

**ANANIA GEOLOGIC ENGINEERING**

ADDENDUM TO SITE SAFETY PLAN  
FOR EXCAVATED FUEL TANK AREA  
CARNATION DAIRY FACILITY  
1310 14TH STREET, OAKLAND, CALIFORNIA

AGE PROJECT NO. 004-88-059

SEPTEMBER 14, 1989

**UNDERGROUND TANK ABANDONMENT**

All work will be conducted with complete concern given for the safety of all persons in and around the work area. Strict adherence to the following guidelines will be monitored by the AGE SSO or their designee.

The immediate work area will be inspected and made as safe as possible. Obstructions that hinder safe work practices will be removed when possible. Heat, flame and spark sources will be removed or extinguished. All residual product remaining in the tank will be pumped or drained off to the lowest possible level.

Vacuum tank trucks or other types of equipment used for pumping the sludge from a tank must be operated in a vapor-free area and located upwind from the tank and outside the path of probable vapor travel.

Where conditions permit, it is preferable that the tank be freed of flammable vapors before other steps are undertaken. Vapor freeing implies the complete replacement of the hydrocarbon vapors in the tank with fresh air. Work in the area will be kept to a minimum in the initial stage of vapor-freeing.

The atmosphere in the tank and the surrounding area will be tested frequently throughout the operation with a vapor indicator to determine the progress of vapor-freeing operations.

Prior to entering a tank to perform the cleaning activities, the tank will be tested for flammable/toxic vapors and oxygen content. The flammable vapor content must not exceed 20 percent of the lower flammable limit (LFL). Most hydrocarbon vapors are toxic. Tests will be made to ensure that vapor concentrations are within established threshold limit values (TLV) noted in the Risk Assessment Summary section of the Site Safety Plan. If the tank is free of combustible/toxic vapors and the oxygen content is

greater than 19.5 percent, measured by an oxygen content meter, personnel entering the tank will employ level C protection equipment. However, if the oxygen content is less than 19.5 percent, level B protection will be employed. Continued monitoring of the vapor and oxygen contents will be conducted while personnel are within the tank.

Each tank will be retested for vapors and oxygen content before re-entry after any extended interruption of work or after an overnight break in operations.

A harness and lifeline will be worn by all personnel entering the tank for ease of rescue in the event of an emergency. In addition, a tripod assembly will be utilized over the access manway, whenever possible, to assist in lifting out an injured person.

While workmen are inside the tank completing the cleaning process, personnel will be stationed outside the tank to assist in the event of an emergency. The outside personnel will have adequate respiratory equipment available for the work conditions above ground. Someone qualified to administer artificial respiration and simple first aid will be available.

Portable fire extinguishers will be available in the immediate work area at all times.

Flammable and toxic vapors may be present as long as oil or sludge remains within the tank. For this reason, forced ventilation will be provided, regardless of acceptable test results for flammable/toxic vapors, until oil and sludge have been removed.

Cleaning compound residuals removed, other than by vacuum tank truck, will be placed in D.O.T. approved containers for proper disposal. All containers shall be labelled as containing hazardous waste.

Surfaces which are to be heated by welding or other processes should be free of liquid hydrocarbons, ignitable scale deposits or other deposits which could release flammable/toxic vapors. Frequent tests should be made to ensure that the atmosphere in the tank is not in excess of 10 percent of the LFL and the TLV requirement is met. Continued ventilation will be required during welding/heating to minimize accumulation of flammable vapors.

Surfaces which might be heated excessively by welding, or other operations, and have been in contact with leaded gasoline, should be cleaned down to bare metal. Welders may use fresh air respiratory equipment as ~~an alternative to~~ cleaning down to bare metal.

*supplied*

*a safety measure instead of*

# acord CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY)

6/27/89

PRODUCER

RECEIVED OCT 10 1989

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW

RBH NORTHERN CA. - OAKLAND  
P.O. BOX 1439  
OAKLAND, CA 94604

## COMPANIES AFFORDING COVERAGE

CODE SUB-CODE

INSURED

Erickson, Inc.  
255 Parr Blvd.

Richmond  
CA 94801

COMPANY LETTER	A	National Union Fire - Seattle
COMPANY LETTER	B	Industrial Indemnity - S.F.
COMPANY LETTER	C	American Home Ass. - S.F.
COMPANY LETTER	D	National Union - L.A.
COMPANY LETTER	E	

## COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	ALL LIMITS IN THOUSANDS	
	GENERAL LIABILITY				GENERAL AGGREGATE	\$ 2000
A X	COMMERCIAL GENERAL LIABILITY CLAIMS MADE <input checked="" type="checkbox"/> OCCUR. OWNER'S & CONTRACTOR'S PROT.	GL5415700	5/01/89	5/01/90	PRODUCTS-COMP/OPS AGGREGATE	\$ 2000
					PERSONAL & ADVERTISING INJURY	\$ 1000
					EACH OCCURRENCE	\$ 1000
					FIRE DAMAGE (Any one fire)	\$ 100
					MEDICAL EXPENSE (Any one person)	\$ 5
	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT	\$ 5,000
X	ANY AUTO	AS8825055	7/01/89	7/01/90	BOODLY INJURY (Per person)	\$
X	ALL OWNED AUTOS				BOODLY INJURY (Per accident)	\$
X	SCHEDULED AUTOS				PROPERTY DAMAGE	\$
X	HIRED AUTOS					
X	NON-OWNED AUTOS					
	GARAGE LIABILITY					
	EXCESS LIABILITY				EACH OCCURRENCE	\$
					AGGREGATE	\$
	OTHER THAN UMBRELLA FORM					
	WORKER'S COMPENSATION				STATUTORY	\$ 1,000 (EACH ACCIDENT)
C	AND EMPLOYERS' LIABILITY	WC5815792	7/01/89	7/01/90		\$ 1,000 (DISEASE-POLICY LIMIT)
						\$ 1,000 (DISEASE-EACH EMPLOYEE)
	OTHER					
D	CONTRACTOR'S	CPL5648491	5/01/89	5/01/90	\$1,000, OCCURRENCE	\$5,000, AGGREGATE

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/RESTRICTIONS/SPECIAL ITEMS

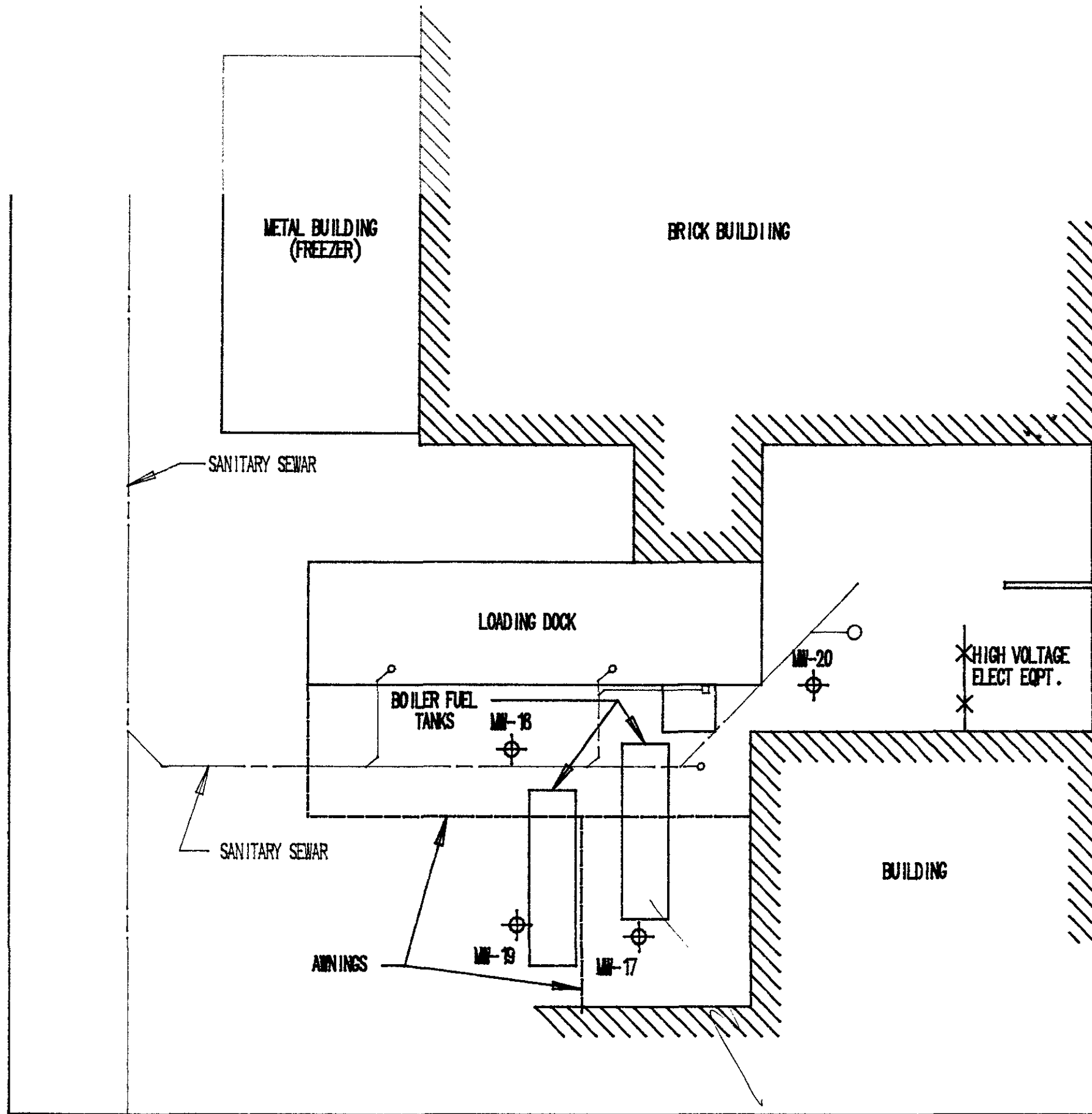
CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES

AUTHORIZED REPRESENTATIVE

*James Gustafson*

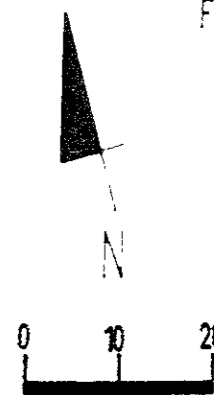


AGE  
 ANANIA GEOLOGIC ENGINEERING

TITLE: MONITORING WELLS MI-17 THROUGH MI-20			
PROJECT NAME: CARNATION/OAKLAND			
SITE LOCATION: 1310 14th ST. OAKLAND, CA.			
DATE: 7-11-89	DRAWING NO.: 059-026	SCALE: 1"=20'	PROJ. NO. 004-88-059

*in concrete vault.*

FIGURE :



LOADING DOCK

LIFT

OLD TANK

NEW TANK

TANK FILL

TANK FILL

TANK FILL

MANHOLE

TANK FILL

SUCTION LINE TO BOILER

RETURN LINE FROM BOILERS

*manifold system*

MAINTENANCE MACHINE SHOP

BOILER ROOM

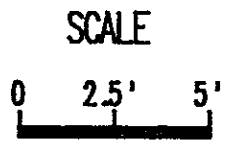
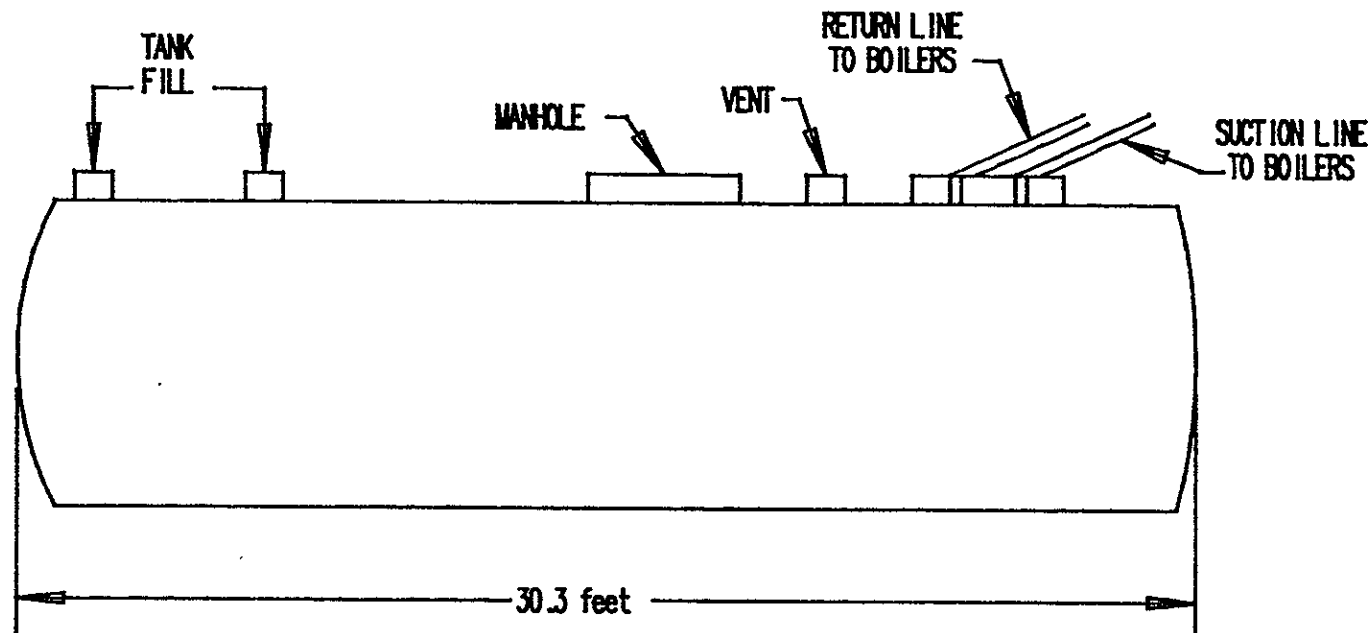
COMPRESSOR ROOM

AGE  
ANANIA GEOLOGIC ENGINEERING

TITLE: BOILER FUEL TANK LOCATIONS AND LINES		
PROJECT NAME: CARNATION/OAKLAND	PROJECT NO: 004-88-059	
SITE LOCATION: 1310 14th ST. AT POPLAR ST. OAKLAND		
DATE: 10-12-89	DRAWING NO: 059-032	SCALE: NONE

FIGURE 2

# SCHEMATIC SIDE VIEW OF EASTERN BOILER FUEL TANK ENCASED IN CONCRETE

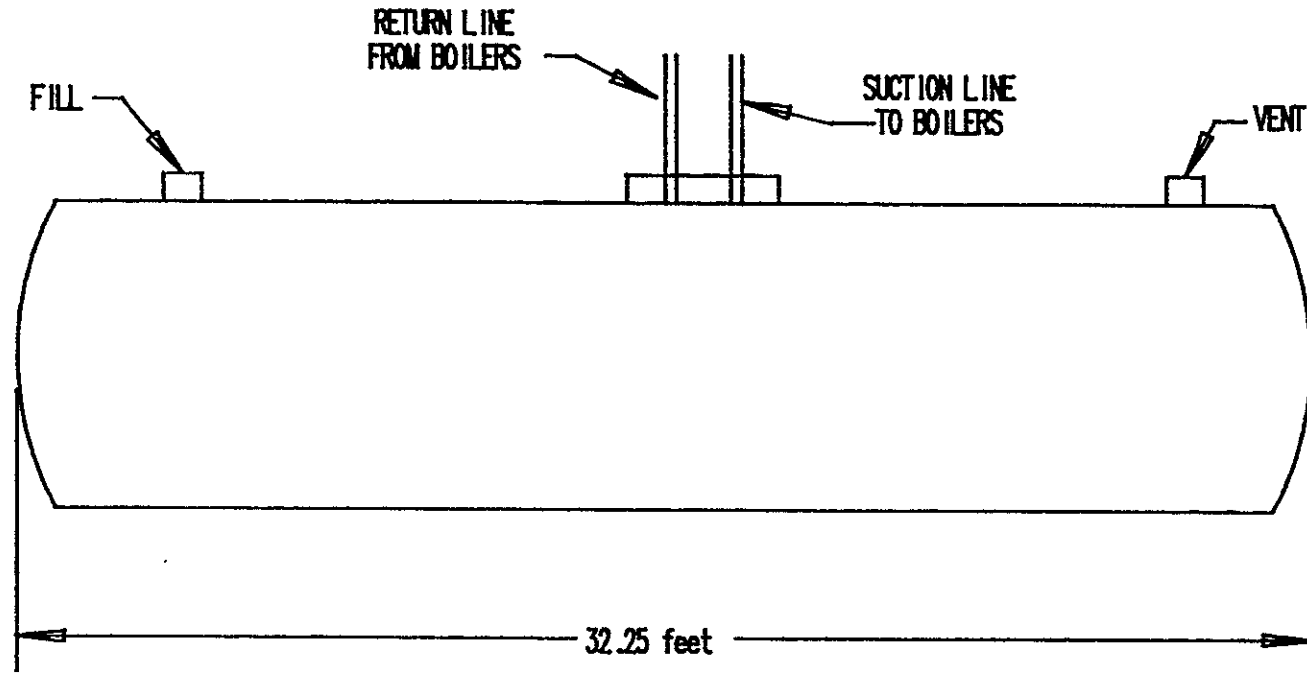


AGE  
ANANIA GEOLOGIC ENGINEERING

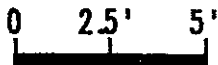
TITLE: SCHEMATIC SIDE VIEW OF EASTERN BOILER FUEL TANK ENCLOSED IN CONCRETE		
PROJECT NAME: CARNATION/OAKLAND	PROJECT NO: 004-88-059	
SITE LOCATION: 1310 14th ST. AT POPLAR ST. OAKLAND		
DATE: 10-12-89	DRAWING NO: 059-032	SCALE: 1" = 5'

# SCHEMATIC SIDE VIEW OF WESTERN BOILER FUEL TANK

FIGURE 3



SCALE



AGE  
ANANIA GEOLOGIC ENGINEERING

TITLE: SCHEMATIC SIDE VIEW OF WESTERN BOILER FUEL TANK		
PROJECT NAME: CARNATION/OAKLAND	PROJECT NO: 004-88-059	
SITE LOCATION: 1310 14th ST. AT POPLAR ST. OAKLAND		
DATE: 10-12-89	DRAWING NO: 059-033	SCALE: 1" = 5'