

REPORT OF FINDINGS  
UNDERGROUND STORAGE TANK REMOVAL

EDEN HOSPITAL  
20103 LAKE CHABOT ROAD  
HAYWARD, CALIFORNIA

91 DEC 19 PM 12:07

PREPARED FOR:  
Mr. Bob Gostanzo  
Eden Hospital  
20103 Lake Chabot Road  
Castro Valley, CA 94546

PREPARED BY:  
APPLIED ENVIRONMENTAL SOLUTIONS, INC.  
775 Montague Expressway  
Milpitas, CA 95035

December 1991

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Mr. Bob Gostanzo  
Eden Hospital  
20103 Lake Chabot Road  
Hayward, CA 94546

Project No. 323  
December 5, 1991  
EPA# CAC000636776

**Subject: EDEN HOSPITAL**  
20103 Lake Chabot Road  
Hayward, CA 94546  
**UNDERGROUND STORAGE TANK REMOVAL**

Dear Mr. Gostanzo

At your request, Applied Environmental Solutions, Inc., (AES), removed a 3000-gallon underground storage tank (UST) from the subject property on October 17, 1991. The scope of our work included completing and submitting the tank closure permit applications as required by the Alameda County Health Care Services Agency and the State of California Water Resources Control Board; removing the tank and associated product line; collecting appropriate soil samples from the UST pit and excavated soil stockpile and providing for their analyses; and properly disposing of the tank and associated product line.

This Report of Findings summarizes the history of the tank, the results of the inspection of the tank and product line, subsurface sampling methods, analytical results of the collected soil samples, and our findings and recommendations.

A copy of this report must be sent to:

- Scott Seery, CHMM, Division of Hazardous Materials, Department of Environmental Health, 80 Swan Way, Rm. 200, Oakland, CA 94621
- The California Regional Water Quality Control Board, 2101 Webster Street, Suite 500, Oakland, CA 94612

Should you have any questions regarding this report, please contact us at (408) 957-7700. Applied Environmental Solutions, Inc. is pleased to be of service to you on this project.

Respectfully,

*Bruem Reddig FOR CS*  
Candace Soles  
Staff Geologist

## EXECUTIVE SUMMARY

On October 17, 1991, AES removed one 3000-gallon underground diesel fuel storage tank (UST) from the subject property. The tank excavation pit was approximately 22 feet long by 12 feet wide and 14 feet deep; groundwater was not encountered in the tank pit to a depth of 16 feet below ground surface. The subsurface native soil predominantly consisted of light to medium yellowish-brown silty clay with minor gravel and medium yellowish-brown to dark brown gravelly clay. The tank pit is underlain by a concrete slab at approximately 16 feet below ground surface. Two additional underground storage tanks are located adjacent to the subject tank.

Visual inspection of the tank indicated significant pitting but no signs of rusting; a gash approximately 9-inches long by 1-inch wide was noted in the base of the tank at its fill end, which probably formed in response to the tank's "crumpling" at that end while attempting to remove it from the pit. No other through-going holes were identified. Hydrocarbon staining and odor were noted in the UST pit along the southeastern wall and northeastern corner between approximately 8 feet to 15 feet below ground surface.

Six soil samples were collected and analyzed at a State-certified analytical laboratory: Samples EH-1 and EH-2 were collected at approximately 15 feet and 12 feet below ground surface, respectively, in native soil, from the sidewalls at each end of the tank pit. Four soil samples were collected from the excavated soil stockpile and composited as one sample -- SP-1,2,3,4\*. Hazardous Materials Specialist Scott Seery was on site to witness the removal of the tank and to supervise the collection of the soil samples. All samples were collected and analyzed according to Alameda County Health Care Services Agency and Tri-Regional Board Staff guidelines for Total Petroleum Hydrocarbons as diesel (TPHD) and Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX).

Analytical results indicated the presence of TPHd and BTEX constituents in soil samples EH-2 and SP-1,2,3,4\*. Soil sample EH-1 did not contain detectable concentrations of TPHd or BTEX.

Approximately 123 cubic yards of soil was excavated from the tank pit. To reduce the possibility of pit wall "failing" as a result of inclement weather, the excavated soil was returned to the pit after the sampling program was completed.

TECC recommends that the contaminated soil stockpile be removed and disposed of at an appropriate disposal facility. In addition, additional soils from the northeastern end of the pit, as well as soils back-filled into the pit, should be excavated and removed. The pit should then be re-sampled to verify the success of the clean-up.

## **SITE BACKGROUND AND TANK HISTORY**

The site, located at 20103 Lake Chabot Road, Castro Valley, Alameda County, is owned and occupied by Eden Hospital. Figure 1 shows the location of the site whereas Figure 2 gives the general layout of the site. Two additional underground storage tanks currently are on site, adjacent to the subject tank. The contents of these tanks are used by the Eden Hospital as an emergency fuel source.

It is the understanding of AES that the subject tank was installed in 1972 and always contained diesel fuel. It is also the understanding of AES that the tank was in service until approximately two weeks before its removal. On October 17, 1991, Evergreen Environmental Management pumped approximately 450 gallons of residual product from the tank prior to its extraction from the pit. It appears that after the tank was initially installed, a well-sorted, medium-grained sand was used as back-fill. The area was subsequently resurfaced with concrete and asphalt.

## **TANK REMOVAL PREPARATION**

On October 17, 1991, prior to extracting the underground storage tank, AES personnel removed the soil above and along the sides of the tank with a backhoe, provided by Galante Brothers General Engineering, Inc., of San Martin, California. The top of the tank was exposed approximately nine feet below ground surface. Because of the confined work area at the tank site, a terra cotta sewer line was severed by the backhoe bucket during the process of removing the overlying soil surrounding the tank. AES personnel repaired the line quickly and all sewage which accumulated in the tank pit was pumped into the closest sewer manhole.

The majority of the tank pit was filled with a well-sorted, medium-grained sand, which apparently was the material used as back-fill during the initial tank installation. The subsurface native soil encountered along the tank pit walls consisted of slightly sticky, moderately plastic, light to medium yellowish-brown silty clay with minor gravel from ground surface to approximately six feet below ground surface and medium yellowish brown to dark brown gravelly clay and silty clay from six feet to approximately 16 feet below ground surface. Hydrocarbon staining (greenish-gray discoloration) was noted in the tank pit in the soil surrounding the southeastern side of the tank and in the northeastern corner of the tank pit; a moderate to strong hydrocarbon odor emanated from the soil excavated from these areas. Figure 3 shows the subsurface location of the tank.

Groundwater was not encountered in the tank pit to a depth of at least 16 feet below ground surface.

To devolatilize the tank of any residual contents, 300 pounds of dry ice was introduced into the fill-port end of the tank. A GasTech Explosimeter (Model 1314) probe latter was dropped into the tank to measure its lower explosive limit (LEL) and oxygen level (OL). According to safety guidelines, the LEL and OL must be below 10% in order for a tank be safely removed and transported. Readings below these levels were measured before the tank was extracted from the pit.

#### **TANK AND PRODUCT LINE REMOVAL**

The product line was disconnected previous to the tank's extraction from the pit. The tank was removed by a Koehring crane, provided by Redwood Crane Service of Castro Valley, California. After extraction, the tank was placed on its side in a staging area for inspection. Hazardous Materials Specialist Scott Seery of the Alameda County Health Care Services Agency was on site to witness the removal of the tank.

Visual inspection of the tank indicated significant pitting but no signs of rusting; a gash approximately 9-inches long by 1-inch wide was identified in the base of tank at its fill-port end. This gash probably formed in response to the tank's "crumpling" at this end while attempting to remove it from the pit.

After inspection, the tank was loaded onto an H&H Ship Service Company transport truck and taken to their recycling facility at 220 China Basin Street, San Francisco, California. There, the tank was steam-cleaned, rendered harmless, and dismantled. The tank was ultimately disposed of as scrap metal at Schnitzer Steel, Oakland, California. A copy of the Hazardous Waste Manifest and Certificate of Disposal is included in Appendix B.

#### **SOIL SAMPLING PROTOCOL**

On October 25, 1991, under the supervision of Inspector Scott Seery, AES personnel collected one soil sample from the wall at the southwestern end of tank pit. For proper waste characterization, four soil samples were collected at various locations from the lower half of the excavated soil stockpile for subsequent laboratory composition. On October 29, 1991, under the supervision of Inspector Scott Seery, AES personnel collected one soil sample from the wall at the northeastern end of the tank pit. All samples were collected and analyzed following Alameda County Health Care Services Agency and Tri-Regional Board Staff guidelines.

## Soil Sampling

Soil sample EH-1 was collected from the southeastern end of the pit, in native soil consisting of moist, medium brown gravelly clay at approximately 15 feet below ground surface whereas sample EH-2 was collected from the northeastern end of the tank pit, in native soil consisting of medium brown silty clay, at approximately 12 feet below ground surface. No hydrocarbon staining or odor was noted in EH-1; however, slight staining and a mild odor were noted in EH-2.

Four soil samples, SP-1, SP-2, SP-3, and SP-4, were collected at random locations from the lower half of the excavated soil stockpile. These four samples were subsequently composited as one sample, SP-1,2,3,4\*, by laboratory personnel.

The "grab sample" method was used to collect soil samples EH-1, SP-1, SP-2, SP-3, and SP-4. With this technique, a clean 2-inch outside diameter, 4-inch long brass sampling tube was hand-driven into the excavated soils in the bucket of the backhoe or in the soil stockpile. Care was taken to recover the samples at a location away from the walls of the bucket in order to reduce the possibility of cross-contamination from the bucket. A core sampler was used to collect sample EH-2. With this method, an 6-inch brass sampling tube was inserted into an 8-inch long, 2-1/4-inch outside diameter stainless steel core sampler. The sampler was then attached to a slide-hammer with a 10-foot extension rod and hammered into the sampling location. Upon recovery of the samples, the ends of the brass tube were sealed with aluminum foil, capped with plastic end caps, secured with aluminized tape, and properly labelled. The label information included the date, identification number, project name and number, sampler's name, and analyses requested. Under proper Chain of Custody procedures, the samples were placed on ice inside a thermally-insulated cooler for subsequent transport to a State-certified analytical laboratory. A copy of the Chain of Custody form is included in Appendix C.

As per instructions outlined in the "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Storage Tank Sites," and under the direction of Inspector Seery, the samples were analyzed for Total Petroleum Hydrocarbons as diesel [(TPHD) (EPA Method 3550)] and Benzene, Toluene, Ethylbenzene, Total Xylenes [(BTEX) (EPA Method 8020)]. The samples were analyzed at Chromalab, Inc., of San Ramon, California (State-certification #238 and #655).

Approximately 123 cubic yards of soil was excavated from the pit as a result of the tank removal and soil sampling procedures. After all samples were collected, the excavated soil was returned to the tank pit to reduce the possibility of pit wall "failing".

## ANALYTICAL RESULTS

The analytical results are presented in Table 1. Soil samples EH-1, EH-2, and SP-1,2,3,4\* were analyzed for TPHd and BTEX. Included in Table 1 is the detection limit for each of the respective parameters. A copy of the laboratory report is included in Appendix C.

Analytical results for soil sample EH-1 did not indicate the presence of TPHd, Benzene, Toluene, Ethylbenzene, or Total Xylenes at concentrations above their respective detection limits.

Soil sample EH-2 contained TPHd at a reported concentration of 25 parts per million (ppm). BTEX constituents Ethylbenzene and Total Xylenes were detected at concentrations of 11 parts per billion (ppb) and 180 ppb, respectively.

Composite stockpile sample SP-1,2,3,4\* contained TPHd at a concentration of 220 ppm. The BTEX constituent Total Xylenes was present at a reported concentration of 11 ppb.

Sample Number	TPHd (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
EH-1	ND	ND	ND	ND	ND
EH-2	25	ND	ND	11	180
SP-1,2,3,4*	220	ND	ND	ND	11
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	3550/ 8015	8020	8020	8020	8020
ppm = parts per million (mg/kg)					
ppb = parts per billion (ug/kg)					
ND = Not Detected					

Table 1 Analytical Results (TPHd & BTEX)



## FINDINGS AND RECOMMENDATIONS

### Findings

The following is a summary of the results and findings of our tank removal program:

- The native soil excavated from the tank pit walls consisted of slightly sticky, moderately plastic, light to medium yellowish-brown silty clay with minor gravel and medium yellowish-brown to dark brown gravelly clay.
- Hydrocarbon staining and odor were noted in the soil in the tank pit wall along the southeastern side of the subject tank.
- Visual inspection of the tank indicated a gash approximately 9-inches long by 1-inch wide in the base of the tank at the fill-port end.
- Groundwater was not encountered in the tank pit to a depth of at least 16 feet below ground surface.
- Analytical results of soil sample EH-1 did not indicate the presence of detectable concentrations of TPHd or BTEX.
- Analytical results of soil sample EH-2 indicated the presence of TPHd at a concentration of 25 ppm, Ethylbenzene at a concentration of 11 ppb, and Xylenes at a concentration of 180 ppb.
- Analytical results of soil sample SP-1,2,3,4\* indicated the presence of TPHd at a concentration of 220 ppm and Xylenes at a concentration of 11 ppb.
  - Soils containing TPHd at concentrations in excess of 100 ppm may be required by regulatory agencies to be remediated and/or disposed of.

### Recommendations

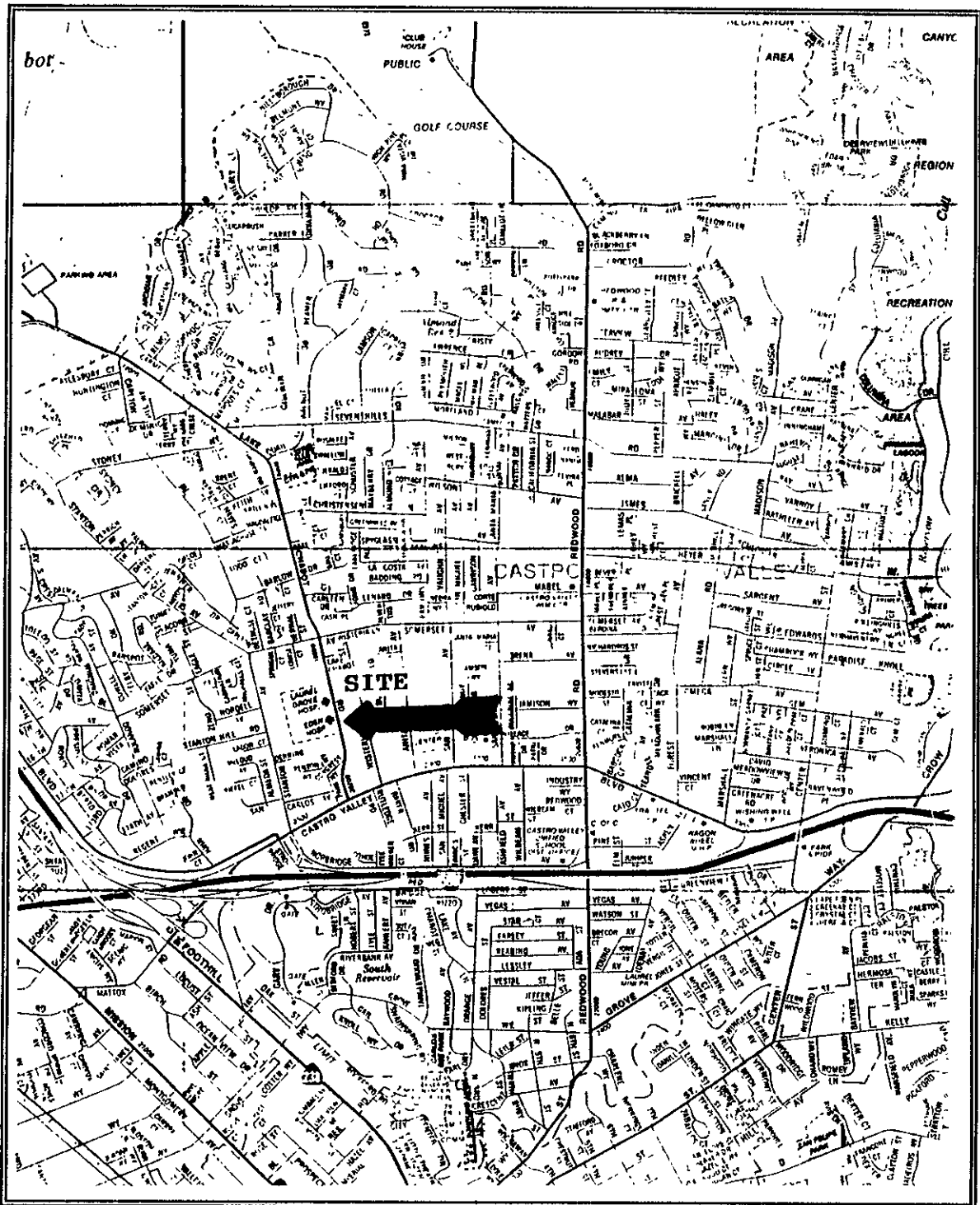
The elevated concentrations of petroleum hydrocarbons in the stockpile samples and EH-2 appear to be the result of product over-spillage and not from tank leakage. Because of the proximity of other underground storage tanks and surface structures, the confined working space limits the available options. Based on the relatively low concentrations of the contaminants, TECC recommends the following actions to complete the site clean-up:

- Removal and disposal of the existing contaminated soil stockpile.
- Removal and disposal of any soil which was back-filled or may have caved into the tank pit.
- Additional excavation and disposal of soils from the northeastern end of the tank pit. Because of the relatively low concentrations, we do not foresee a great deal of excavation to be required.
- Field observations and measurements may indicate additional areas which may require excavation.

Upon completion of the re-excavation, the tank pit must be re-sampled in order to verify the success of the additional soil removal.

#### LIMITATIONS

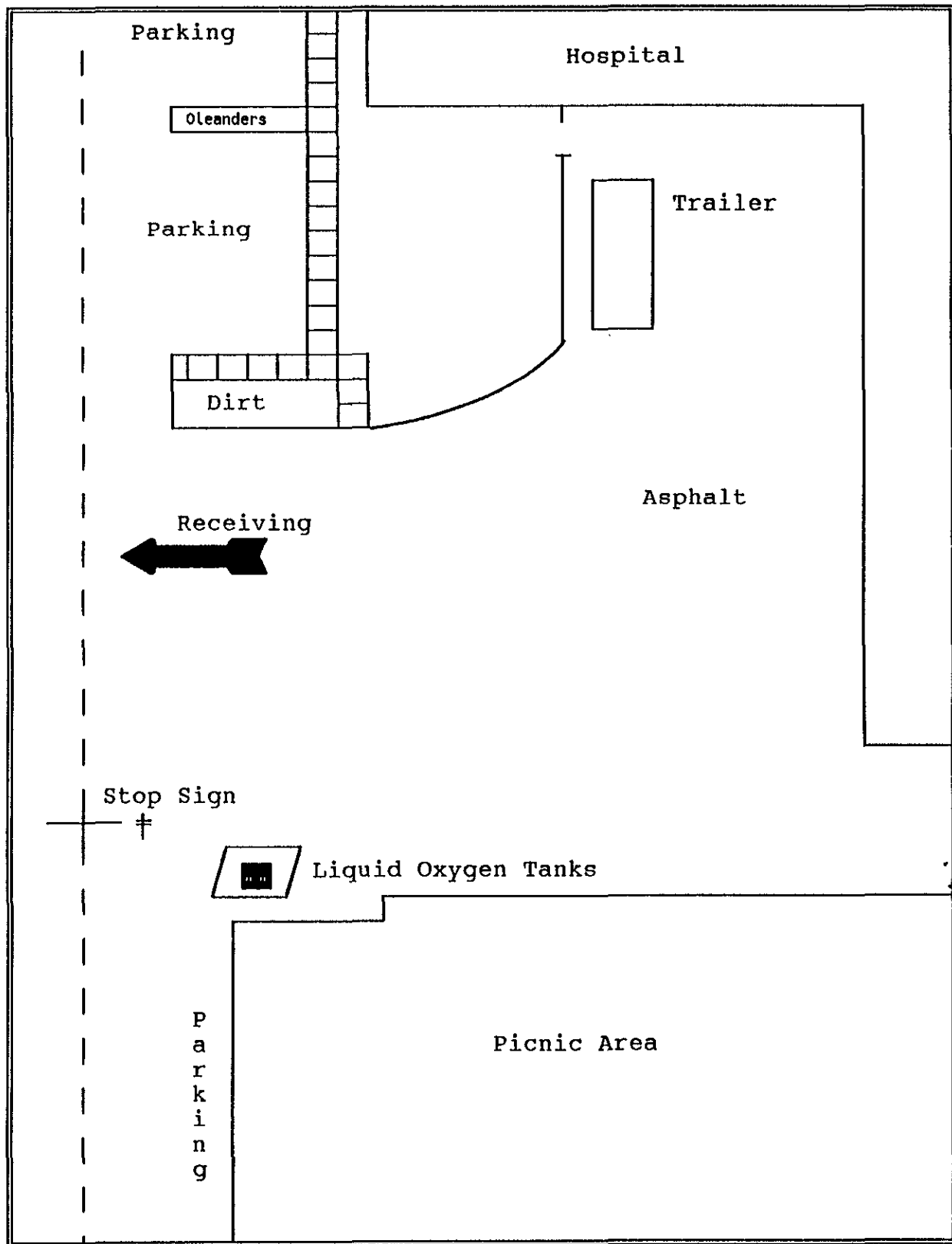
The conclusions and professional guidelines presented herein were developed in accordance with generally accepted practice for addressing fuel leaks from underground storage tanks as outlined in the guidelines from the Alameda County Water District, Alameda County Health Care Services Agency, and the California Water Quality Control Board. Because the analytical results are based on data collected from the sampling locations only, TECC cannot have full knowledge of the underlying conditions at the site. Conditions at the project site may change with time due to the works of man and/or acts of nature. Accordingly, the findings of this report may be subject to change in light of new information.



Scale: 1 inch = 1/2 mile

SITE LOCATION MAP

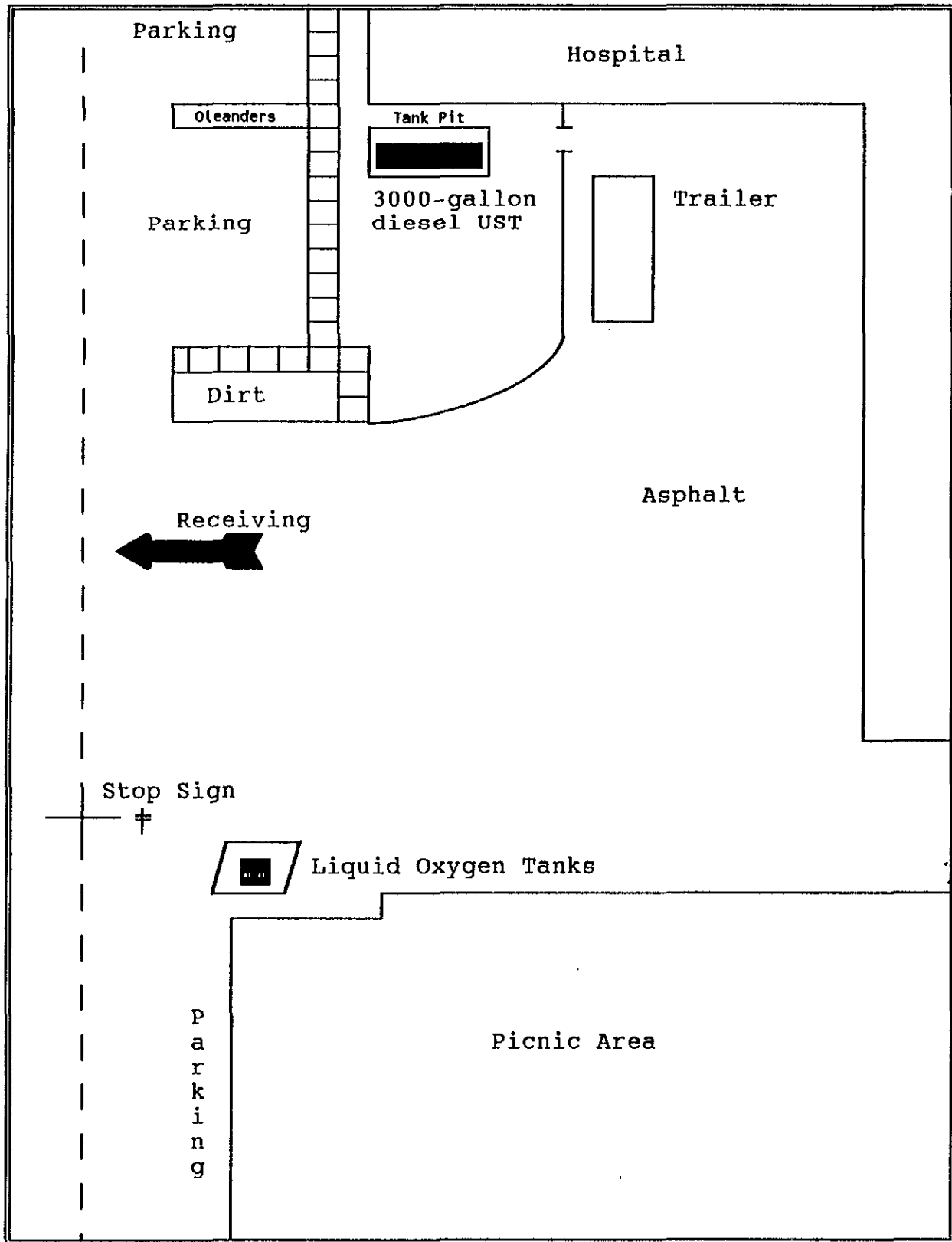
FIGURE 1



Scale: 1 inch = 30 feet

SITE CHARACTERIZATION MAP

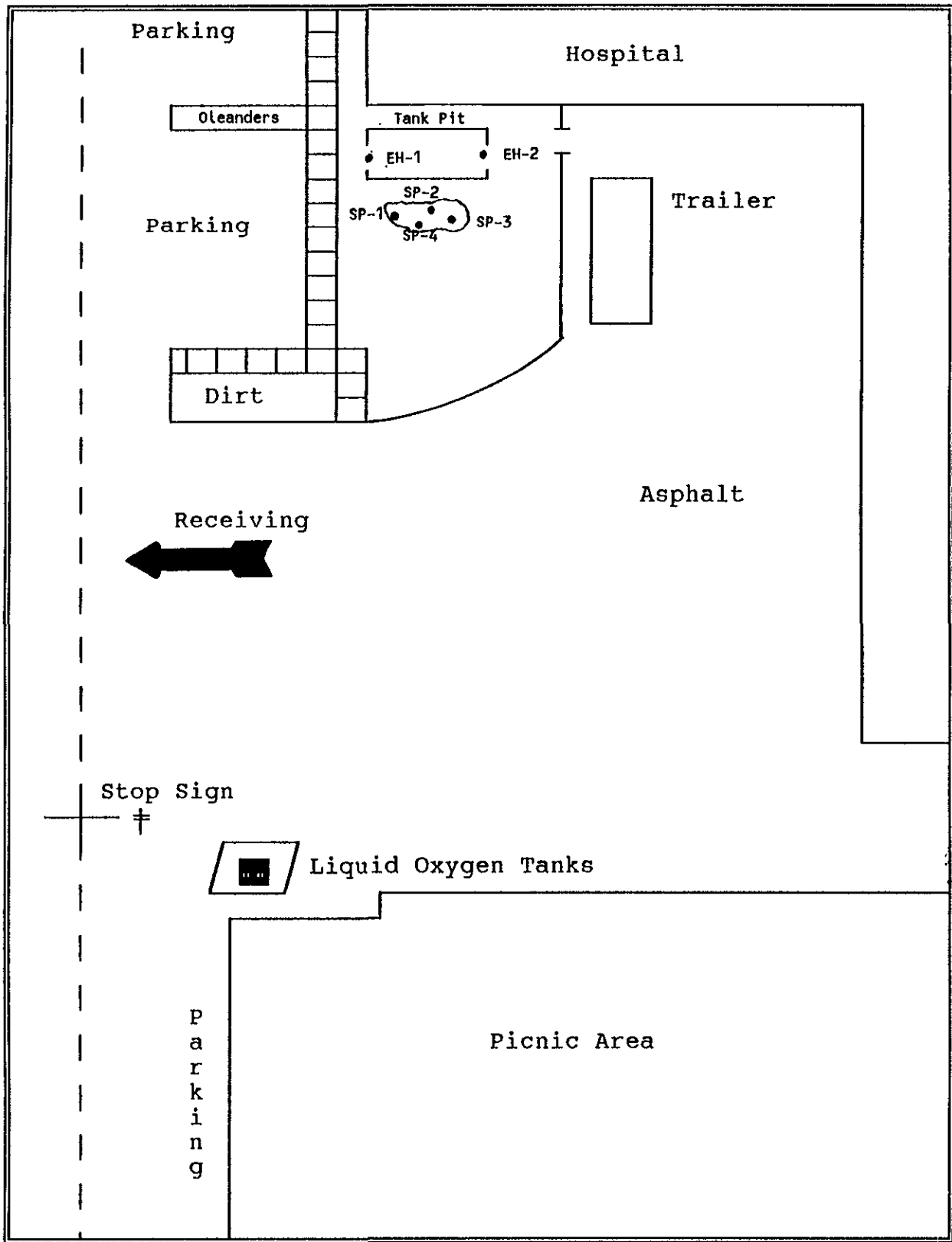
FIGURE 2



Scale: 1 inch = 30 feet

SUBSURFACE TANK LOCATION MAP

FIGURE 3



Scale: 1 inch = 30 feet

SOIL SAMPLING LOCATION MAP

FIGURE 4

APPENDIX A

TANK REMOVAL PERMIT

**ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY  
DEPARTMENT OF ENVIRONMENTAL HEALTH  
HAZARDOUS MATERIALS DIVISION  
80 SWAN WAY, ROOM 200  
OAKLAND, CA 94621  
PHONE NO. 415/271-4320**

Project Specialist (print) Scott Seery

**ACCEPTED**

DEPARTMENT OF ENVIRONMENTAL HEALTH  
470 - 27th Street, Third Floor **505**  
Oakland, CA 94612  
Telephone: (415) 374-7237 **10-3-91**

These plans have been reviewed and found to be acceptable and essentially meet the requirements of State and local health laws. Changes to your plans indicated by this Department are to assure compliance with State and local laws. The project proceeds only if you are aware of the issuance of any required building permits for construction.

One copy of these accepted plans must be on the job and available to all contractors and craftsmen involved with the removal.

Any changes or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspection Department to determine if such changes meet the requirements of State and local laws. Notify this Department at least 48 hours prior to the following required inspections:

- \_\_\_\_\_ Removal of Tank and Piping
- \_\_\_\_\_ Sampling
- \_\_\_\_\_ Final Inspection

Issuance of a permit to operate is dependent on compliance with accepted plans and all applicable laws and regulations.

**THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS.**

**UNDERGROUND TANK CLOSURE PLAN**

**\* \* \* Complete according to attached instructions \* \* \***

1. Business Name EDEN HOSPITAL  
Business Owner EDEN HOSPITAL
  2. Site Address 20103 LAKE CHABOT RD.  
City CASTRO VALLEY CA Zip 94546 Phone 415-889-5059
  3. Mailing Address SAME AS ABOVE  
City \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_
  4. Land Owner EDEN HOSPITAL  
Address SAME AS ABOVE City, State \_\_\_\_\_ Zip \_\_\_\_\_
  5. Generator name under which tank will be manifested \_\_\_\_\_  
EDEN HOSPITAL
- EPA I.D. No. under which tank will be manifested CAC000636776



REF./  
A/C NO. R

COUNTY OF ALAMEDA  
OFFICE OF THE AUDITOR-CONTROLLER

DATE: 9/16/91

No 612073 SS

MISCELLANEOUS RECEIPT

\$ 432<sup>00</sup>  
DOLLARS

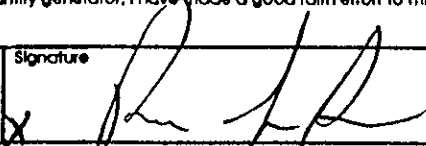
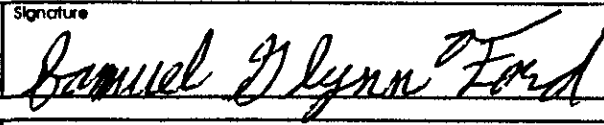

RECEIVED FROM: Env. Constr Co., 775 Montague Expwy, Milpitas, 95035  
FOR: Eden Hospital  
20103 Lake Chabot Rd., Castro Valley 94546  
RECEIVED BY: [Signature] DEPT. NO.: 430-453

CASH  PERSONAL/CASHIER'S CHECK/M. O. # 1383  OTHER: \_\_\_\_\_

APPENDIX B

HAZARDOUS WASTE MANIFEST  
CERTIFICATE OF DISPOSAL

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

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. C, A, C, 0, 0, 0, 6, 3, 6, 7, 7, 6		Manifest Document No. 0, 0, 0, 0, 1		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.		
3. Generator's Name and Mailing Address <b>EDEN HOSPITAL 20103 Lake Chabot Road, Castro Valley, CA. 94546</b>					A. State Manifest Document Number <b>91507661</b>					
4. Generator's Phone (510) 889-5059					B. State Generator's ID					
5. Transporter 1 Company Name <b>H &amp; H Ship Service Company</b>			6. US EPA ID Number C, A, D, 0, 0, 4, 7, 7, 1, 1, 6, 8		C. State Transporter's ID <b>200501</b>			D. Transporter's Phone <b>(415) 543-4835</b>		
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 <b>H &amp; H Ship Service Company 220 China Basin Street San Francisco, CA 94107</b>					10. US EPA ID Number C, A, D, 0, 0, 4, 7, 7, 1, 1, 6, 8		G. State Facility's ID			
							H. Facility's Phone <b>(415) 543-4835</b>			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)					12. Containers		13. Total		14. Unit	
					No. Type		Quantity		Wt/Vol	
a. <b>RESIDUE DIESEL TANK NON-RCRA HAZARDOUS WASTE SOLID</b>					0, 0 1 T, P		0, 3, 0, 0, 0 P		State <b>512</b> EPA/Other	
b. - - -									State EPA/Other	
c. - - -									State EPA/Other	
d. - - -									State EPA/Other	
J. Additional Descriptions for Materials Listed Above <b>EMPTY 3,000 gallon tank last containing diesel. Tank inerted with dry ice for transport.</b>					K. Handling Codes for Wastes Listed Above					
					a. <b>01</b>		b.			
					c.		d.			
15. Special Handling Instructions and Additional Information <b>JOB #9480 24 Hr Emergency Contact: H &amp; H #(415) 543-4835 APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR</b>										
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 <b>x Ron LeGue For EDEN Hospital</b>			Signature 			Month Day Year <b>1, 0   1, 7   9, 1</b>				
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/typed Name <b>SAMUEL GLYNN FORD</b>			Signature 			Month Day Year <b>1, 0   1, 7   9, 1</b>				
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/typed Name			Signature			Month Day Year				
19. Discrepancy Indication Space										
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.										
Printed/typed Name <b>Castro Valley</b>			Signature 			Month Day Year <b>10, 1, 79, 1</b>				

DO NOT WRITE BELOW THIS LINE.



**CERTIFICATE OF DISPOSAL**

OCTOBER 22, 1991

H & H Ship Service Company hereby certifies to **THE ENVIRONMENTAL CONSTRUCTION** that:

1. The storage tank(s), size(s) **ONE (1) 3,000 GALS.**

removed from the **EDEN HOSPITAL**

facility at **20103 LAKE CHABOT ROAD**

**CASTRO VALLEY, CALIFORNIA**

were transported to H & H Ship Service Company, 220 China Basin St., San Francisco, California 94107.

2. The following tank(s), H & H Job Number **9480**

have been steamed cleaned, cut with approximately 2' X 2' holes, rendered harmless and disposed of as scrap metal.

3. Disposal site: **SCHNITZER STEEL, OAKLAND, CALIFORNIA.**

4. The foregoing method of destruction/disposal is suitable for the materials involved, and fully complies with all applicable regulatory and permit requirements.

5. Should you require further information, please call (415) 543-4835.

Very Truly Yours,

  
Cleveland Valrey  
Operations Coordinator

220 CHINA BASIN, SAN FRANCISCO, CA 94107 • DAY AND NIGHT: 543-4835



APPENDIX C

ANALYTICAL RESULTS

CHAIN OF CUSTODY

# CHROMALAB, INC.

5 DAYS TURNAROUND

Analytical Laboratory (E694)

November 4, 1991

ChromaLab File No.: 1091256

THE ENVIRONMENTAL CONSTRUCTION COMPANY

Attn: Ron Legue

RE: Two soil samples for BTEX and Diesel analyses

Project Name: EDEN HOSPITAL

Project Location: 20103 Lake Chabot Road, Castro Valley

Project Number: 323

Date Sampled: Oct. 24, 1991

Date Submitted: Oct. 28, 1991

Date Extracted: Nov. 1, 1991

Date Analyzed: Nov. 1, 1991

## RESULTS:

Sample I.D.	Diesel (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl Benzene (µg/kg)	Total Xylenes (µg/kg)
EH-1	N.D.	N.D.	N.D.	N.D.	N.D.
SP-1,2,3,4*	220	N.D.	N.D.	N.D.	11
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	101.1%	80.6%	84.2%	106.0%	100.7%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	3550/ 8015	8020	8020	8020	8020

\*Composited soil sample.

ChromaLab, Inc.



David Duong  
Chief Chemist

Eric Tam (by DD)  
Eric Tam  
Laboratory Director



# CHROMALAB, INC.

5 DAYS TURNAROUND

Analytical Laboratory (E894)

November 6, 1991

ChromaLab File No.: 1091298

APPLIED ENVIRONMENTAL SOLUTIONS, INC.

Attn: Ron LeGue

RE: One soil sample for BTEX and Diesel analyses

Project Name: EDEN HOSPITAL

Project Location: 20103 Lake Chabot Rd.

Project Number: 323

Date Sampled: Oct. 29, 1991

Date Submitted: Oct. 30, 1991

Date Extracted: Nov. 4, 1991

Date Analyzed: Nov. 4, 1991

RESULTS:

Sample I.D.	Diesel (mg/kg)	Benzene ( $\mu$ g/kg)	Toluene ( $\mu$ g/kg)	Ethyl Benzene ( $\mu$ g/kg)	Total Xylenes ( $\mu$ g/kg)
EH-2	25	N.D.	N.D.	11	180
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	101.1%	85.4%	88.9%	90.3%	93.8%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	3550/ 8015	8020	8020	8020	8020

ChromaLab, Inc.



David Duong  
Chief Chemist



Eric Tam  
Laboratory Director



