



consulting, inc.

Re ~~485~~  
108

FACSIMILE TRANSMITTAL SHEET

BARNEY CHAN  
337-9335 - Alameda  
City

2101 Webster Street, 12th Floor, Oakland, CA 94612 tel (510) 663-4257 fax (510) 663-4141

ATTENTION:	Keith Matthews	/	Jeff Rubin
COMPANY:	Fire Dept.	/	Port of Oakland
FROM:	Melba Polierichio		
DATE:		TIME:	
JOB NO:		PAGE:	1 OF 5
FAX NO:	238-7761	Original to Follow	<input type="checkbox"/> Yes <input type="checkbox"/> No

451-5916

SPECIAL RECEIVING INSTRUCTIONS/NOTES:

Hi Inspector Matthews -

Attached please find the geotechnical evaluation letter from the PE as well as CHAN's sampling letter. A site plan is also attached

Please let me know if you have any question. I will bring original hard copies to the job site tomorrow

SENT BY: \_\_\_\_\_

FACSIMILE VERIFICATION: (510) 663-4257



consulting, inc.

2101 Webster Street, 12<sup>th</sup> Floor Oakland, CA 94612  
tel (510) 663-4257 fax (510) 663-4141  
www.gaiainc.com

May 1, 2003

Keith Matthews  
City of Oakland  
Oakland Fire Department  
1605 Martin Luther King, Jr. Way  
Oakland, CA 94612

**SUBJECT: Tank Abandonment Sampling Procedures for USTs HF-14 & HF-15  
9<sup>th</sup> Avenue Terminal, Oakland, CA**

Dear Inspector Matthews:

Attached please find a signed and stamped letter from Steve Osborne, a professional engineer from Fugro West, Inc, stating that USTs HF-14 and HF-15 should be abandoned in place due to their vicinity to Building II-229 and the 10-inch diameter firewater line. Removing the USTs would jeopardize the stability of the firewater line as well as the building foundation. Because the tanks are being abandoned in place, soil beneath the tanks will not be removed.

Groundwater in the area is very shallow (approximately 5 feet below ground surface); the tanks are set below groundwater level. GAIA proposes to collect a total of 3 soil samples, two from the sidewalls of the outer ends of the tanks and one sample in the area between the two tanks (USTs HF-14 and HF-15 share a common end). All soil samples will be taken above the water line at approximately 5 feet below ground surface. In addition to the soil samples, a grab groundwater sample from within the trench area will also be collected.

All soil and groundwater samples will be tested for TPH-d and TPH-g via EPA method 8015M, BTEX via 8021, fuel oxygenates and lead scavengers via EPA method 8260, and total lead.

The site will be backfilled using clean fill material composed of a bottom layer of aggregate base rock. Once the trench has been filled and compacted, the site will be resurfaced with asphalt.

Sincerely,  
GAIA Consulting, Inc.

A handwritten signature in black ink, appearing to read "Melba Policicchio". The signature is fluid and cursive.

Melba Policicchio  
Environmental Scientist

Enclosures: Fugro West's Geotechnical Evaluation



GAIA, Inc.  
May 1, 2003 (Project No. 133.018 T8)



Fugro concludes that the removal of the USTs will endanger the stability of the 10-inch water line and the gas line. Fugro understands that the water line provides fire protection to the western part of this property. In addition, the removal of the USTs may also cause a subsidence of the foundation that supports the warehouse, leading to potential damage to the warehouse structure. As a result, Fugro believes that the USTs should not be excavated from the site but rather that they should be topped off with cement grout and backfilled. Fugro recommends that the contractor use a self-compacting backfill material such as pea gravel to fill in the voids around the USTs and that the remaining portion of the excavation be raised to final grade with a suitable import material. The suitable import material should be moisture controlled, placed and compacted to achieve a maximum dry density of at least 90% in accordance with ASTM 1557.

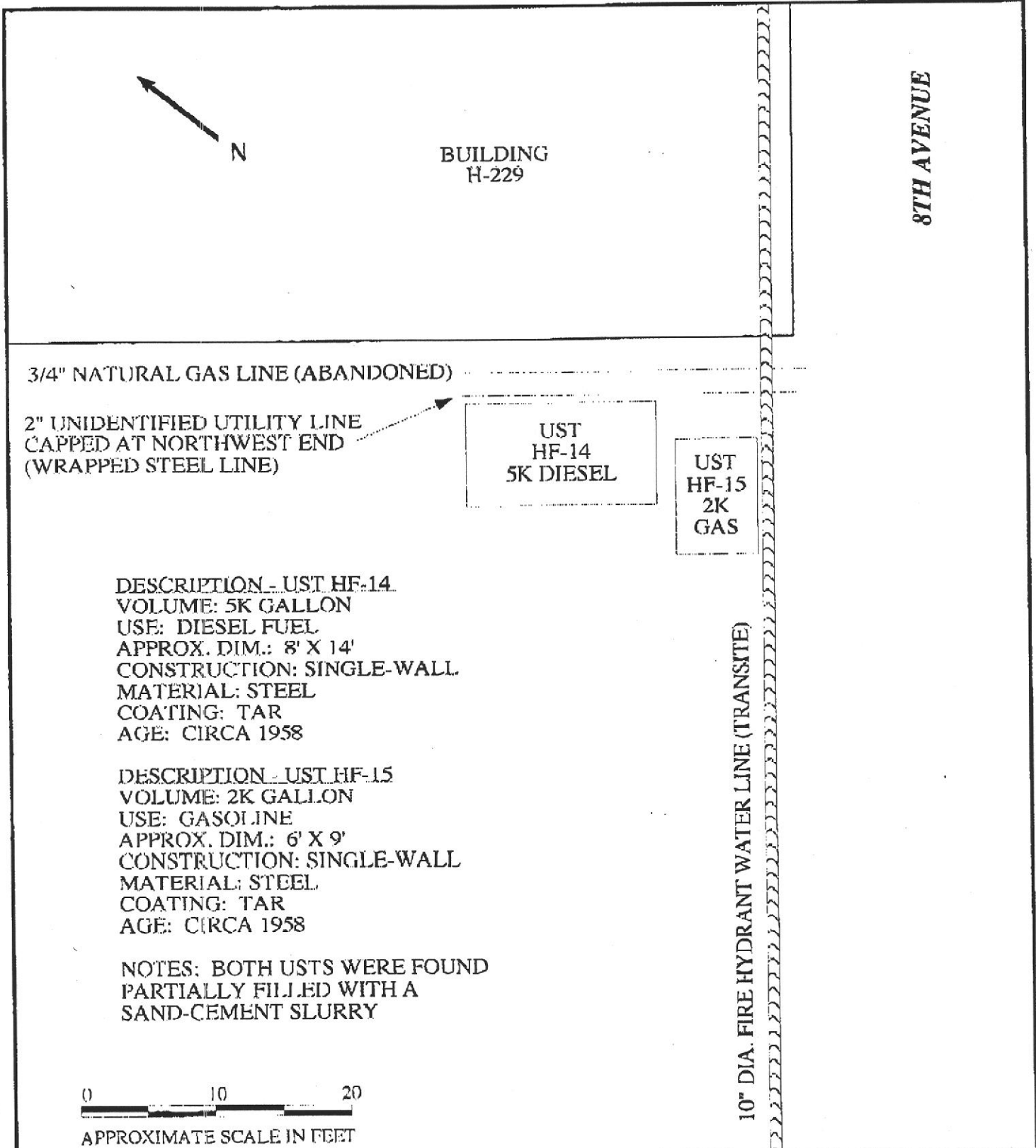
Fugro further understands that GAIA will prepare a scope of work for investigating the presence of petroleum hydrocarbons at these two USTs. If you have any questions concerning this letter, please call me at (510) 267-4411. We appreciate this opportunity to work together on this project with GAIA.

Sincerely,  
FUGRO WEST, INC.

  
Stephen J. Osborne  
Geotechnical Engineer



Enclosure: Site Plan



3/4" NATURAL GAS LINE (ABANDONED)

2" UNIDENTIFIED UTILITY LINE  
CAPPED AT NORTHWEST END  
(WRAPPED STEEL LINE)

UST  
HF-14  
5K DIESEL

UST  
HF-15  
2K  
GAS

DESCRIPTION - UST HF-14  
VOLUME: 5K GALLON  
USE: DIESEL FUEL  
APPROX. DIM.: 8' X 14'  
CONSTRUCTION: SINGLE-WALL  
MATERIAL: STEEL  
COATING: TAR  
AGE: CIRCA 1958

DESCRIPTION - UST HF-15  
VOLUME: 2K GALLON  
USE: GASOLINE  
APPROX. DIM.: 6' X 9'  
CONSTRUCTION: SINGLE-WALL  
MATERIAL: STEEL  
COATING: TAR  
AGE: CIRCA 1958

NOTES: BOTH USTS WERE FOUND  
PARTIALLY FILLED WITH A  
SAND-CEMENT SLURRY

0 10 20  
APPROXIMATE SCALE IN FEET

10" DIA. FIRE HYDRANT WATER LINE (TRANSITE)

8TH AVENUE

BUILDING  
H-229

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GAIA CONSULTING, INC.

SITE PLAN  
9TH AVENUE TERMINAL, PORT OF OAKLAND  
FORMER BUILDING H-209 (NEW BLDG. H-229)  
USTS HF-14 AND HF-15

DRAWN BY: H. HURKMANS  
DATE: 5/1/83

Project No.  
168344

Figure  
1

Ro ~~45~~ 108

# PORT OF OAKLAND

Environmental Health &  
Safety Compliance  
530 Water Street, 2nd Floor  
Oakland, CA 94607

FAX: (510) 451-5916

PHONE: (510) ~~627-1529~~ 627-1134

## FACSIMILE TRANSMITTAL

TO	ACHCSA
ATTENTION	BARNEY CHAN
FROM	JEFF RUBIN
DATE & TIME	05/02/03 2:30pm
FAX NUMBER	(510) 337-9335
NO. OF PAGES	4

### COMMENTS:

Hi BARNEY -

The letter GAIA faxed to you earlier was preliminary. The attached letter is final.

We plan to abandon the tanks in place... Samples were collected today and all documentation will be submitted to you when it is available -

Have a great weekend - Jeff

**FUGRO WEST, INC.**

1000 Broadway, Suite 200  
Oakland, California 94607  
Tel: (510) 268-0461  
Fax: (510) 268-0137

May 2, 2003  
Project No. 133.018

GAIA Consultants, Inc.  
2101 Webster Street  
Oakland, California 94612

Attention: Ms. Melba Policicchio

Subject: Geotechnical Evaluation, Removal of Underground Storage Tanks Adjacent to Buried Utilities and Warehouse Building H-229, 217 8<sup>th</sup> Avenue, Oakland, California

Dear Ms. Policicchio:

Fugro West Inc. (Fugro) presents this evaluation of the removal of two underground storage tanks (USTs) at the referenced site in Oakland, California. Fugro understands that GAIA Consultants, Inc. (GAIA) is under contract to the Port of Oakland to oversee the removal of the two USTs that contained 5,000-gallons of diesel and 2,000-gallons of gasoline. At your request, we visited the site with you on May 1, 2003 to review the proximity of the USTs to the adjacent warehouse and the adjacent utilities and to evaluate the feasibility of the removal of the USTs. We also met with Mr. Keith Mathews, Fire Inspector for the City of Oakland, and Mr. Aaron Grijalva, Superintendent for Foss Environmental Services.

We observed that the soil covering the two USTs had been removed, exposing the USTs at a depth of approximately 3.7 feet below grade. At the time of our visit, the groundwater had recharged into the excavation to a depth of approximately 5.3 feet. The water obscured the location of a concrete, 10-inch water line that runs immediately adjacent to the 2,000-gallon UST and alongside the warehouse. Fugro's representative confirmed the presence of the water line by probing with a metal rod. The 5,000-gallon diesel UST lies parallel to the warehouse and its centerline is nine feet from the edge of the warehouse structure. At a distance of approximately 4.9 feet from the warehouse, an unidentified line runs parallel to the warehouse. The line is two inches in diameter and is capped at one end near the 5,000-gallon UST. The line is metal with a plastic wrap. Fugro also observed an abandoned 3/4-inch metal line that runs between the warehouse and the natural gas line. A sketch of the USTs, and the utilities is presented in the attached plan. Fugro also observed that the southern edge of the warehouse is supported by an eight-inch slab that runs the length of the structure.

Mr. Grijalva informed Fugro that both of the USTs had been closed in place at some time in the past. The USTs were partially filled with cement grout. Foss Environmental Services removed residual product in the USTs and rinsed the UST through the fill bungs. Fugro observed that no petroleum product was present in the excavation and that no petroleum odor was present.

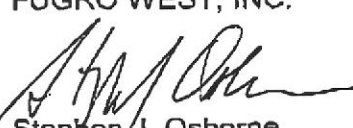


GAIA, Inc.  
May 2, 2003 (Project No. 133.018 T8)

Fugro judges that an extensive effort would be required to support the 10-inch water line if the USTs were removed. This extensive effort could include shoring or grouting to stabilize the excavation. The risk of damage to the water line would still remain because of the uncertain strength and integrity of the pipeline. Fugro understands that the water line provides fire protection to the western part of this property.

Fugro also judges that an extensive effort would be required to support the southern wall of the warehouse if the USTs were removed. This extensive effort could also include shoring or grouting to stabilize the excavation. If not performed correctly, the removal of the USTs could also lead to subsidence of the foundation that supports the warehouse, causing damage to the warehouse structure. At this time, Fugro believes that it is more feasible to complete the in-place abandonment of the USTs than to remove the USTs. Fugro recommends that the contractor top off the USTs with cement grout and backfill the excavation. The contractor should use a self-compacting backfill material such as pea gravel to fill in the voids around the USTs, and the remaining portion of the excavation be raised to final grade with a suitable import material. The suitable import material should be moisture conditioned, placed and compacted to achieve a maximum dry density of at least 90% in accordance with ASTM 1557.

Fugro further understands that GAIA will prepare a scope of work for investigating the presence of petroleum hydrocarbons at these two USTs. If you have any questions concerning this letter, please call me at (510) 267-4411. We appreciate this opportunity to work together on this project with GAIA.

Sincerely,  
FUGRO WEST, INC.  
  
Stephen J. Osborne  
Geotechnical Engineer



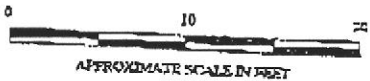
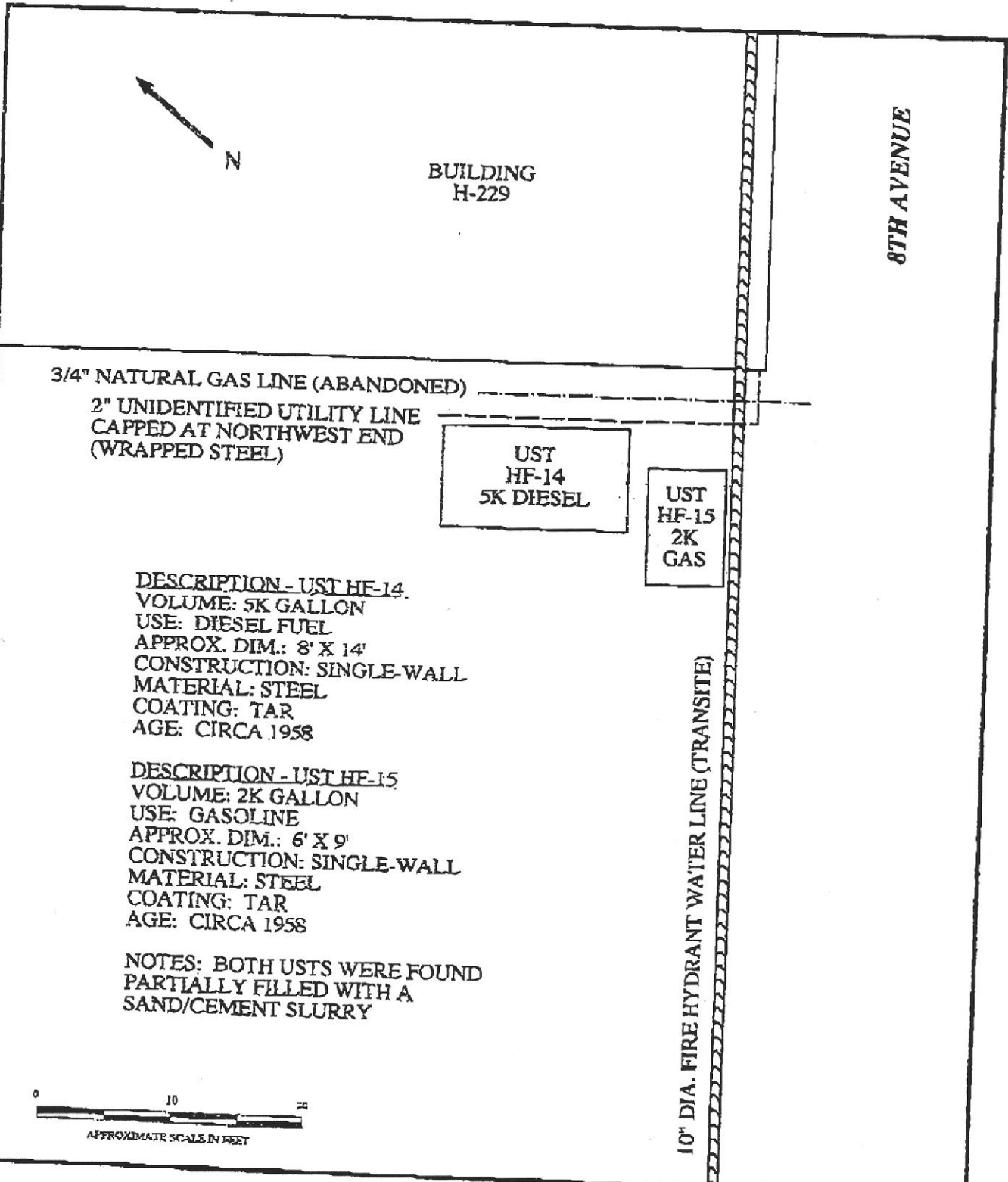
Enclosure: Site Plan



FROM :

FAX NO. :

May. 01 2003 10:58AM P2



**SITE PLAN**  
 9TH AVENUE TERMINAL, PORT OF OAKLAND  
 FORMER BUILDING H-209 (NEW BLDG. H-229)  
 USTS HF-14 AND HF-15

<b>GAIA CONSULTING, INC.</b>		
DRAWN BY: H. HURKMAN DATE: 5/1/85	Project No. <b>168344</b>	Figure <b>1</b>