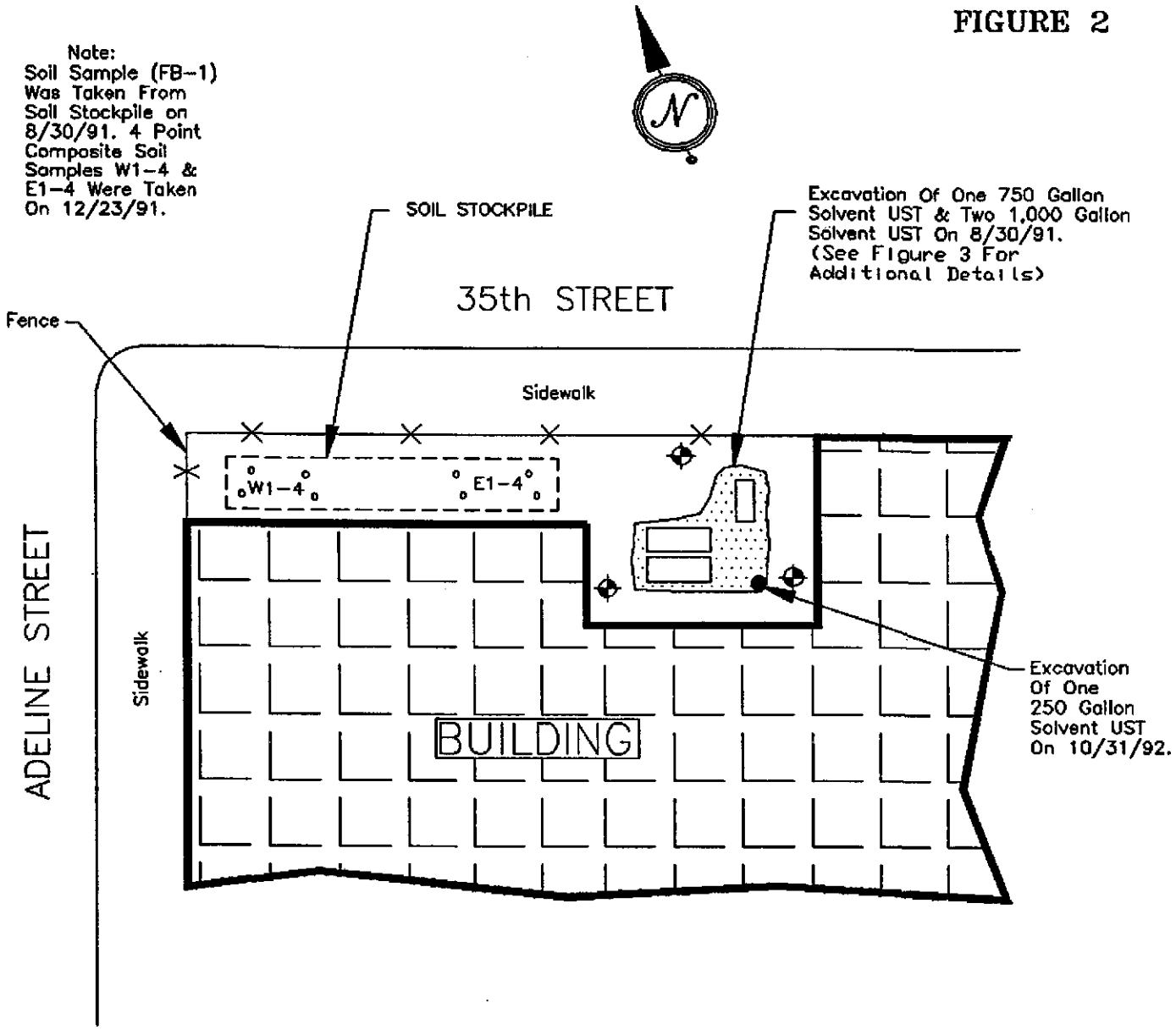
⌖ Proposed Monitoring Well Locations.

CITY OF PARIS CLEANERS
3516 ADELINE STREET
OAKLAND, CALIFORNIA

URIAH, INC.
AN ENVIRONMENTAL SERVICES COMPANY

FIGURE 2

Note:
Soil Sample (FB-1) Was Taken From Soil Stockpile on 8/30/91. 4 Point Composite Soil Samples W1-4 & E1-4 Were Taken On 12/23/91.



SCALE:

0 10 20

1"=20'

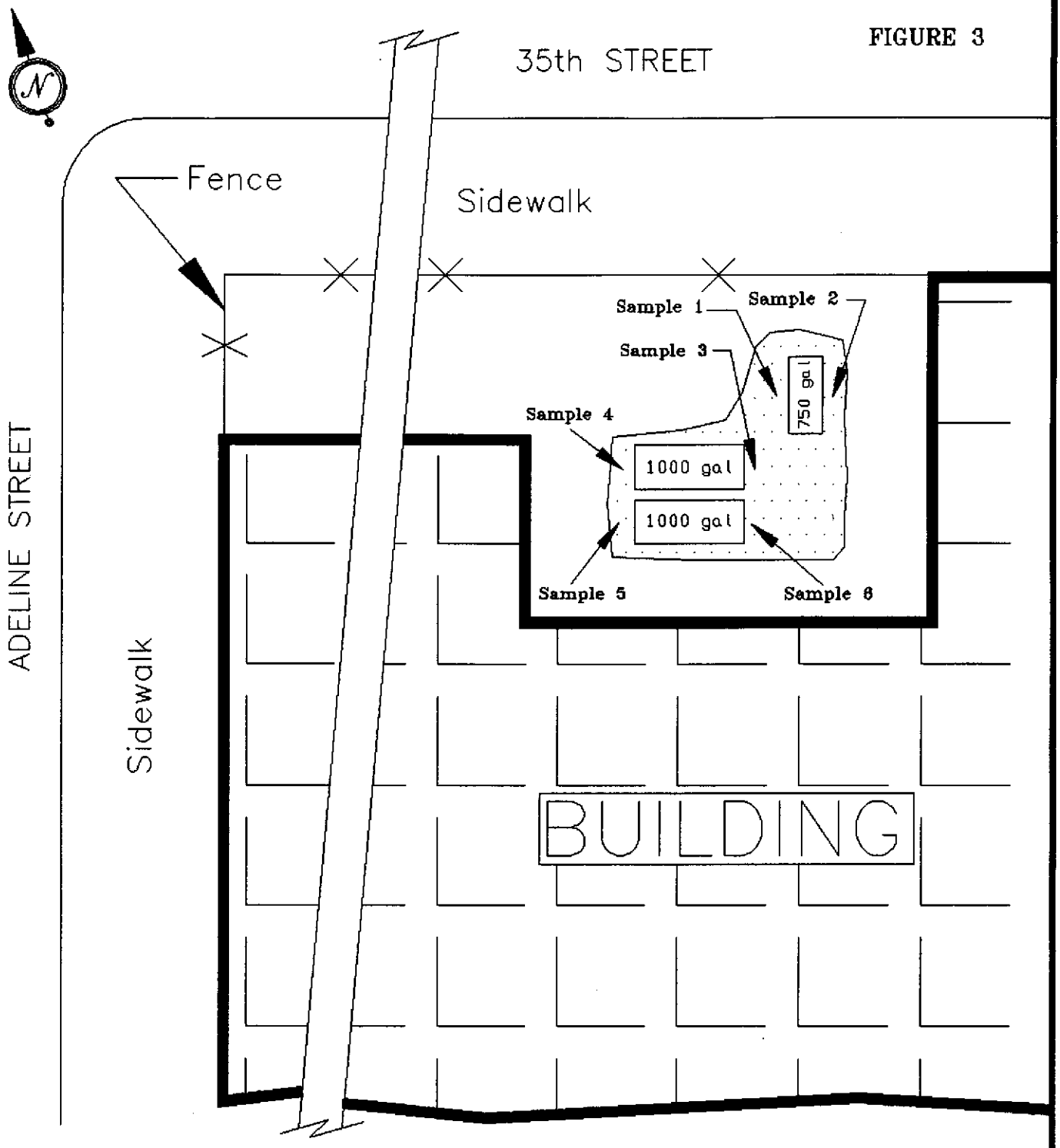
° Composite Soil Sample Locations.

⊕ Proposed Monitoring Well Locations.

CITY OF PARIS CLEANERS
3516 ADELINE STREET
OAKLAND, CALIFORNIA

URIAH, INC.
AN ENVIRONMENTAL SERVICES COMPANY

FIGURE 3



SITE MAP DATA FROM SEMCO, 1990, SHOWING RELATIVE LOCATIONS OF 750 GALLON AND 1000 GALLON SOLVENT TANKS AND SOIL SAMPLE LOCATIONS.

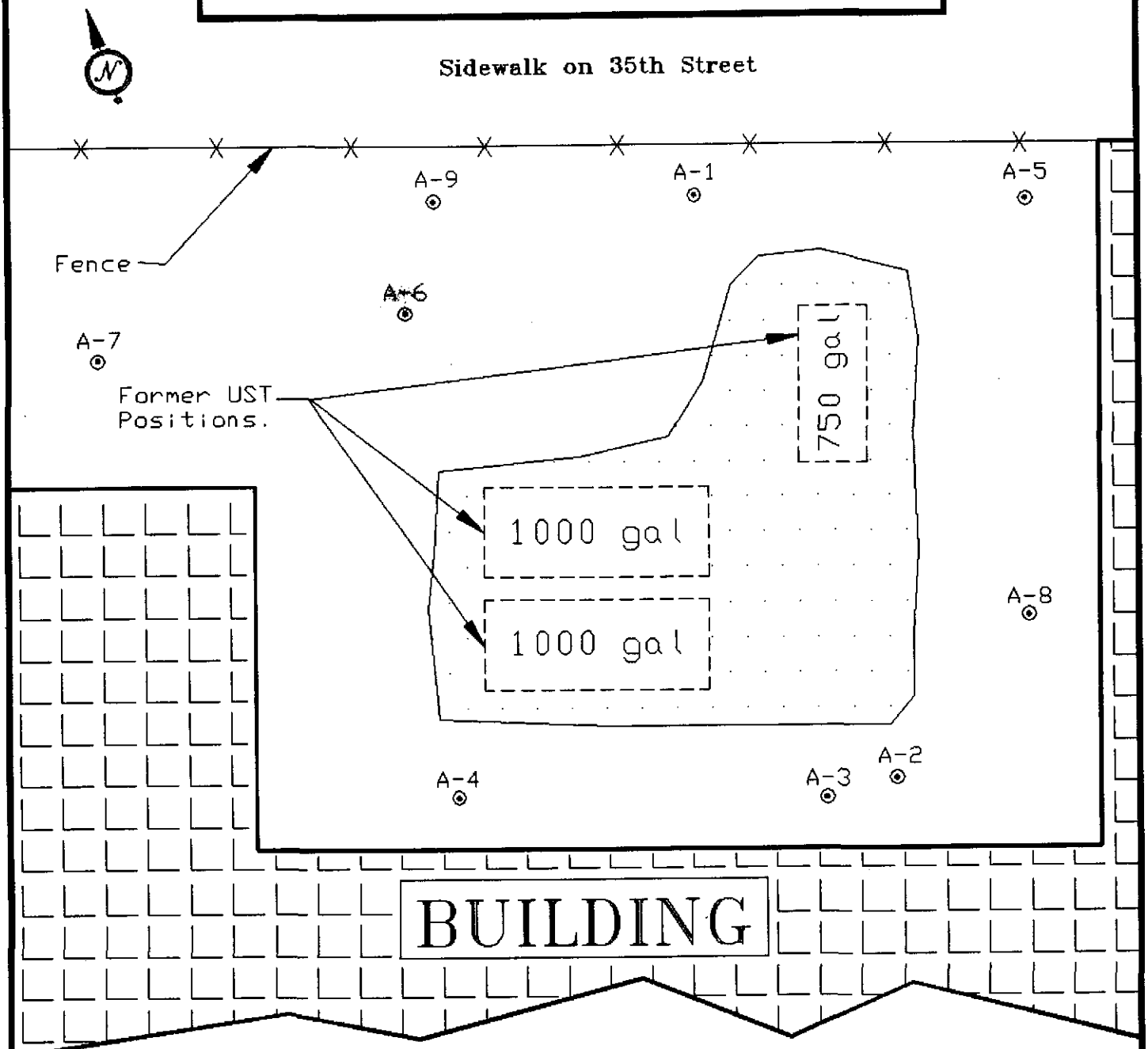
SCALE:
0 5 10
1" =10'

CITY OF PARIS CLEANERS
3516 ADELINE STREET
OAKLAND, CALIFORNIA

URIAH, INC.
AN ENVIRONMENTAL SERVICES COMPANY

Soil Vapor Survey Map: 7/31, 8/1, 8/2/91

FIGURE 4



Soil Vapor Depth	VAPOR TEST NUMBERS (Data in ppm TPH)								
	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9
3'	---	49	---	---	---	---	---	---	---
6'	16	---	24	44	21	14	17	18	10
9'	20	---	7	5	28	110	13	13	13
12'	13	---	6	---	30	26	22	15.5	15.5

SCALE:

0 1 2 3 4 5

1"=5'

⊙ Soil Vapor Test Locations.

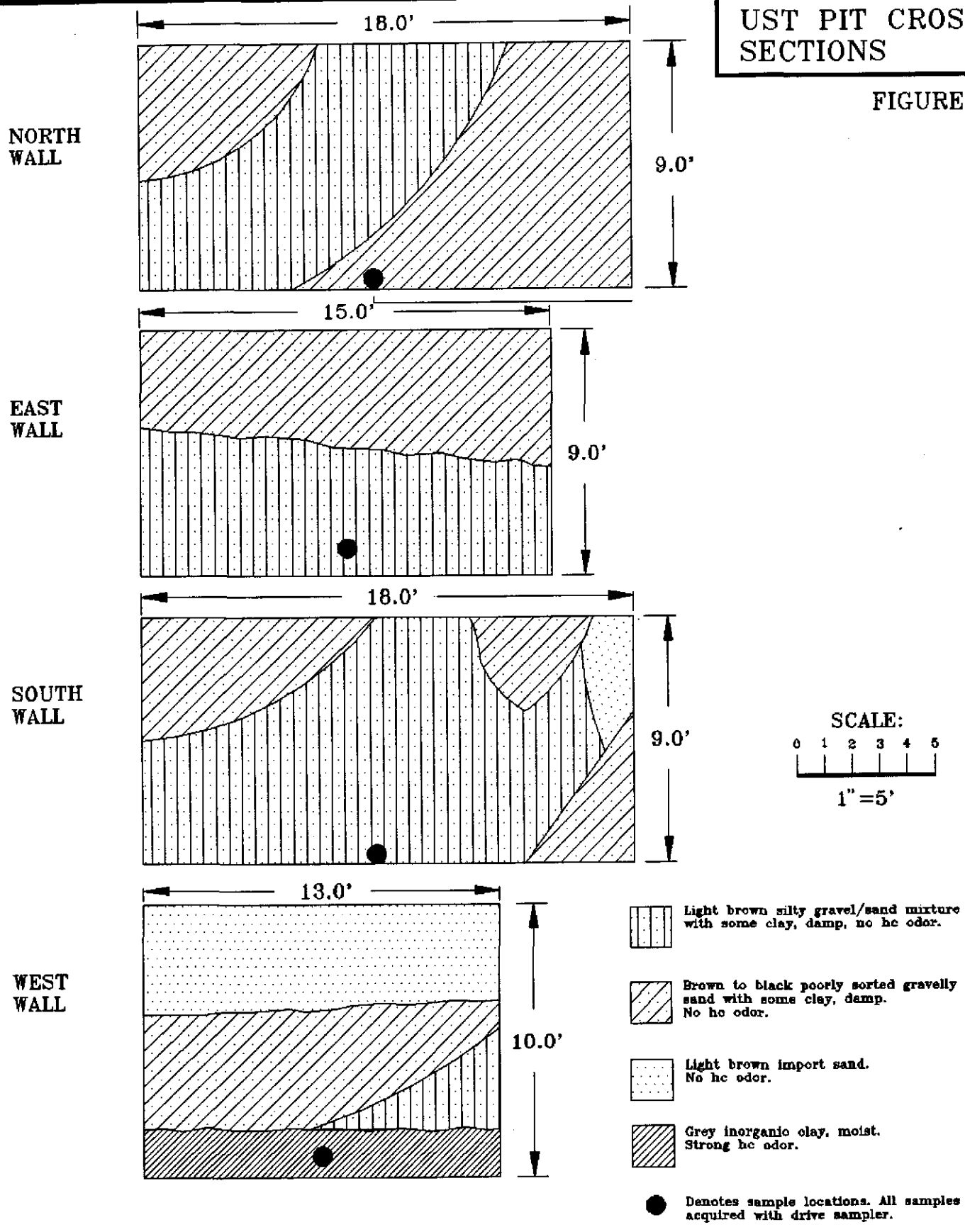
CITY OF PARIS CLEANERS
3516 ADELINE STREET
OAKLAND, CALIFORNIA

URIAH, INC.

AN ENVIRONMENTAL SERVICES COMPANY

UST PIT CROSS SECTIONS

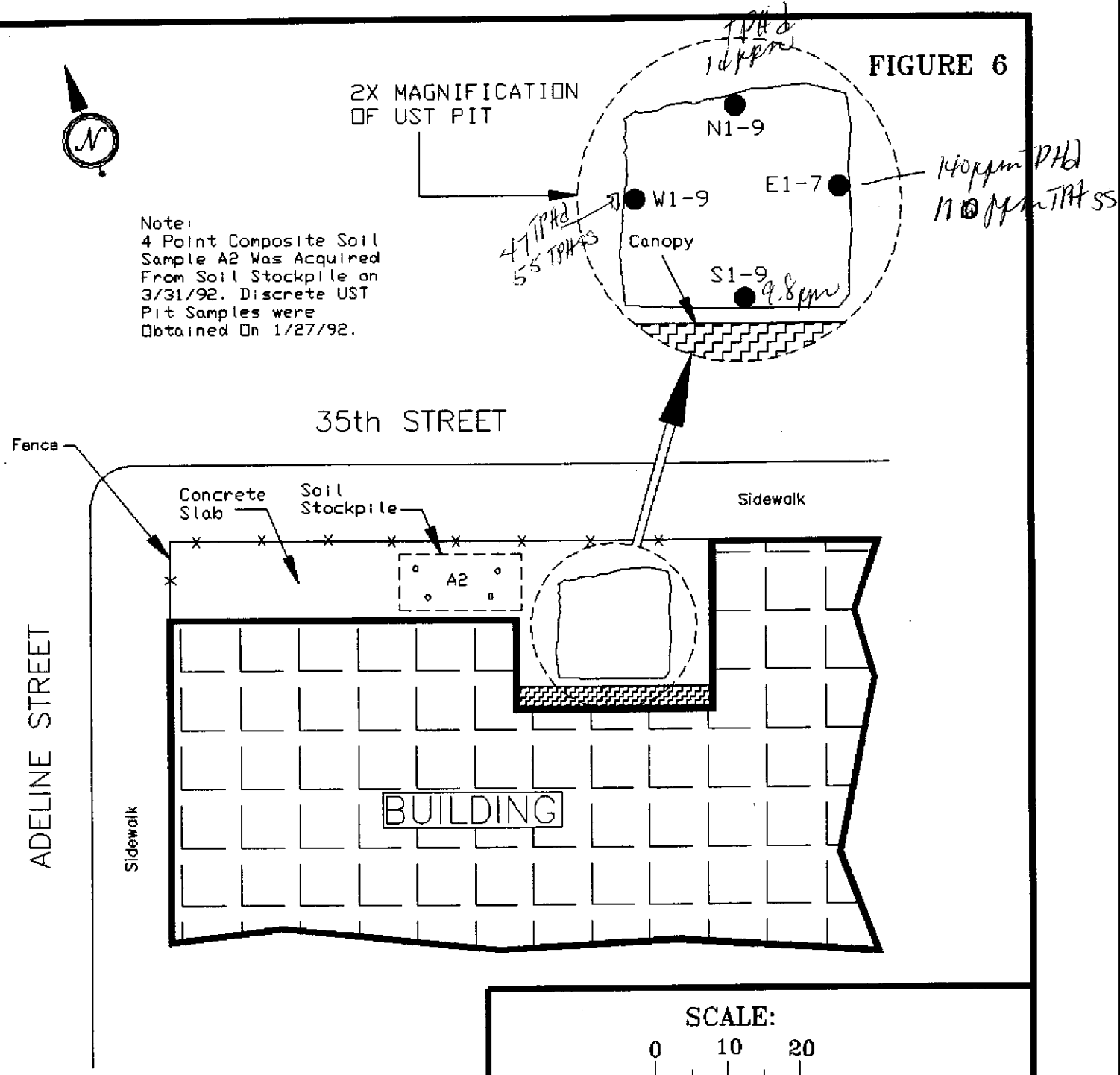
FIGURE 5



CITY OF PARIS CLEANERS
3516 ADELINE STREET
OAKLAND, CALIFORNIA

URIAH, INC.
AN ENVIRONMENTAL SERVICES COMPANY

FIGURE 6



SCALE:

0 10 20

1" =20'

- ○ 4 Point Composite Soil Sample Locations.
- ● Discrete Soil Sample Locations.

CITY OF PARIS CLEANERS

3516 ADELINE STREET

OAKLAND, CALIFORNIA

URIAH, INC.

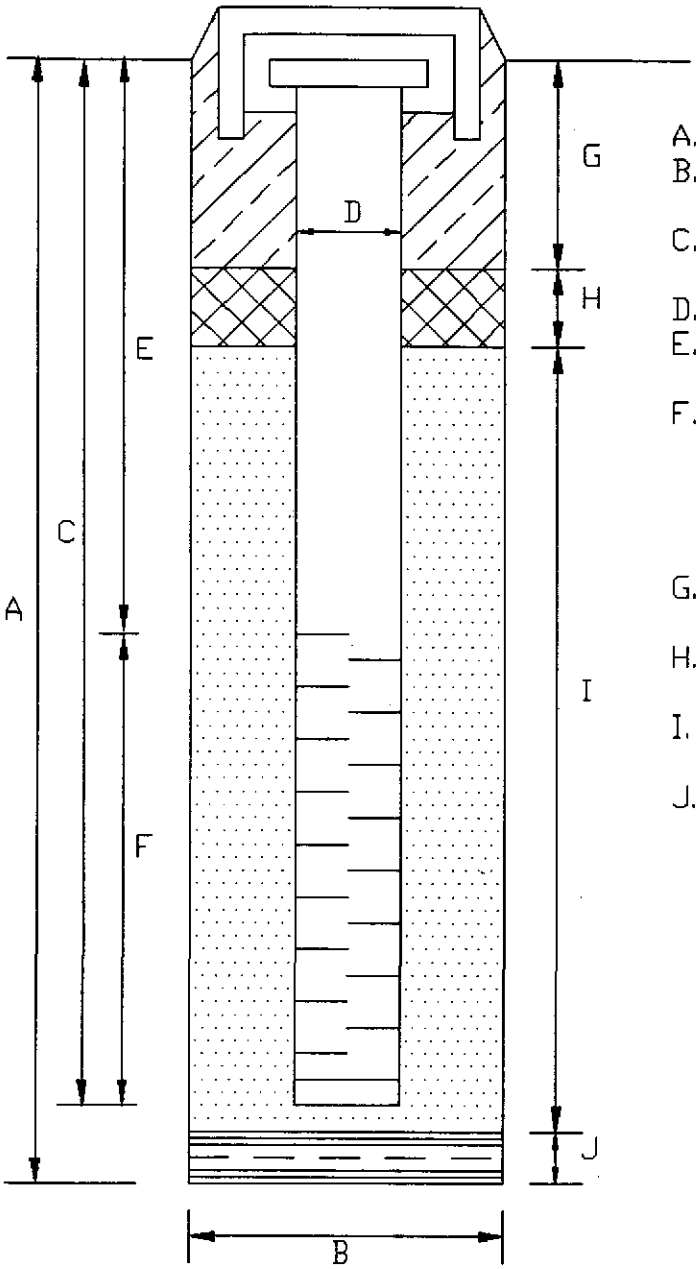
AN ENVIRONMENTAL SERVICES COMPANY

WELL DETAILS

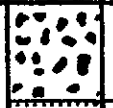
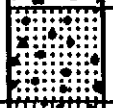
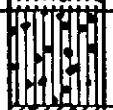
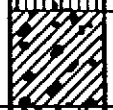
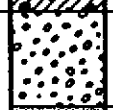
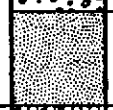
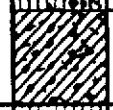
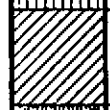
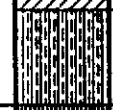
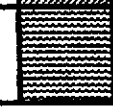
(Model Well)

Project: **City of Paris Cleaners Site**
3516 Adeline Street, Oakland, CA

Well Identification: **MW-1 thru MW-3**



A. Total Depth: 30.0' bgs
B. Boring Diameter: 8.0"
Drilling Method: HSA
C. Casing Length: 30.0'
Material: Schedule 40 PVC
D. Casing Diameter: 2.0"
E. Depth to Perforations: 10.0' bgs
F. Perforated Length: 20.0'
Perforated Interval: 30.0'-10.0' bgs
Perforation Type: 0.02" slotted screen PVC
G. Surface Seal: 0.0'-8.0' bgs
Material: Portland Cement
H. Seal: 8.0'-9.0' bgs
Material: pelletized bentonite
I. **Annular Pack:** 9.0'-30.0' bgs
Material: #3 grade silica sand
J. Bottom Seal: none

MAJOR DIVISIONS			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS — MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SAND AND SANDY SOILS — MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND-SILT MIXTURES
				SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS — LIQUID LIMIT LESS THAN 50			ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS — LIQUID LIMIT GREATER THAN 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

UNIFIED SOIL CLASSIFICATION SYSTEM

Please print or type. *Form designed for use on elite (12-pitch typewriter).* Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAC00 [struck] 04208 080005 — Manifest Document No. — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

A. State Manifest Document Number: 90796472

3. Generator's Name and Mailing Address: Estate of Frank Champion, % Kim Quick, 1393 Solano – Albany, Calif 94706

B. State Generator's ID

4. Generator's Phone: 510 527-1525

5. Transporter 1 Company Name: Davenport, Ltd. — 6. US EPA ID Number: CAD982438566

C. State Transporter's ID: 204797

D. Transporter's Phone: (510) 657-1295

7. Transporter 2 Company Name — 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address — 10. US EPA ID Number: CAD009466392

Erickson, Inc.
255 Parr Blvd.
Richmond, Calif. 94801

G. State Facility's ID

H. Facility's Phone: (510) 235-1393

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Empty Storage Tank Non-RCRA Hazardous Waste Solid	001	TP	00450	P	State: 512; EPA/Other: None
b.					State; EPA/Other
c.					State; EPA/Other
d.					State; EPA/Other

J. Additional Descriptions for Materials Listed Above

Qty 1 Empty Storage Tank # 7389 .
Tank has been inerted with 15 lbs. dry ice per 1000 gals. capacity.

K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information

Keep away from sources of ignition. Always wear hardhat when working around U.S.T.'s.
24 hour contact Name: Lael Champion & Phone # (510) 738-9431

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be *economically practicable* and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a *small quantity generator*, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Agent of Generator [illegible] — Signature: [signature] — Month Day Year: 1/03/91

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: James P. Cox — Signature: James P. Cox — Month Day Year: 1/03/91

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

1. Generator's EPA ID# is CAC000564208
13. Tank Total Quanity is 00450.

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Month Day Year

GENERATOR — TRANSPORTER — FACILITY

90796472 IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

DHS 8022 A
EPA 8700—22
(Rev. 6-89) Previous editions are obsolete.

Do Not Write Below This Line

Blue: GENERATOR SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 400, Sacramento, CA 95812-0400

SUPERIOR ANALYTICAL LABORATORY, INC.
1555 BURKE, UNIT I • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 52588
CLIENT: SEMCO
CLIENT JOB NO.: CHAMPION

DATE RECEIVED: 10/01/90
DATE REPORTED: 10/11/90

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/kg) Gasoline Range*
1	#1-750	290
2	#2-750	560
3	#3-1K	370
4	#4-1K	1
5	#5-1K	170
6	#6-1K	1000

mg/kg - parts per million (ppm)
Minimum Detection Limit for Gasoline in Soil: 1mg/kg

* Possible weathered gasoline or diesel.

QAQC Summary:
Daily Standard run at 2mg/L: RPD Gasoline = <15%
MS/MSD Average Recovery = 92%: Duplicate RPD = <1%

Richard Srna, Ph.D.

Onuj A Nwoga (for)
Laboratory Director

FILE

SUPERIOR ANALYTICAL LABORATORY, INC.
1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081

RECEIVED 10-11-90

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 52588
CLIENT: SEMCO
CLIENT JOB NO.: CHAMPION

DATE RECEIVED: 10/04/90
DATE REPORTED: 10/11/90

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/kg) Benzene	Toluene	Ethyl Benzene	Xylen
1	#1-750	ND<150	ND<150	400	5100
2	#2-750	ND<150	ND<150	ND<150	11000
3	#3-1K	ND<150	ND<150	ND<150	4700
4	#4-1K	ND<3	ND<3	ND<3	9
5	#5-1K	ND<30	64	ND<30	2100
6	#6-1K	ND<150	ND<150	ND<150	19000

ug/kg = parts per billion (ppb)

Minimum Detection Limit in Soil: 3.0ug/kg
High detection limit due to high hydrocarbon contamination.
QAQC Summary:
Daily Standard run at 20ug/L: RPD = <15%
MS/MSD Average Recovery = 100% : Duplicate RPD = <2%

Richard Srna, Ph.D.

Laboratory Direc

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1517 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 84275
CLIENT: Uriah Environmental, Inc.
CLIENT JOB NO.:3516 Aeline St. Oakland

DATE RECEIVED: 10/31/91
DATE REPORTED: 11/11/91
DATE SAMPLED :10/31/91

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES
by EPA SW-846 METHODS 5030 and 8020

LAB #	Sample Identification	Concentration Benzene	Toluene	Ethyl Benzene	Xylenes
1	CPCS-1 ug/kg	ND<75	420	270	1500
2	CPCW-1 ug/L	ND<3	ND<3	6	32

ug/kg - parts per billion (ppb)
ug/L - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/Kg
Method Detection Limit in Water: 0.3 ug/L

QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%
MS/MSD Average Recovery = %: Duplicate RPD =

Richard Srna, Ph.D.

Laboratory Director

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 84275
CLIENT: Uriah Environmental, Inc.
CLIENT JOB NO.:3516 Aeline St. Oakland

DATE RECEIVED: 10/31/91
DATE REPORTED: 11/11/91
DATE SAMPLED : 10/31/91

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/L) Diesel Range
2	CPCW-1	130

mg/L - parts per million (ppm)

Method Detection Limit for Diesel in Water: 0.05 mg/L

QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = NA
RPD Diesel = 1
MS/MSD Average Recovery = 107/102%: Duplicate RPD = 5

Richard Srna, Ph.D.

Laboratory Director

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1517 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 84275
CLIENT: Uriah Environmental, Inc.
CLIENT JOB NO.: 3516 Aeline St., Oakland

DATE RECEIVED: 10/31/91
DATE REPORTED: 11/11/91
DATE SAMPLED : 10/31/91

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/Kg) Stoddard Range
1	CPCS-1	130

mg/kg - parts per million (ppm)

Method Detection Limit for Diesel in Soil: 10 mg/kg

QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = NA
RPD Diesel = 1
MS/MSD Average Recovery = 107/102%: Duplicate RPD = 6

Richard Srna, Ph.D.

Laboratory Director

Uriah, Inc.

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

9475

CHAIN OF CUSTODY

DATE: 10/31/91 PAGE: 1 OF 1

PROJ. MGR: Tony Favero
COMPANY: Uriah, Inc.
ADDRESS: 2456 Armstrong Street
Livermore, CA 94550
SAMPLER'S SIGNATURE: Tony Favero
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	HALOCARBONS PURGEABLE	ORGANICS VOLATILE	ORGANIC LEAD	TOTAL LEAD	SOLUBLE LEAD	NUMBER OF CONTAINERS
CPCN-1	10/31/91	1155	SOIL / WATER			X	X								1
CPCW-1	10/31/91	1225	SOIL / WATER												3
			SOIL / WATER												
			SOIL / WATER												
			SOIL / WATER												
			SOIL / WATER												
			SOIL / WATER												

Please Initial:
Samples Stored in Ice. BW
Appropriate containers BW
Samples preserved BW
VOA's without headspace BW
Comments:

PROJECT INFORMATION:
3516 A ELINE ST
OAKLAND, CA

LABORATORY INSTRUCTIONS/COMMENTS:
Turn Around Time (Circle One)
Same Day 24 Hrs 48 Hrs
72 Hrs (Normal)
Chlorology CPCW-1 on TPH as STODDARD SOLVENT.

ANALYTICAL LABORATORY: SUPERIOR LAB
CITY: MARTINEZ, CA

RELINQUISHED BY:
Tony Favero
Signature
Tony Favero
Printed Name
URIAH, INC
Company
Time 1449 Date 10/31/91

RECEIVED BY:
Robert Favero
Signature
Robert Favero
Printed Name
EXPRESS IT
Company
Time 1449 Date 10/31/91

RELINQUISHED BY:
Robert Favero
Signature
Robert Favero
Printed Name
EXPRESS IT
Company
Time 15:30 Date 10/31/91

RECEIVED BY:
Signature
Printed Name
Company
Time Date

RELINQUISHED BY:
Signature
Printed Name
Company
Time Date

RECEIVED BY:
Signature
HALEY
Printed Name
SUPERIOR
Company
Time 1530 Date 10/31/91

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 54032-1
CLIENT: Uriah, Inc.

DATE RECEIVED: 09/03/91
DATE REPORTED: 09/13/91
JOB NO.: Champion

FLASH POINT ANALYSIS REPORT
EPA Method 1010

LAB ID	Customer Identification	Flash Range
1	FB-1	>100 C

Richard Srna, Ph.D

Laboratory Director

ATT

LETTER OF TRANSMITTAL

Date: September 16, 1991

To: Ms. Onyi Nwogu (c/o Mr. McNamons)
Superior Precision Analytical, Inc. (c/o Uriah, Inc.)
155 Burke Street, Unit I
San Francisco, CA 92124

From: William E. Foster, M.S.
Laboratory Manager

Terrance E. Carter
Laboratory Director

Subject: Aquatic Toxicity Testing Results for Hazardous Waste Testing.

Aqua Terra Technologies
Aquatic Bioassay
Laboratory

2950 Buskirk Avenue
Suite 120
Walnut Creek, CA
94596
415 934-4884
FAX 934-0418

SAMPLE MATRIX AND I.D.: One Soil Sample #10376 (54032-1); Job #FB-1; PO #54032.

TREATMENT DILUTIONS (mg/L): 250, 500, 750, and Control run in soft water (40-48 mg/L hardness) and in duplicate with 10 fish/10 L tank and 20 fish/treatment.

TESTING PERIOD: Received 9/05/91; Tested 9/07-11/91.

BIOASSAY TEST: Fathead minnow (Pimephales promelas) 96-hour static Hazardous Waste Toxicity.

METHODS: "Standard Methods for the Examination of Water and Wastewater", 16th Edition, American Public HealthAssociation, 1986; "Static Acute Bioassay Procedures for Hazardous Waste Samples" (Polisini and Miller, 1988), California Department of Fish and Game; and certified by the State of California Department of Health Services.

SUMMARY:

Fathead minnow 96-hour percent survival was 100% in Control.

The 96-hour LC50 > 750 mg/L for Soil Sample #10376 (54032-1).

The summary data sheets for this test are enclosed.

Uriah, Inc.

An Environmental Services Company

(415) 455-4991 Office
(415) 455-4995 FAX

CHAIN OF CUSTODY

DATE: 9/3/91 PAGE: 1 OF 1

PROJ. MGR. KEVIN MCNAMARA
COMPANY Uriah, Inc.
ADDRESS 464 Lindbergh Ave.
Livermore, CA 94550
SAMPLER'S SIGNATURE
PHONE NO. 415-455-4991

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	FIXED SOLIDS	IGNITABILITY			NUMBER OF CONTAINERS
F3-1	9/3/91	15:00	(SOIL) / WATER												✓	✓			1
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																

PROJECT INFORMATION:
CHANNEL - 3316 ADELINE ST
1) COMPOSITE SAMPLE

SPECIAL INSTRUCTIONS/COMMENTS:
Turn Around Time (Circle One)
Same Day 24 Hrs 48 Hrs
72 Hrs (Normal)

RELINQUISHED BY:
Signature: Kevin McNamara
Printed Name: KEVIN MCNAMARA
Company: URIAH INC
Time 8:03 Date 9-3-91

RELINQUISHED BY:
Signature: Valentin Constantin
Printed Name: VALENTIN CONSTANTIN
Company: URIAH INC
Time 9:40 Date 9-3-91

RELINQUISHED BY:
Signature: [illegible]
Printed Name: [illegible]
Company: [illegible]
Time 1512 Date 9/3/91

RECEIVED BY:
Signature: [illegible]
Printed Name: VALENTIN CONSTANTINESCU
Company: URIAH INC
Time 8:03 Date 9/3/91

RECEIVED BY:
Signature: [illegible]
Printed Name: [illegible]
Company: [illegible]
Time 1242 Date 9/3/91

RECEIVED BY:
Signature: [illegible]
Printed Name: [illegible]
Company: [illegible]
Time 8:00 Date 9/3/91

Section I

Chain of Custody and Analysis Request

page ___ of ___

From: Superior Precision Analytical, Inc.
1555 Burke St. Unit I
San Francisco, CA 92124
Phone No. (415) 647-2061 Fax No. (415) 821-7123
Contact: Onyx + Nwoga
P.O. No. 54032

Turn Around Time (circle one) ASAP
Same Day 72 Hrs
24 Hrs 5 Day
48 Hrs 10 Day

Superior Precision Analytical, Inc.
P.O. Box 1545
Martinez, California 94553

Work Subcontracted to: ___

Section II: Analysis Request

Laboratory Sample Identification	S = Soil A = Air W = Water Matrix	CAM17	Metals:	418.1	8270	8080 (pest. and PCB's)	Fish Biomassy				Client Sample Identification	Number of Containers	Preservative (yes or no)			Sampling Remarks
1 54032-1	Soil						X				FB-1	1				Chevron ☐ Non-Chevron ☒ **Please Fax Results**
2																please fax and send Results to ATTN: Kevin McNamara Uriah, Inc 464 Lindbergh Livermore CA 9455 fax # (415) 455-4995
3																
4											10376 AH					
5																
6																
7																
8																
9																Invoice Superior Labs San Francisco
10																
11																
12																

Relinquished by Onyx A Nwoga	Date/Time 9/4/91	Received by Bill Forbes	Date/Time 9/5/91 1200	Lab please initial the following:
Organization Superior Labs SF		Organization AH Lab		Samples Stored in Ice ___
Relinquished by ___	Date/Time	Received by ___	Date/Time	Appropriate Containers ___
Organization ___		Organization ___		Samples Preserved ___
Relinquished by ___	Date/Time	Received by ___	Date/Time	VOAs without Headspace ___
Organization ___		Organization ___		Comments ___

TOTAL P.05

Aqua Terra Technologies
2950 Buskirk Avenue
Walnut Creek, CA 94596
(415) 934-4884

STATIC ACUTE BIOASSAY
(Hazardous Waste Test)

CLIENT: Superior Lab (c/o Uriah Inc) (pg. 1 of 2) ATTENTION: Ms. Nancy (c/c Mr. McNamara)
SAMPLE ID#: 10376 SAMPLE DESCRIPTION: SCC/FB-1 TESTING DATES: 9-7-91 to 9-11-91
CLIENT ID#: 54032-1.; PO# 54032

	Alk *	Hard *	Live	pH	DO	Temp
TEST CONC CTRL	mg/L	mg/L			mg/L	oC
PR 9-7-91 1400 — INITIAL						
C1	25	42	10	7.5	6.9	21
C2	25	42	10	7.4	6.9	21
WJ 1403 9-8-91 — 24-HOUR						
C1			10	7.4	8.8	21
C2			10	7.5	8.8	21
RD 9/9/91 1700 — 48-HOUR						
C1			10	8.1	8.6	21
C2			10	8.1	8.6	21
RD 9/10/91 1500 — 72-HOUR						
C1			10	7.6	8.8	20
C2			10	7.6	8.8	20
9-11-91 PR 1400 — 96-HOUR FINAL						
C1			10	8.2	8.8	21
C2			10	8.2	8.8	21

Test Species: A. Thaela Avg Length 68.4 mm SL Max Length 75.0 mm SL Min Length 64.0 mm SL
Test Source: Thomas Fish Company Avg Wt 0.678 g Max Wt 0.76 g Min Wt 0.63 g
Species Density 10 tank 20/treatment Control & Dilution Water dechlorinated tap Test Soln Vol 10 L Depth 12 cm Aeration Bubble
Acclimation Tank % Dead 0 Accl. Tank Water dechlorinated tap Accl. Period 30 Days Accl. Temp. 20+/-2C
96-hr. LC50: n/a
95% Confidence Limits: n/a
96-hr. Final Percent Survival in Controls: 100%
Remarks:
* Final Alk, Hard (mg/L): Controls = 35, 49, WB

Technician: WB, RD, PR
Laboratory Manager: WB
Laboratory Director: WB/TC

STATACU.HWT

Aqua Terra Technologies
2950 Buskirk Avenue
Walnut Creek, CA 94596
(415) 934-4884

STATIC ACUTE BIOASSAY
(Hazardous Waste Test)

CLIENT: Superior Lab (Golf, Inc, pg. 2 of 2) ATTENTION: MS WC (c/o Mr. McNamara)
SAMPLE ID#: 10376 SAMPLE DESCRIPTION: Sock/FB-1 TESTING DATES: 9-7-91 to 9-11-91
CLIENT ID#: Sock/91

TEST CONC mg/L	Alk * mg/L	Hard * mg/L	INITIAL Live	pH	DO mg/L	Temp oC	24-HOUR Live	pH	DO mg/L	Temp oC	48-HOUR Live	pH	DO mg/L	Temp oC	72-HOUR Live	pH	DO mg/L	Temp oC	96-HOUR, FINAL Live	pH	DO mg/L	Temp oC
			Pkd 9-7-91 1402				Pkd 1430 9-8-91				RO 9-9-91 1700				RO 9-10-91 1500				1600 9-11-91 PK			
250 A			20	7.4	8.4	21	10	7.3	8.8	21	10	8.0	8.6	21	10	7.6	8.8	20	10	7.9	6.6	21
250 B			10	7.5	8.4	21	10	7.6	8.8	21	10	8.0	8.6	21	10	7.6	8.8	20	10	7.9	6.6	21
500 A			10	7.4	8.9	21	10	7.6	8.8	21	10	7.9	8.7	21	10	7.6	8.9	20	10	7.9	6.8	21
500 B			10	7.1	8.9	21	10	7.6	8.9	21	10	8.0	8.5	21	10	7.6	8.6	20	10	7.9	6.8	21
750 A	35	87	10	7.0	8.9	21	10	7.6	8.9	21	10	8.0	8.6	21	10	7.6	8.8	20	10	7.9	6.9	21
750 B	35	87	10	7.2	8.9	21	10	7.4	8.8	21	10	7.9	8.9	21	10	7.6	8.5	20	10	7.9	6.9	21

Test Species: Fathead Avg Length 68.4 mm SL Max Length 75.0 mm SL Min Length 64.0 mm SL
Test Source: Thomas Fish Company Avg Wt 0.678 g Max Wt 0.76 g Min Wt 0.63 g

Species Density 10 tank 20/treatment Control & Dilution Water dechlorinated tap Test Soln Vol 10 L Depth 12 cm Aeration Bubble
Acclimation Tank % Dead 0 Accl. Tank Water dechlorinated tap Accl. Period 30 Days Accl. Temp. 20 +/- 1°C
96-hr. LC50: > 750 mg/L
95% Confidence Limits: N/A
96-hr. Final Percent Survival This Pg.: 100% mall
Remarks:
* Final Alk, Hard (mg/L): 750 mg/L = 49, 99.

Technician: WF, KD, PK
Laboratory Manager: [illegible]
Laboratory Director: WF/TC

STATACU2.HWT

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Uriah Inc. 2456 Armstrong Street Livermore, CA 94550	Client Project ID: Bioremediated soil from 35th & Adeline St, Oakland	Date Sampled: 12/23/91 Date Received: 12/24/91
	Client Contact: Gene Painter	Date Analyzed: 12/27/91

Low Boiling Point TPH* (as Stoddard Solvent) and BTEX*

DOHS LUFT procedure; EPA method 5030, modified 8020 & 602

Lab ID	Client ID	Matrix	TPH(SS)+	Benzene	Toluene	Ethyl Benzene	Xylenes	% Rec. Surrogate
090256	E1-4	S	4.2,g	ND	0.005	ND	ND	103
090257	W1-4	S	7.3,g	ND	ND	ND	ND	97
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L	0.3	0.3	0.3	0.6	
		S	1.0 mg/kg	0.005	0.005	0.005	0.010	

*water samples are reported in ug/L and soils in mg/kg

#cluttered chromatogram; sample peak co-elutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately unmodified or weakly modified gasoline; b) heavier gasoline range compounds predominate (aged gasoline?); c) lighter gasoline range compounds predominate (the most mobile gas compounds); d) heavy and light gasoline range compounds predominate (aged gasoline together with introduced light compounds?); e) one to a few isolated peaks predominate; f) gasoline range compounds together with higher boiling point (diesel range) compounds; g) Stoddard solvent range compounds predominate.

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Uriah Inc. 2456 Armstrong Street Livermore, CA 94550	Client Project ID: Bioremediated soil from 35th & Adeline St, Oakland Client Contact: Gene Painter	Date Sampled: 12/23/91 Date Received: 12/24/91 Date Analyzed: 12/27/91-01/05/92

Medium Boiling Point TPH (as Diesel) *

DOHS LUFT procedure; modifed EPA method 3550

Lab ID	Client ID	Matrix	TPH(D) +
090256	E1-4	S	ND
090257	W1-4	S	ND,g

Detection Limit unless otherwise stated; ND means Not Detected	W	500 ug/L
	S	10 mg/kg

*water samples are reported in ug/L and soils in mg/kg

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately diesel compounds; b) diesel range compounds together with gasoline range compounds; c). diesel range compounds together with very low boiling point compounds; d) gasoline range compounds predominate; e) medium boiling point pattern that does not match diesel; f) peaks elute in the diesel range but no pattern is present; g) Stoddard solvent compounds together with diesel-range compounds.

Edward Hamilton, Lab Director

Uriah, Inc.
An Environmental Services Company
(510) 455-4991 OFFICE (510) 455-4995 FAX

CHAIN OF CUSTO

DATE: _____ PAGE: 1 OF 2

PROJ. MGR. Mike Wepat
COMPANY Uriah, Inc.
ADDRESS 2456 Armstrong Street
Livermore, CA 94550
SAMPLER'S SIGNATURE Gene Painter
PHONE NO. (510) 455-4991

ANALYSIS REQUEST

SAMPLE I.D.	DATE	TIME	MATRIX	TPH G	TPH G&BTEX	TPH D	BTEX 8020	O&G	METALS Cd,Cr Pb,Zn Ni	PURGEABLE HALOCARBONS	VOLATILE ORGANICS	ORGANIC LEAD	TOTAL LEAD	SOLUBLE LEAD			EPA 5015 Diesel and Stoddard Solvent		NUMBER OF CONTAINERS
E1-4	12/23/91	11:45	SOIL / WATER				X										X		1
W1-4	"	11:55	SOIL / WATER				X										X		1
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																

No. 090256
No. 090257

2

PROJECT INFORMATION:
Block - soil from
35th and Adeline St. Oak.

LABORATORY INSTRUCTIONS/COMMENTS:
Turn Around Time (Circle One)
Same Day 24 Hrs 48 Hrs
72 Hrs (Normal)
Please Chromatogram on TPH as Stoddard solvent.

ANALYTICAL LABORATORY McCampbell Lab.
CITY Pacheco, Ca.

RELINQUISHED BY:
Gene Painter
Signature
Gene Painter
Printed Name
Uriah
Company
Time 2:20 Date 12/23/91

RECEIVED BY:
Adrian Ilie
Signature
ADRIAN ILIE
Printed Name
URIAH
Company
Time 2:20 Date 12/23/91

RELINQUISHED BY:
Adrian Ilie
Signature
ADRIAN ILIE
Printed Name
URIAH
Company
Time 7:30 Date 12/24/91

RECEIVED BY:
Gene Painter
Signature
Gene Painter
Printed Name
Uriah
Company
Time 7:30 Date 12/24/91

RELINQUISHED BY:
Gene Painter
Signature
Gene Painter
Printed Name
Uriah Inc
Company
Time 0956 Date 12/24/91

RECEIVED BY:
Dan Pelcher
Signature
Dan Pelcher
Printed Name
CCY
Company
Time 0951 Date 12-24-91

CLIENT:

ADDRESS:

PHONE:

PROJECT NAME/SITE:

SAMPLER:

DATE:

REPORT TO:

BILLING TO:

TURNAROUND TIME:

8 HR.				
24 HR.		48 HR.		72 HR.
5 DAY		10 DAY		15 DAY

PO#/BILLING REFERENCE:

ANALYSIS REQUESTED

SAMPLE ID#/ STATION	SAMPLE DESCRIPTION	NUMBER OF CONT.	TYPE CONT.	SAMPLING TIME/DATE	REMARKS	SAMPLE NUMBER
	[redacted] 1-4			12-27		
	W1-4					
	continuation of COC					

RELINQUISHED BY: Dan Beldler — DATE: 12-27-91 — TIME: 12:10

RECEIVED BY: [redacted]

RELINQUISHED BY: — DATE: — TIME:

RECEIVED BY:

RELINQUISHED BY: — DATE: — TIME:

RECEIVED IN LAB BY:

TRAVEL TIME:

ON SITE TIME:

OTHER:

WERE SAMPLES:	YES	NO
PRESERVED ?		
IN GOOD CONDITION?		

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Uriah Inc. 2456 Armstrong Street Livermore, CA 94550	Client Project ID: City of Paris Cleaners, Oakland	Date Sampled: 01/27/92
		Date Received: 01/28/92
	Client Contact: Gene Painter	Date Analyzed: 01/30/92

Low Boiling Point TPH* (as Stoddard Solvent) and BTEX*

DOHS LUFT procedure; EPA method 5030, modified 8020 & 602

Lab ID	Client ID	Matrix	TPH(SS)+	Benzene	Toluene	Ethyl Benzene	Xylenes	% Rec. Surrogate
090378	N1-9	S	14,g	ND	ND	ND	ND	89
090379	S1-9	S	9.8,g	ND	ND	ND	ND	96
090380	E1-7	S	140,g	ND	ND	ND	0.41	94
090381	W1-9	S	47,g	ND	0.022	ND	0.016	95
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L	0.3	0.3	0.3	0.3	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

*water samples are reported in ug/L and soils in mg/kg

#cluttered chromatogram; sample peak co-elutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately unmodified or weakly modified gasoline; b) heavier gasoline range compounds predominate (aged gasoline?); c) lighter gasoline range compounds predominate (the most mobile gas compounds); d) heavy and light gasoline range compounds predominate (aged gasoline together with introduced light compounds?); e) one to a few isolated peaks predominate; f) gasoline range compounds together with higher boiling point (diesel range) compounds; g) stoddrd solvent range compounds predominate.

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Uriah Inc. 2456 Armstrong Street Livermore, CA 94550	Client Project ID: City of Paris Cleaners, Oakland	Date Sampled: 01/27/92
		Date Received: 01/28/92
	Client Contact: Gene Painter	Date Analyzed: 01/30/92

Medium Boiling Point TPH (as Diesel) *

DOHS LUFT procedure; modifed EPA method 3550 or 3510

Lab ID	Client ID	Matrix	TPH(D)+
090378	N1-9	S	15,g
090379	S1-9	S	ND,g
090380	E1-7	S	110,g
090381	W1-9	S	55,g
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L
		S	10 mg/kg

*water samples are reported in ug/L and soils in mg/kg

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately diesel compounds; b) diesel range compounds together with gasoline range compounds; c). diesel range compounds together with very low boiling point compounds; d) gasoline range compounds predominate; e) medium boiling point pattern that does not match diesel; f) peaks elute in the diesel range but no pattern is present; g) stoddard solvent range peaks predominate.

EH Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT

Date: 01/30-02/01/92 Matrix: soil

Analyte	Concentration (mg/kg) Sample	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.00	1.99	1.99	2.03	98	98	0.0
Benzene	0.00	0.214	0.212	0.2	107	106	0.9
Toluene	0.00	0.21	0.204	0.2	105	102	2.9
Ethyl Benzene	0.00	0.21	0.206	0.2	105	103	1.9
Xylenes	0.00	0.624	0.612	0.6	104	102	1.9
TPH (diesel)	0	142	144	150	94	96	1.7
TRPH (oil & grease)	0	1025	1020	1000	103	102	0.5

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

Uriah, Inc.

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

CHAIN OF CUSTODY

DATE: 1/27/92 PAGE: ___ OF ___

PROJ. MGR. Craig Long
COMPANY Uriah, Inc.
ADDRESS 2466 Armstrong Street
Livermore, CA 94550
SAMPLER'S SIGNATURE Gene Painter
PHONE NO. (510) 455-4991

ANALYSIS REQUEST

SAMPLE I.D.	DATE	TIME	MATRIX	TPHG	TPHG & BTEX	TPHD	BTEX gc22	O&G	METALS Cd.Cr Pb.Zn Ni	HALOCARBONS PURGEABLE	ORGANICS VOLATILE	ORGANIC LEAD	TOTAL LEAD	SOLUBLE LEAD	8 WHTS	NUMBER OF CONTAINERS
N1-9	1/27/92	10:25	SOIL / WATER			X	X								X	No. 090378
S1-9	"	10:35	SOIL / WATER			X	X								X	No. 090379
E1-9	"	10:45	SOIL / WATER			X	X								X	No. 090380
W1-9	"	2:00	SOIL / WATER			X	X								X	No. 090381
			SOIL / WATER													
			SOIL / WATER													

PROJECT I.D./ADDRESS
City of Paris Cleaners
in Oakland

LABORATORY INSTRUCTIONS/COMMENTS:
Turn Around Time (Circle One)
Same Day 24 Hrs 48 Hrs
72 Hrs (Normal)

ANALYTICAL LABORATORY M.C. Campbell
CITY Pacheco, Ca.

RELINQUISHED BY:
Gene Painter
Signature
Gene Painter
Printed Name
Uriah
Company
Time 9:40 Date 1/28/92

RECEIVED BY:
Craig Long
Signature
CASEY LONG
Printed Name
URIAH
Company
Time 9:41 Date 1-28-92

RELINQUISHED BY:
Craig Long
Signature
CASEY LONG
Printed Name
URIAH
Company
Time 3:32 Date 1-28-92

RECEIVED BY:
M. Tabriki
Signature
M. Tabriki
Printed Name
ECX
Company
Time 3:30 Date 1-28-92

RELINQUISHED BY:
M. Tabriki
Signature
M. Tabriki
Printed Name
ECX
Company
Time 4:25 Date 1-28-92

RECEIVED BY:
Signature
Printed Name
Company
Time 4:25 Date 1-28-92

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Uriah Inc. 2456 Armstrong Street Livermore, CA 94550	Client Project ID: City of Paris Cleaners	Date Sampled: 03/31/92
		Date Received: 03/31/92
	Client Contact: Casey Long	Date Extracted: 04/01/92
	Client P.O.:	Date Analyzed: 04/01-04/06/92

Low Boiling Point TPH* (as Stoddard's Solvent) and BTEX*

DOHS LUFT procedure; EPA method 5030, modified 8020 & 602

Lab ID	Client ID	Matrix	TPH(SS)+	Benzene	Toluene	Ethyl Benzene	Xylenes	% Rec. Surrogate
12253	A2,1-4	S	6.1,g	ND	ND	ND	0.012	97
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

*water samples are reported in ug/L and soils in mg/kg

#cluttered chromatogram; sample peak co-elutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately unmodified or weakly modified gasoline; b) heavier gasoline range compounds predominate (aged gasoline?); c) lighter gasoline range compounds predominate (the most mobile gas compounds); d) heavy and light gasoline range compounds predominate (aged gasoline together with introduced light compounds?); e) one to a few isolated peaks predominate; f) gasoline range compounds together with higher boiling point (diesel range) compounds; g) stoddard's solvent range compounds predominate.

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Uriah Inc.	Client Project ID: City of Paris Cleaners	Date Sampled: 03/31/92
2456 Armstrong Street		Date Received: 03/31/92
Livermore, CA 94550	Client Contact: Casey Long	Date Extracted: 04/01/92
	Client P.O.:	Date Analyzed: 04/01/92

Medium Boiling Point TPH (as Diesel) *

DOHS LUFT procedure; modified EPA method 3550 or 3510

Lab ID	Client ID	Matrix	TPH(D)+
12253	A2,1-4	S	ND,e
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L
		S	10 mg/kg

*water samples are reported in ug/L and soils in mg/kg

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately diesel compounds; b) diesel range compounds together with gasoline range compounds; c) diesel range compounds together with very low boiling point compounds; d) gasoline range compounds predominate; e) medium boiling point pattern that does not match diesel (stoddard's solvent?); f) peaks elute in the diesel range but no pattern is present; g) one to a few isolated peaks predominate.

Edward Hamilton, Lab Director

Uriah, Inc.

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

CHAIN OF CUSTODY

DATE:_____ PAGE:____ OF____

PROJ. MGR. Casey Lange
COMPANY Uriah, Inc.
ADDRESS 2456 Armstrong Street
Livermore, CA 94550
SAMPLER'S SIGNATURE Gene Painter
PHONE NO. (510) 455-4991

ANALYSIS REQUEST

SAMPLE I.D.	DATE	TIME	MATRIX	TPH (Shell Solvent)	TPHG & BTEX	TPHD	BTEX	O & G	METALS (Cd, Cr, Pb, Zn, Ni)	HALOCARBONS PURGEABLE	VOLATILE ORGANICS	ORGANIC LEAD	TOTAL LEAD	SOLUBLE LEAD					NUMBER OF CONTAINERS
A2, 1-4	3/31/92	11:35	SOIL / WATER	X		X	X												
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																
			SOIL / WATER																

ICE/T° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATIVE ___
APPROPRIATE CONTAINERS ✓

VOAS | O&G | METALS | OTHER

PROJECT INFORMATION:
City of Paris Cleaners

LABORATORY INSTRUCTIONS/COMMENTS:
Turn Around Time (Circle One)
Same Day 24 Hrs 48 Hrs
72 Hrs Normal

ANALYTICAL LABORATORY McCampbell
CITY Pacheco

RELINQUISHED BY:
Signature Gene Painter
Printed Name
Company Uriah
Time 1:10 Date 3/31/92

RECEIVED BY:
Signature Ed Hamilton
Printed Name
Company NAI
Time 1:10 Date 3-31-92

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 _____

HEALTH AND SAFETY PROCEDURES FOR EXPLORATORY SOIL BORINGS/WELL INSTALLATIONS, EXCAVATIONS, AND BIOLOGICAL TREATMENT

The following protocol for personnel involved in the above referenced project is considered generally appropriate; however, modifications may be imposed by their consultants, and/or the County of Alameda in response to site specific conditions.

HEALTH AND SAFETY STAFF

Mr. John Rapp, REHS
Mr. Casey Long, Project Geologist

PUBLIC HEALTH/ENVIRONMENTAL HAZARD ASSESSMENT

Hazards associated with the performance of exploratory soil borings are those related to: 1). Exposure to the hydrocarbon contaminated soils being explored, 2). The potential for ignition of flammable/explosive vapors, and 3). The physical hazards associated with working with/near heavy equipment.

HAZARDS OF CHEMICAL EXPOSURE

A portion of the soils to be handled may be contaminated with Stoddard Solvent/diesel fuel. The most toxic constituents present are believed to be the aromatic compounds within fuel hydrocarbons- benzene, toluene, xylenes, and ethylbenzene (BTX&E); with benzene the most toxic of these having been identified as a carcinogen and forming as much as 3.5% of gasoline by weight. Due to the volatile nature of the aromatics, the most significant route of potential exposure would appear to be via inhalation. Secondary routes of exposure would include dermal (by direct contact with contaminated soil) and the incidental ingestion of contaminated dusts. The measures prescribed for the minimization of risks associated with the aforementioned routes of exposure are described below.

HAZARDS ASSOCIATED WITH FLAMMABLE VAPORS

Although by and large the levels of fuel hydrocarbons within soils encountered will not be very high, it is recognized that there is a potential for vapors to collect within the flammable range. The measures for early detection of these vapors are described below.

PHYSICAL HAZARDS

The physical hazards attendant to the performance of excavations and soil borings are those associated with working on/near mechanized equipment. Appropriate procedures attendant to the operation of equipment to be utilized on this project are already in force and are well known to our staff. Further, work-rest cycles will be established and adhered to so as to provide adequate rest periods; liquids will also be available to preclude problems associated with heat stress.

RISK FACTORS AND ASSOCIATED MITIGATION PROCEDURES

Type of Risk	Route of Exposure	Mitigating Factor(s)
Chemical	Inhalation	-Air purifying respirators with organic vapor and dust filters. -A hydrocarbon vapor survey meter will be used to determine exposure.
Chemical	Dermal/Ingestion	-Optimum use of equipment to minimize direct exposure to the soil. -Use of protective clothing. -The nature of the project does not involve the uncontrolled release of toxic materials.
Flammable Vapors		-A hydrocarbon vapor meter will be used to determine the percent of the lower explosive limit (LEL) present at the excavation.
Physical		-Physical hazards attendant to this project are no different from those associated with

drilling projects involving non-regulated materials.
-The use of trained and experienced staff; properly attired and using appropriate and well-maintained equipment.

WORK AREA

Only authorized personnel will be permitted within the work area. This area will be clearly marked and monitored.

DECONTAMINATION PROCEDURES

General procedures for handwashing and disposal of soiled clothing will be adhered to.

STANDARD WORK PRACTICES

All work will be planned in advance of its undertaking. No eating, smoking, or inappropriate consumption of liquids will be permitted. Proper procedures for the operation of equipment, and the instructions of the Safety Officer will be adhered to.

DOCUMENTATION

Monitoring, sampling, and analytical results will be carefully documented.