

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

Alameda County CC4580
Environmental Health Services
1131 Harbor Bay Pkwy., #250
Alameda CA 94502-6577
(510)567-6700 FAX(510)337-9335

May 2, 1996

REMEDIAL ACTION COMPLETION CERTIFICATION

Ms. Jackie Ross
Linde Gases of California
2678 Bishop Dr. Suite 200
San Ramon, California 94583

Mr. Joe Lopez
Praxair / Altair Bayox
1785 Old Oakland, Road
San Jose, California 95131

RE: Praxair / Altair Bayox
1171 Ocean Avenue, Oakland, California 94608
STID # 307

Dear Ms. Ross and Mr. Lopez:

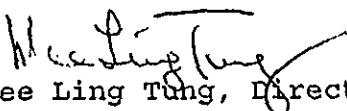
This letter confirms the completion of site investigation and remedial action for the 5,000 gallon diesel underground storage tank removed on March 22, 1989 at the above described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the diesel underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721 (e). If a change in the present land use is proposed, the property owner must promptly notify this agency.

Please contact Susan L. Hugo at (510) 567-6780 if you have any questions regarding this matter.

Sincerely,


Mee Ling Tung, Director

Enclosure

c: Gordon Coleman, Acting Chief, Environmental Protection - files
Kevin Graves, RWQCB
Mike Harper, SWRCB (with enclosure)

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

April 1, 1996
STID # 307

Mr. Joe Lopez
Praxair / Altair Bayox
1785 Old Oakland Road
San Jose, California 95131

RE: Case Closure - Praxair / Altair Bayox
1171 Ocean Avenue, Oakland, California 94608

Dear Mr. Lopez:

The Alameda County Department of Environmental Health, Environmental Protection Division has recently received concurrence from the Regional Water Quality Control Board regarding this office determination that no further action is required concerning the removal of one 5000 gallon diesel underground storage tank at the above referenced site.

Please be advised that the groundwater monitoring well (MW-1) at the site must be properly decommissioned before our agency will issue the Remedial Action Completion Certification (closure letter) for the subject site. A report must be submitted documenting the abandonment of the monitoring well.

Additionally, you will need to notify this office 72 hours in advance of the well abandonment field activities.

If you have any questions concerning this letter, please contact me at (510) 567- 6780.

Sincerely,

Susan L. Hugo
Senior Hazardous Materials Specialist

c: Jun Makishima, Interim Director, Environmental Health
Gordon Coleman, Acting Chief, Environmental Protection / files
Kevin Graves, San Francisco Bay RWQCB

LOP - RECORD CHANGE REQUEST FORM

printed:
04/29/96

Mark Out What Needs Changing and Hand to LOP Data Entry
(Name/Address changes go to Annual Programs Data Entry)

Insp: SH

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 12034
 StID : 307 LOC: -0-
 SITE NAME: Bayox DATE REPORTED : 02/01/88
 ADDRESS : 1171 -0 Ocean Ave DATE CONFIRMED: 02/01/88
 CITY/ZIP : Oakland 94608 MULTIPLE RPs : N

SITE STATUS

CASE TYPE: S CONTRACT STATUS: 4 PRIOR CODE: 2B4 EMERGENCY RESP: -0-
 RP SEARCH: S DATE COMPLETED: 10/13/92
 PRELIMINARY ASMNT: C DATE UNDERWAY: 09/06/89 DATE COMPLETED: 12/26/89
 REM INVESTIGATION: C DATE UNDERWAY: 12/26/89 DATE COMPLETED: 01/24/95
 REMEDIAL ACTION: C DATE UNDERWAY: 03/22/89 DATE COMPLETED: 01/24/95
 POST REMED ACT MON:- DATE UNDERWAY: -0- DATE COMPLETED: -0-

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 10/13/92
 LUFT FIELD MANUAL CONSID: 3HSCAWG
 CASE CLOSED: Y DATE CASE CLOSED: 05/02/96
 DATE EXCAVATION STARTED : 03/22/89 REMEDIAL ACTIONS TAKEN: ED-

RESPONSIBLE PARTY INFORMATION

RP#1.-CONTACT NAME: Ms. Jackie Ross
 COMPANY NAME: Linde Gases of California
 ADDRESS: 2678 Bishop Dr. Suite 200
 CITY/STATE: San Ramon, California 94583

INSPECTOR VERIFICATION:

NAME Juan F. Hugo SIGNATURE _____ DATE 5/2/96

DATA ENTRY INPUT:

Name/Address Changes Only			Case Progress Changes	
ANPPGMS	LOP	DATE	LOP	DATE
_____	_____	_____	_____	_____

Leaking Underground Fuel Storage Tank Program

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	**Before	After
TPH (Gas)	-	-	-	220
TPH (Diesel)	ND	* 1.6	800	ND
TPH (as waste oil)	ND	ND	ND	-
Benzene	ND	ND	ND	ND
Toluene	ND	ND	ND	ND
Xylene	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND
Oil & Grease	ND	ND	490	-

by EPA # 9070/9071

* Soil sample collected from boring LB-3 at 8 feet bgs (soil /water interface).

** Grab water sample collected from the excavation following the removal of the tank.

Comments (Depth of Remediation, etc.):

In March 1989, a 5,000 gallon diesel UST was removed at the above referenced site. The former tank was covered with tar paper and no apparent leakage was noted. Two soil samples were collected at the soil/water interface, one from each end of the tank found no detectable concentration of TPH diesel, BTEX, and TPH as waste oil. However, the grab water sample collected from the tank pit found TPH diesel (800 ppb) and TOG (490 ppb).

A limited site assessment was conducted on September 6, 1989 to determine the extent of the contamination related to the former diesel UST. Six exploratory soil borings were drilled (11 to 15 feet bgs) in the immediate area of the former tank (see Figure 6). Soil samples collected from the borings were non detect for TPH diesel and BTEX with the exception of one soil sample from boring LB-3 exhibiting very low levels of TPH diesel (1.6 ppm). Five grab water samples from borings LB-1, LB2, LB-3, LB-4 and LB-6 showed no detectable concentration of TPH diesel and BTEX.

On December 26, 1989, one groundwater monitoring well was installed within 8 feet of the tank area in the assumed downgradient direction. Groundwater was encountered at 14 feet bgs and the boring terminated at 29.5 feet bgs. During the drilling, stiff clay was present to a depth of 7 feet, followed by clayey gravel up to 16 feet bgs and sandy gravel up to the bottom of the boring. Groundwater stabilized at 9 feet bgs. Soil samples collected during the well installation and the groundwater sample collected following the well development found no detectable level of TPH gasoline, TPH diesel and BTEX. The well was sampled consistently every quarter in 1990 (1/90, 3/90/, 7/90 and 11/90). The first three sampling events showed non detect for TPH gasoline, TPH diesel, and BTEX. However, the fourth quarter found TPH gasoline at 170 ppb and benzene at 1.8 ppb.

Leaking Underground Fuel Storage Tank Program

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **Undetermined**

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **Undetermined**

Does corrective action protect public health for current land use? **YES**
Site management requirements: **NA**

Should corrective action be reviewed if land use changes? **YES**

Monitoring wells Decommissioned: **No, will decommission upon case closure**

Number Decommissioned: **NA**

Number Retained: **NA**

List enforcement actions taken: **NA**

List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Susan L. Hugo** Title: **Sr. Hazardous Materials Specialist**

Signature: *Susan L. Hugo* Date: *2/26/96*

Reviewed by

Name: **Dale Klettke** Title: **Hazardous Materials Specialist**

Signature: *Dale Klettke* Date: *2/28/96*

Name: **Thomas Peacock** Title: **Sup. Hazardous Materials Specialist**

Signature: *Thomas Peacock* Date: *2-27-96*

VI. RWQCB NOTIFICATION

Date Submitted to RB: *2/28/96* RB Response: *Approved*

RWQCB Staff Name: **Kevin Graves**

Title: **Water Resources Control Engineer**

Kevin Graves

Date: *3/26/96*

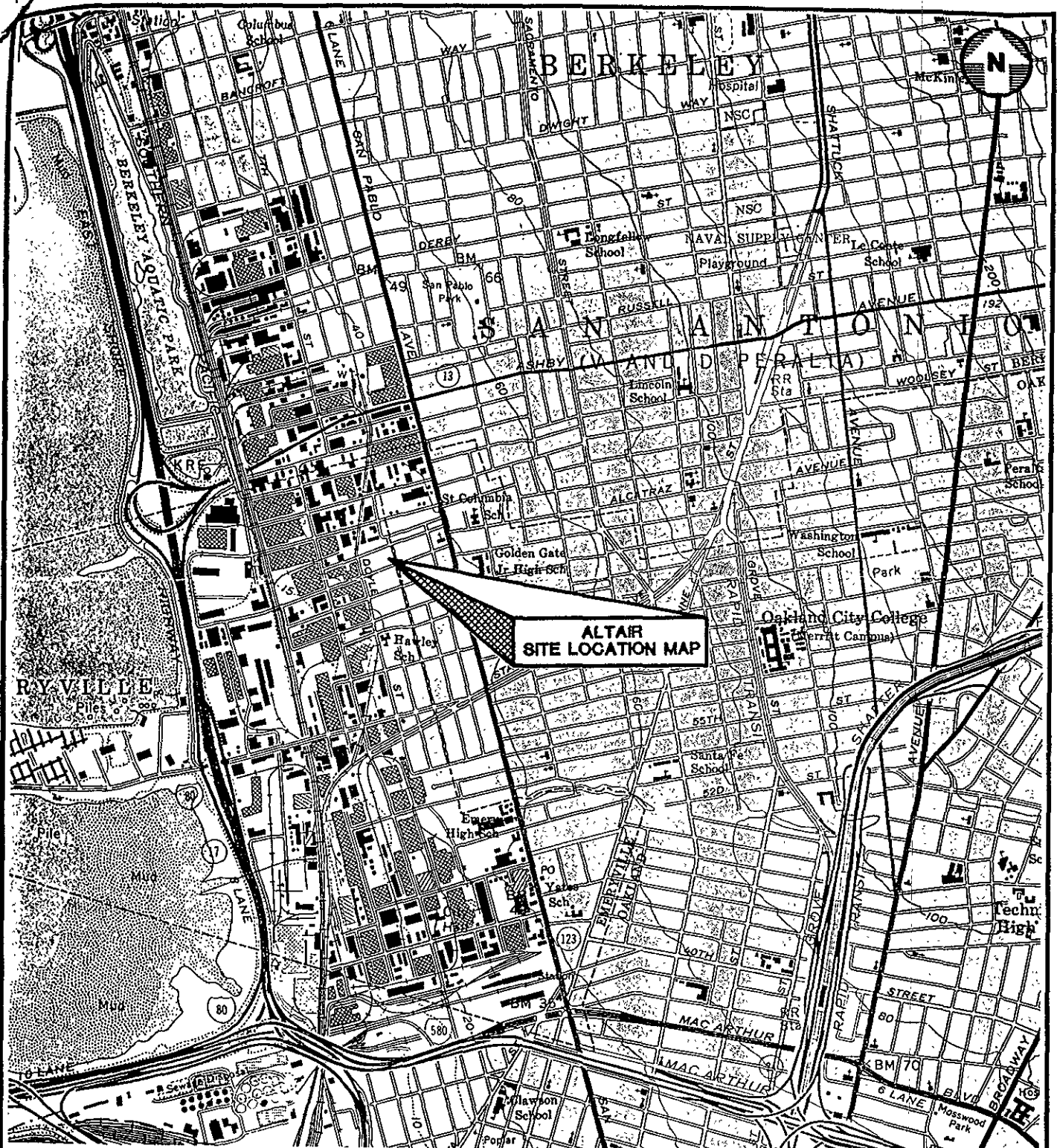
Leaking Underground Fuel Storage Tank Program

VII. ADDITIONAL COMMENTS, DATA, ETC.

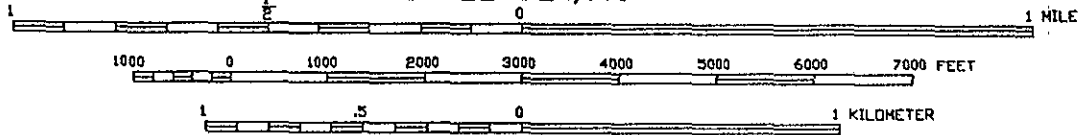
Two additional monitoring events were performed (12/7/94 and 1/24/95) at the subject site. TPH gasoline (170 to 220 ppb), toluene (nd to 1.4 ppb), xylene (nd to 3.6 ppb) and ethyl benzene (nd to 0.6 ppb) were found during these sampling events but TPH diesel and benzene remained non detect.

Case closure or no further action regarding the former diesel tank is recommended for the above referenced site due to the following reasons:


- 1) Soil contamination was not encountered at the site (1.6 ppm TPH diesel was the only concentration found in the soil).
- 2) TPH diesel was not detected in the groundwater during the six sampling events.
- 3) Benzene was detected one time at very low concentration (1.8 ppb) during the 11/90 sampling event.
- 4) The level of TPH gasoline (nd to 220 ppb) found in the groundwater was low and may be coming from off-site and not related to the former diesel tank removed from the site.
- 5) The site is categorized as low risk and the residual levels of TPH gasoline in groundwater do not appear to be a threat to public health and the environment.



SCALE 1:24,000



SOURCE: U.S.G.S. 7.5 QUADRANGLE MAP, OAKLAND WEST, CALIF. 1956, PHOTOREVISED 1980.

	Environmental Science & Engineering, Inc.	DATE 06/93	SITE LOCATION MAP	FIGURE NO. 1
	4090 NELSON AVENUE, SUITE J CONCORD, CA 94520	REVISED 10/93		ALTAIR 1171 OCEAN AVENUE OAKLAND, CALIFORNIA
		CAD FILE 50821001		

PRAXAIR/ALTAIR FACILITY
 1171 Ocean Avenue
 Oakland, California

TABLE 3

ANALYTICAL GROUND WATER RESULTS

DATE	TPH-G mg/L	TPH-D mg/L	Benzene mg/L	Toluene mg/L	Total Xylenes mg/L	Ethylbenzene mg/L
<i>DTW (r)</i> 7.04 01/08/90	ND	ND	<i>ppb</i> ND	<i>ppbm</i> ND	<i>ppbm</i> ND	<i>ppbm</i> ND
5.0 03/09/90	ND	ND	ND	ND	ND	ND
6.77 07/12/90	ND	ND	ND	ND	ND	ND
7.35 11/16/90	0.17	ND	1.8 <i>ppb</i>	ND	ND	ND
4.70 12/07/94	0.17	ND	ND	0.0014	0.0036	0.0006
3.52 01/24/95	0.22	ND	ND	ND	ND	ND

Notes:

TPH-G = Total Petroleum Hydrocarbons as Gasoline
 TPH-D = Total Petroleum Hydrocarbons as Diesel
 mg/L = Milligrams per liter
 ND = Non-detectable

By: I. Joseph Lopez
 Praxair, Inc.

N



MARSHALL STREET

(Residential)

OCEAN AVENUE

Driveway

OFFICE

Loading Dock/
Cylinder
Storage
(Covered)



(Fence)

(Residential)

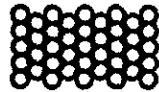
64TH STREET

Driveway

(Former)
Diesel Tank
Pit



MW-1



(Outside)
Cylinder Storage

(Fence)

1185 Ocean Avenue
Bay Area Structural
Engineering/Contractors

Figure 5 - Detail Map

Location and shape of subject site at
1171 Ocean Avenue,
Oakland, CA

0 50



Approx. Scale
(feet)



Uriah Environmental Services Inc.

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

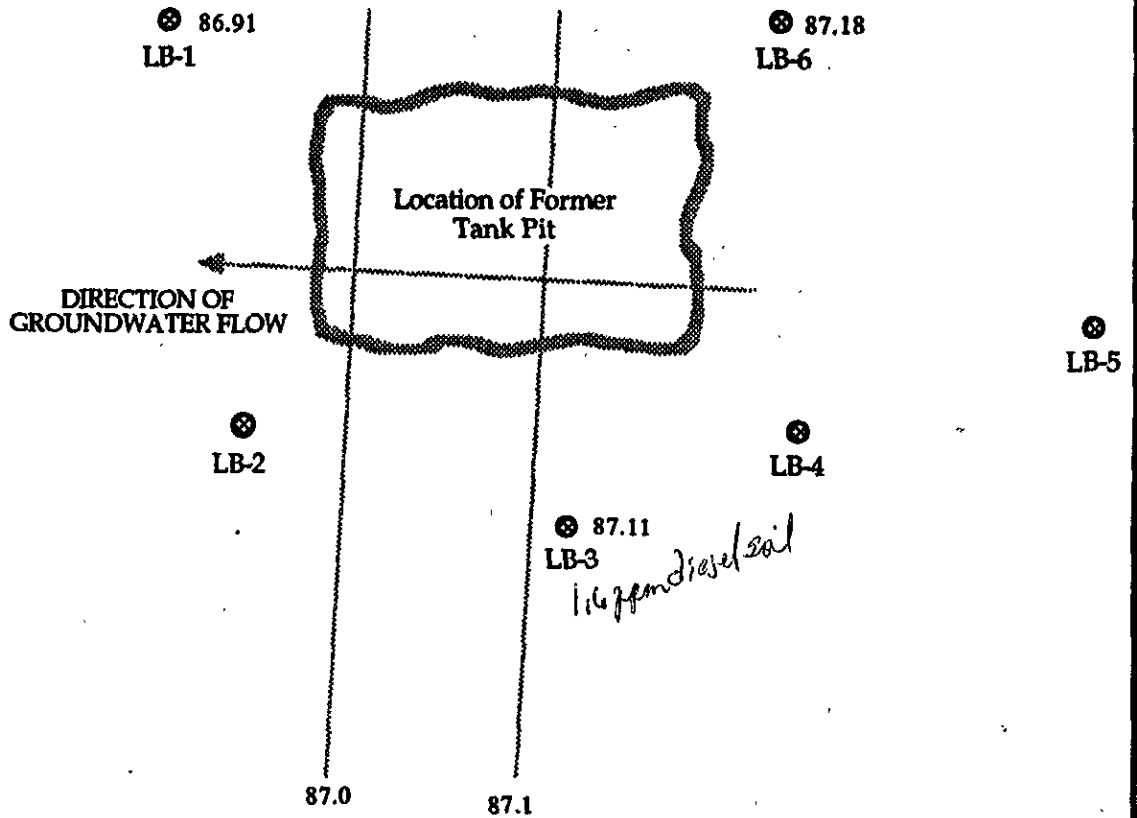


OCEAN AVENUE

Sidewalk

1185 OCEAN AVENUE
BAY AREA STRUCTURAL
ENGINEERING/CONTRACTORS

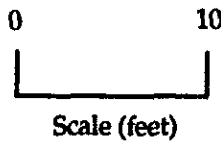
Fence



Re-drawn from Detail Map for "Report Regarding Initial Subsurface Investigation Performed at Bayox, 1171 Ocean Avenue, Oakland, CA" (Uriah, March 5, 1990)

Figure 6 - Detail Map

Location of former tank pit and exploratory soil borings advanced at 1171 Ocean Avenue, Oakland, CA (9/6/89)



Uriah Environmental Services Inc.
2401 East Orangeburg Avenue #675-218, Modesto, CA 95335

TABLE I

**Soil and Groundwater Sample Results
Exploratory Soil Borings
Limited Site Assessment, September 6, 1989**

Sample #	TPH-D	Benzene	Toluene	Ethylbenzene	Xylenes
Soil Samples (ppm)					
909-0341/LB1-S	ND	ND	ND	ND	ND
909-0342/LB2-S	ND	ND	ND	ND	ND
909-0334/LB3-S	1.6	ND	ND	ND	ND
909-0344/LB4-S	ND	ND	ND	ND	ND
909-0345/LB5-S	ND	ND	ND	ND	ND
909-0346/LB6-S	ND	ND	ND	ND	ND
Method Detection Limit (ppm)	1	0.05	0.1	0.1	0.1
Grab Groundwater Samples (ppb)					
909-0347A/LB1-W	ND	ND	ND	ND	ND
909-0348A/LB2-W	ND	ND	ND	ND	ND
909-0349A/LB3-W	ND	ND	ND	ND	ND
909-0350A/LB4-W	ND	ND	ND	ND	ND
909-0351A/LB6-W	ND	ND	ND	ND	ND
Method Detection Limit (ppb)	50	0.3	0.3	0.3	0.3
TPH-G = Total Petroleum Hydrocarbons as Gasoline TPH-D = Total Petroleum Hydrocarbons as Diesel ppm = Parts per million ppb = Parts per billion ND = Non-detectable					


Exploratory Boring Log

Project No. LB-1	Boring & Casing Diameter 8"	Logged By Walter Floyd- Geologist
Project Name Linde- Oakland	Casing Elevation	Date Drilled 9/6/89
Boring No. LB-1	Hollow-stem Flight Auger	Depth to Groundwater 8'

Penetration blows/ft	G. W. level	Depth (ft) Samples	Litho- graphy USCS	Description
		0	CL	Dark brown to black SILTY CLAY (CL), no odors, soft.
		5	CL	Yellowish-brown CLAY (CL), no odors, firm.
7; 12	▼	10		Boring terminated at 11 feet.
		15		


Exploratory Boring Log

Project No.	Boring & Casing Diameter	Logged By Walter Floyd- Geologist
Project Name Linde- Oakland	Casing Elevation	Date Drilled 9/6/89
Boring No. LB-2	Hollow-stem Flight Auger 8"	Depth to Groundwater 8.5'

Penetration blows/ft	G. W. level	Depth (ft) Samples	Litho- graphy USCS	Description
6, 10		0	CL	Dark brown to black SILTY CLAY (CL), no odor, soft.
		5	GC	Gravel lense of CLAYEY GRAVEL (GC), 2' thick, no odors.
		5	CL	Yellowish-brown CLAY (CL), no odors.
		10		
		15		Boring terminated at 11.5'.

Exploratory Boring Log

Project No.	Boring & Casing Diameter	Logged By
		Walter Floyd- Geologist
Project Name Linde- Oakland	Casing Elevation	Date Drilled
		9/6/89
Boring No. LB-3	Hollow-stem Flight Auger 8"	Depth to Groundwater 9.5'

Penetration blows/ft	G. W. level	Depth (ft) Samples	Litho- graphy USCS	Description
8, 14		0	CL	Dark brown to black CLAY (CL), soft, no odor.
		5	CL	Yellowish-brown SILTY CLAY (CL), stiff, no odor.
		10		
		15		Boring terminated at 12.5'.

Exploratory Boring Log

Project No.	Boring & Casing Diameter	Logged By Walter Floyd- Geologist
Project Name Linde- Oakland	Casing Elevation	Date Drilled 9/6/89
Boring No. LB-4	Hollow-stem Flight Auger 8"	Depth to Groundwater 9.5'

Penetration blows/ft	G. W. level	Depth (ft) Samples	Litho- graphy USCS	Description
7, 14	▼	0	CL	Dark brown CLAY (CL), soft, no odor.
		5	CL	Yellowish-brown SILTY CLAY (CL), stiff, no odor.
		10		
		15		Boring terminated at 12.5'.

Exploratory Boring Log

Project No.	Boring & Casing Diameter	Logged By Walter Floyd- Geologist
Project Name Linde- Oakland	Casing Elevation	Date Drilled 9/6/89
Boring No. LB-5	Hollow-stem Flight Auger 8"	Depth to Groundwater

Penetration blows/ft	G. W. level	Depth (ft) Samples	Litho- graphy USCS	Description
9, 15		0	CL	Dark brown CLAY (CL), soft, no odor.
		5	CL	Yellowish-brown SILTY CLAY (CL), stiff, no odor.
		10		
		15		Encountered resistance and boring terminated @ 15'. No groundwater encountered.

Exploratory Boring Log

Project No.	Boring & Casing Diameter	Logged By Walter Floyd- Geologist
Project Name Linde- Oakland	Casing Elevation	Date Drilled 9/6/89
Boring No. LB-6	Hollow-stem Flight Auger 8"	Depth to Groundwater 13'

Penetration blows/ft	G. W. level	Depth (ft) Samples	Litho- graphy USCS	Description
9, 15	▼	0	CL	Dark brown CLAY (CL), soft, no odor.
		5	CL	Yellowish-brown SILTY CLAY (CL), stiff. Slight odor at 5', goes away with depth.
		10		
		15		Boring terminated at 16'.
		20		

WELL DETAILS

PROJECT NAME: Linde Gases

BORING/WELL NO. MW-1

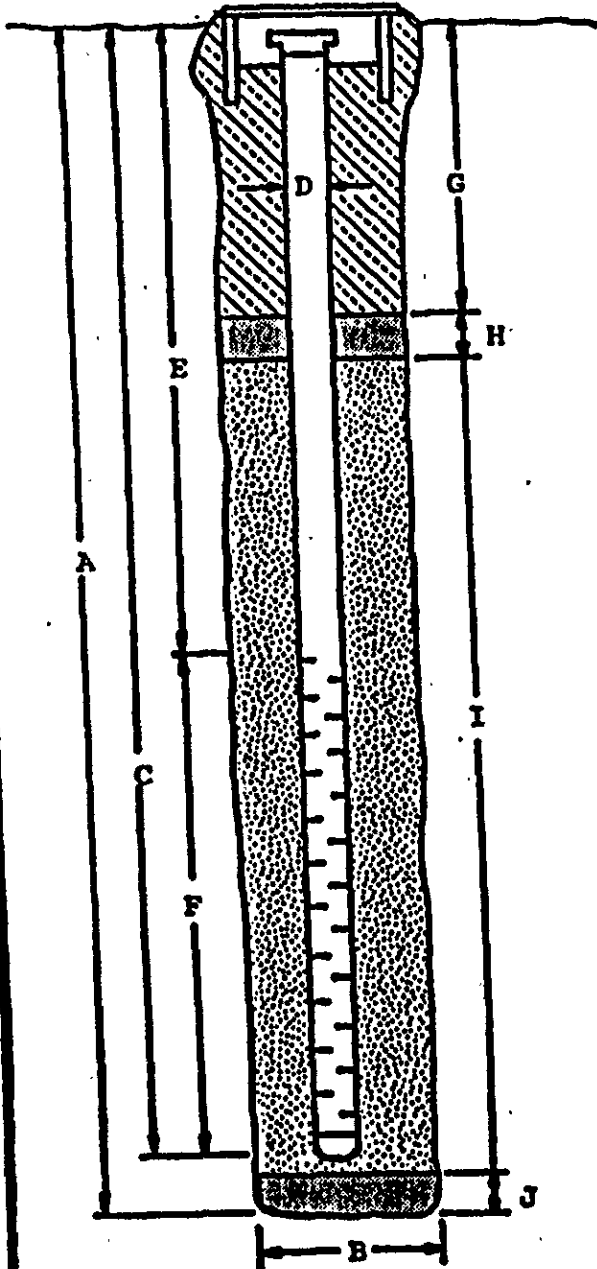
PROJECT NUMBER: _____

CASING ELEVATION: _____

WELL PERMIT NO.: _____

SURFACE ELEVATION: _____

G-5 Vault Box



- A. Total Depth: 29'
- B. Boring Diameter: 8"
- Drilling method: H/S Auger
- C. Casing Length: 29'
- Material: PVC
- D. Casing Diameter: 2"
- E. Depth to Perforations: 9'
- F. Perforated Length: 20'
- Perforated Interval: 29'-9'
- Perforation Type: Factory Slot
- Perforation Size: 0.020"
- G. Surface Seal: 5'-0'
- Seal Material: Grout
- H. Seal: 7.5'-5'
- Seal Material: Bentonite
- I. Gravel Pack: 29'-7.5'
- Pack Material: Monterey Sand
- Size: #3
- J. Bottom Seal: _____
- Seal Material: _____