

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



July 17, 1997

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

StId 1962

Barry Gallagher
One Kaiser Plaza, Suite 2450
Oakland CA 94612-3685

Dear Mr. Gallagher:

Subject: Fuel Leak Site Case Closure - (Formerly) Forni Corporation, 3600 Depot Rd., Hayward CA 94545

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 225299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, Alameda County, Division of Environmental Health Local Oversight Program is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release(s) at the subject site.

Site Investigation and Cleanup Summary

Please be advised that the following conditions exist at the site:

- 5.1 parts per million (ppm) Total Petroleum Hydrocarbons (TPH) as gasoline, 0.060 ppm benzene, 0.026 ppm toluene, 0.012 ppm ethylbenzene, and 0.35 ppm xylene remain in soil in the vicinity of the former UST pit and dispenser area.
- 2,000 parts per billion (ppb) TPH as gasoline, 140 ppb benzene, 11 ppb toluene, 94 ppb ethylbenzene, and 120 ppb xylenes are the maximum concentrations detected in groundwater during the sampling period from December 1994 to September 1996.

If you have any questions, please contact this office at (510)567-6700.

Sincerely,

Amy Leech
Hazardous Materials Specialist

Enclosures:

1. Case Closure Letter
2. Case Closure Summary

c: William and Patsy Wheat, 28072 Sandalwood Dr., Hayward CA 94545 (encl.-Case Closure Summary)
Alameda County Planning Department (QIC #50506)
ALL-file

ALAMEDA COUNTY
HEALTH CARE SERVICES

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July 17, 1997

Barry Gallagher
One Kaiser Plaza, Suite 2450
Oakland CA 94612-3685

**RE: UNDERGROUND STORAGE TANK (UST) CASE
(2-4,000 gallon gasoline USTs)
(Formerly) Forni Corporation, 3600 Depot Rd., Hayward CA 94545
SITE ID #1962**

Dear Mr. Gallagher:

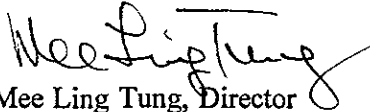
This letter confirms the completion of a site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Section 2721(e) of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,


Mee Ling Tung, Director

c: Kevin Graves, RWQCB
Dave Deaner, UST Cleanup Fund (encl.-Case Closure Summary)
ALL-File

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program
 Page 1 of 4

01-0655
ORIGINAL FILE COPY

Department of Environmental Health

MAY 01 1997

I. AGENCY INFORMATION
 Agency name: **Alameda County-HazMat** Date: **January 10, 1997**
 Date/City/State/Zip: **Alameda, CA 94502** Address: **1131 Harbor Bay Pkwy**
 Responsible staff person: **Amy Leech** Phone: **(510) 567-6700**
 Title: **Hazardous Materials Spec.**

II. CASE INFORMATION
 Site facility name: **(Formerly) Forni Corporation**
 Site facility address: **3600 Depot Rd., Hayward CA 94545**
 RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **1962**
 URF filing date: **04/05/92 (?)** SWEEPS No: **N/A**

<u>Responsible Parties:</u>	<u>Address:</u>	<u>Phone Numbers:</u>
Barry Gallagher	One Kaiser Plaza, Suite 2450 Oakland CA 94612-3685	(510)836-1266

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	4,000	gasoline	removed	03/10/92
2	4,000	"	"	"

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **unknown**

Site characterization complete? **Yes**

Monitoring Wells installed? **Yes** Number: **3**

Proper screened interval? **Yes**

Highest GW depth below ground surface: **7.34 ft** Lowest depth: **8.24 ft (MW-2)**

Flow direction: **Westerly**

Most sensitive current use: **Commercial**

Are drinking water wells affected? **No** Aquifer name: **N/A**

Is surface water affected? **No** Nearest affected SW name: **N/A**

Off-site beneficial use impacts (addresses/locations): **none**

Report(s) on file? **YES** Where is report(s) filed?
Alameda County, 1131 Harbor Bay Pkwy, Alameda, CA 94502

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tanks	2-4,000 gallon USTs	Erickson, 255 Parr Blvd., Richmond CA	03/11/92
Rinsate	1,000 gallons	Evergreen, 6880 Smith Ave., Newark CA	03/19/92

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (cont'd)

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before ¹	After ²	Before ³	After ⁴
TPH (Gasoline)	2,200	5.1	16,000	2,000
Benzene	15	0.060	460	140
Toluene	18	0.026	470	11
Ethylbenzene	26	0.012	470	94
Xylene	130	0.35	2,000	120
MTBE	NT	NT	NT	29

NT=not tested

- 1 "Before" soil sample (WSW) collected from western side-wall of UST pit after limited overexcavation in 3/92.
- 2 "After" soil sample (RX-S4) collected in 11/94 after overex. of soil in the vicinity of the former tank pit in 7/96.
- 3 "Before" water represents the max conc. of "grab" samples collected from borings EB1-EB3 in 11/94 (prior to overex.).
- 4 "After" water represents the max. conc. since 1995 identified during groundwater monitoring of wells MW1-MW3 (subsequent to overex.).

Comments (Depth of Remediation, etc.): See "Additional Comments" section.

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: **If a change in land use is proposed or excavation of soils is planned at this site, then an evaluation of risk from exposure to contaminated soil and groundwater must be made.**

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

Monitoring wells Decommissioned: **Pending case closure approval.**
 Number Decommissioned: **0** Number Retained: **3 (MW1-MW3)**

List enforcement actions taken: **n/a**
 List enforcement actions rescinded: **n/a**

V. ADDITIONAL COMMENTS

On March 10, 1992, two 4,000-gallon gasoline underground storage tanks (USTs) were removed from the property located at 3600 Depot Road in Hayward CA. (See attachment 1 for site location.) Floating product was observed on water that was present in the excavation when the tanks were uncovered. This water was later determined to be caused from a water supply pipe leak rather than groundwater infiltration. Soil samples were collected in the tank pit subsequent to tank removal and after limited overexcavation. Up to 2,200 ppm TPH-G and 15, 18, 130, 26 ppm BTXE, respectively, were detected in the west side-wall sample (WSW) of the excavation. This area was also beneath the former dispenser pump and adjacent to the property boundary. (See attachment 2 for site layout and soil results.)

V. ADDITIONAL COMMENTS (cont'd)

Excavated soil was apparently stockpiled on site for future remediation and the excavation was subsequently back-filled with soil materials generated from concrete manufacturing.

On September 15, 1994, a preliminary site assessment was completed to determine the vertical and lateral extent of soil and groundwater contamination. Three borings (EB1-EB3) were advanced on the westerly adjacent property immediately west of the former USTs. Insignificant concentrations of TPH-G and BTEX were detected in all soil samples collected from 5 to 11.5 ft, the deepest depth explored. TPH-G and BTEX were detected in all "grab" groundwater samples collected from all borings; up to 16,000 ppb TPH-G and 460 ppb benzene were identified. (See attachment 3 for boring locations and results.)

Additional impacted soil was excavated west of the UST pit, including the former pump dispenser area, in November 1994. The excavation extended from the limits of the original tank removal excavation and progressed laterally and vertically (12 ft. bgs) based on visual observations. Unremarkable levels of petroleum hydrocarbons (up to 5.1 ppm TPH-G and 0.060 ppm benzene) were identified in the confirmation samples (RX-S1 through RX-S5) collected at the perimeter of the excavation. Groundwater was encountered at 11 ft. bgs in the excavation. (See attachment 3 for sample locations and results.)

The excavations was back-filled with "clean" imported soil materials. The total quantity of soil removed from the former gasoline UST pit was not reported. However, it was apparently combined with existing stockpile soil on site which had been excavated as a result of an above-ground diesel spill which occurred at this site in February 1988. Approximately 510 cubic yards of stockpile soil was remediated on site via ex-situ biological treatment. Analytical results of soil samples collected from the stockpile in July 1995, identified unremarkable concentrations of TPH-D, TPH-G, and BTEX. This soil was apparently reused on site as top soil.

Subsequent to the 1994 overexcavation project of the gasoline UST pit, three monitoring wells (MW1-MW-3) were installed at the site. One was located in the proximity of the former UST pit and two wells were located westerly and downgradient of the UST pit on the adjacent property. Groundwater was first encountered from 9 to 10 ft. bgs. Soil samples were not collected for laboratory analysis. TPH-G and BTEX were detected in groundwater samples collected from all three wells. (See attachment 4 for well locations and boring logs.)

Groundwater was sampled and analyzed five times from December 1994 through September 1996. Groundwater flow at this site is westerly. Up to 2,000 ppm TPH-G and 140/11/94/120 ppm BTEX, respectively, have been detected in groundwater since the overexcavation was performed in 11/94. (See attachment 5 for historical groundwater results.)

To assess the potential risk to human health from exposure to residual soil and groundwater contamination at this site and the adjacent property located immediately west, a RBCA analysis was performed in accordance with the ASTM E1739-95. Based on this analysis, there is no significant risk to human health from the residual levels of benzene in soil and groundwater at this site based on the current commercial land-use and site configuration.

No further investigations are recommended since this site appears to meet the San Francisco RWQCB's definition of a low risk groundwater case:

1. The source of contamination was abated by removal of the UST and overexcavation of contaminated soil in the vicinity of the abandoned UST pit.
2. The extent of impact to soil and groundwater has been evaluated at this site by analysis of multiple soil and groundwater samples collected within and in the vicinity of the UST pit.
3. Analytical groundwater data collected five times over two years has shown that the dissolved hydrocarbon plume is stable and is expected to attenuate with time.

V. ADDITIONAL COMMENTS (cont'd)

4. The residual contamination left in soil and groundwater at this site is not expected to significantly impact water wells, deeper drinking water aquifers, surface water, or other sensitive receptors. Shallow groundwater at this site is not used for municipal or domestic purposes.
5. Based on a RBCA modified Tier-1/Tier-2 analysis, there is no significant risk to human health (commercial exposure scenario with 1×10^{-4} excess cancer risk) from the residual levels of benzene in soil and groundwater at this site with the current land-use and site configuration. There are currently no buildings or structures over the soil and groundwater contaminant plume.
6. It does not appear that sensitive ecological receptors are currently impacted by the petroleum hydrocarbon release from this site; therefore, an environmental risk analysis was not performed.

A risk management strategy should be developed to:

- If appropriate, mitigate any potential negative impacts posed by the residual contamination remaining on site (e.g., install vapor barriers beneath new building construction).
- Develop a strategy to address any risk posed to the construction or utility worker exposure during earth moving activities in the vicinity of the former tank pit.
- Take precautions to avoid making vertical or lateral conduits that may cause cross contamination between the shallow and deeper aquifers.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Name: Amy Leech

Signature: 

Title: Hazardous Materials Specialist

Date: 3/28/97

Reviewed by

Name: Madhulla Logan

Signature: 

Title: Hazardous Materials Specialist

Date: 3/21/97

Name: Thomas Peacock

Signature: 

Title: Supervising, Hazardous Materials Spec.

Date: 3-27-97

VII. RWQCB NOTIFICATION

Date Submitted to RB:

RWQCB Staff Name: Kevin Graves, P.E.

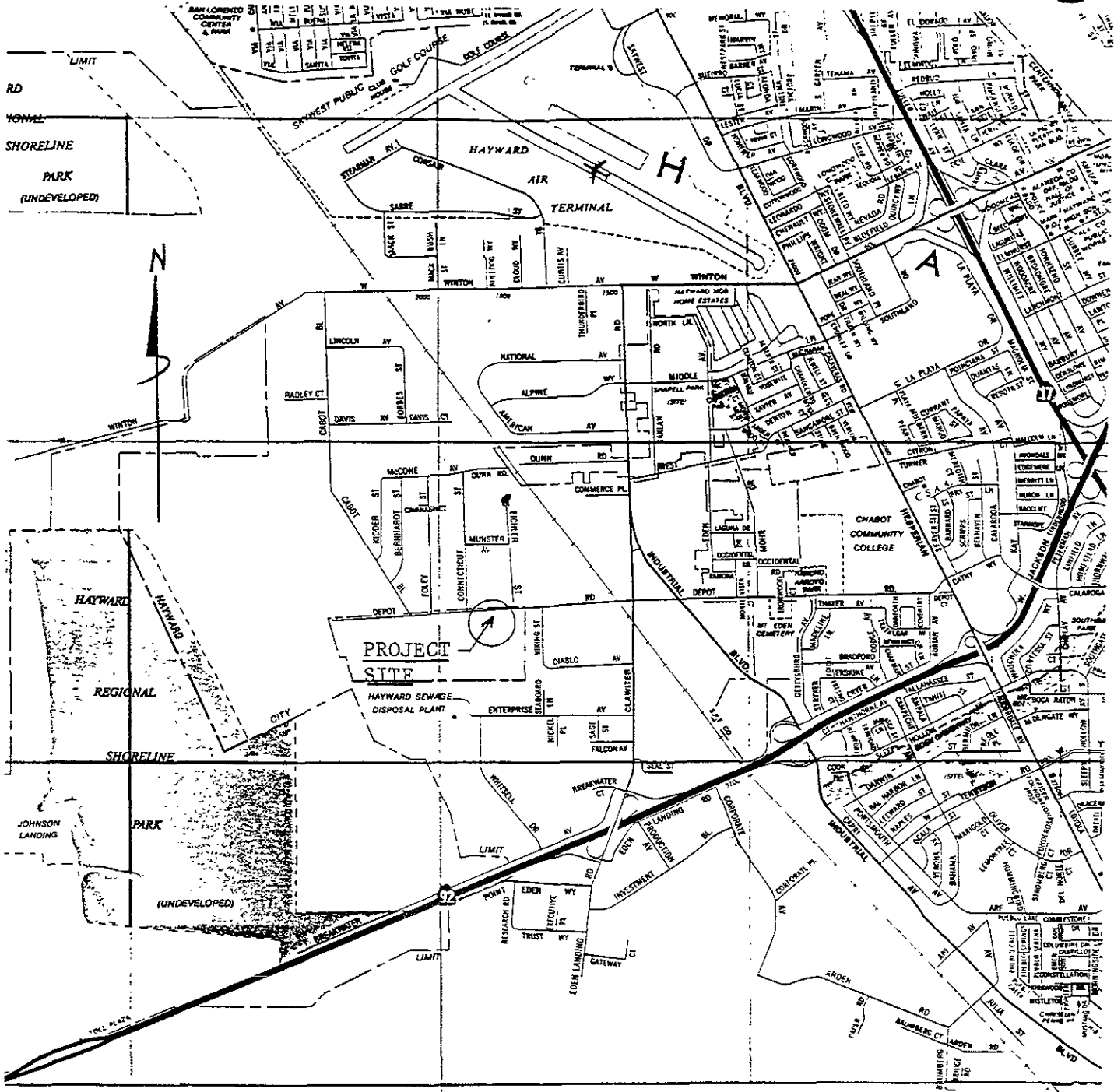
Title: Assoc. Water Resources Control Engineer

RB Response: 

Signature:

Date:

**Note: Copy of Case Closure Summary and Remedial Action Completion Certificate should be copied to the owner of the adjacent property (3636 Depot Rd., Hayward CA 94545. William J. and Patsy R. Wheat are the property owners of parcel #439-75-13-2 located at 3636 Depot Road in Hayward. Their mailing address is 28072 Sandalwood Dr., Hayward CA 94545.



1

SOURCE: CSAA

FORNI CORPORATION		
DATE 2/10/93	SCALE n/a	DRAWN BY dcb
LOCATION MAP		
		Figure 1

GeoPlexus, Inc.

DEPOT ROAD

SALES OFFICE

MAIN OFFICE BLD.

NOTE:

SAMPLE
1TXN
1TXS
2TXN
2TXS
ESW
SSW
WSW
NSW

TPHg
CONCENTRATION (ppm)
490
480
N.D.
6.6
4.1
6.6
2,200
1.5

FRAME & COVERS AR

LIMITS OF EXCAVATION

STORAGE BIN.

NSW

1TXN

1TXS

2TXN

2TXS

SSW

WSW

ORIGINAL EXCAVATION

PARKING

FENCE



SOURCE: KTW & ASSOCIATES CLOSURE REPORT

FORNI CORPORATION

DATE 2/10/93	SCALE n/a	DRAWN BY dcb
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Figure 4

FORN CORPORATION
SPOT ROAD, HAYWARD, CALIFORNIA

TABLE I

SOIL SAMPLES	DATE	TPH-G	B	T	X	E	6010	7240
1TXN	3/10/92	490	1.7	1.4	21	8.90	6.1	N/A
1TXS	3/10/92	480	N.D.	1.1	14	8.60	5.8	N/A
2TXN	3/10/92	N.D.	0.025	0.013	0.021	0.013	3.9	N/A
2TXS	3/10/92	0.6	0.08	0.041	0.07	0.016	4.8	N/A
SSW	3/12/92	6.6	0.19	0.026	0.009	0.15	N/A	62
WSW	3/12/92	2200	15	18	130	26	N/A	42
ESW	3/12/92	4.1	0.19	0.042	0.11	0.011	N/A	5
NSW	3/12/92	1.5	0.09	0.022	0.072	0.028	N/A	3.5
EXB	3/12/92	30	0.38	0.68	1.2	0.3	N/A	3

initial

even excavation

WSW calculated adjacent to west property boundary

ABBREVIATIONS

TPH-G TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
 TPH-D TOTAL PETROLEUM HYDROCARBONS AS DIESEL
 B BENZENE
 T TOLUENE
 X XYLENES
 E ETHYLBENZENE
 6010 ICP METALS
 7240 AA TOTAL LEAD
 N.D. NON-DETECTED
 N/A NOT APPLICABLE

NOTE: ALL SOIL SAMPLES ARE MEASURED IN PARTS PER MILLION (PPM)

NOTE: ALL SOIL SAMPLES ACQUIRED DURING TANK REMOVAL ACTIVITIES AND OVEREXCAVATION ACTIVITIES WERE TAKEN AT THE STAND WATER INTERFACE (+/- 7.0 FEET)

GeoPlexus, Inc.

2

11/94 Confirmation Samples after overexcavation
TABLE 1
SUMMARY OF REMEDIAL ACTION ANALYTICAL TEST DATA
 (concentrations in parts per million)

Sample No.	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
RX-S1	ND	ND	ND	ND	ND
RX-S2	ND	0.021	ND	0.008	0.007
RX-S3	ND	ND	ND	0.011	0.017
RX-S4	5.1	0.060	0.026	0.12	0.35
RX-S5	1.3	0.011	0.009	0.012	0.031

Note: ND - indicates constituents not detected.

The excavation has subsequently been backfilled with clean imported soil materials.

TABLE 1

SUMMARY OF SOIL BORING ANALYTICAL TEST DATA

Sample	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
EB1-S1, 5-6.5'	N.D.	0.009	N.D.	N.D.	0.010
EB1-S2, 10-11.5'	N.D.	N.D.	N.D.	N.D.	0.010
EB2-S1, 5-6.5'	N.D.	N.D.	N.D.	N.D.	N.D.
EB2-S2, 10-11.5'	22	0.02	0.043	0.27	1.0
EB3-S1, 10-11.5'	N.D.	0.022	N.D.	0.006	0.017

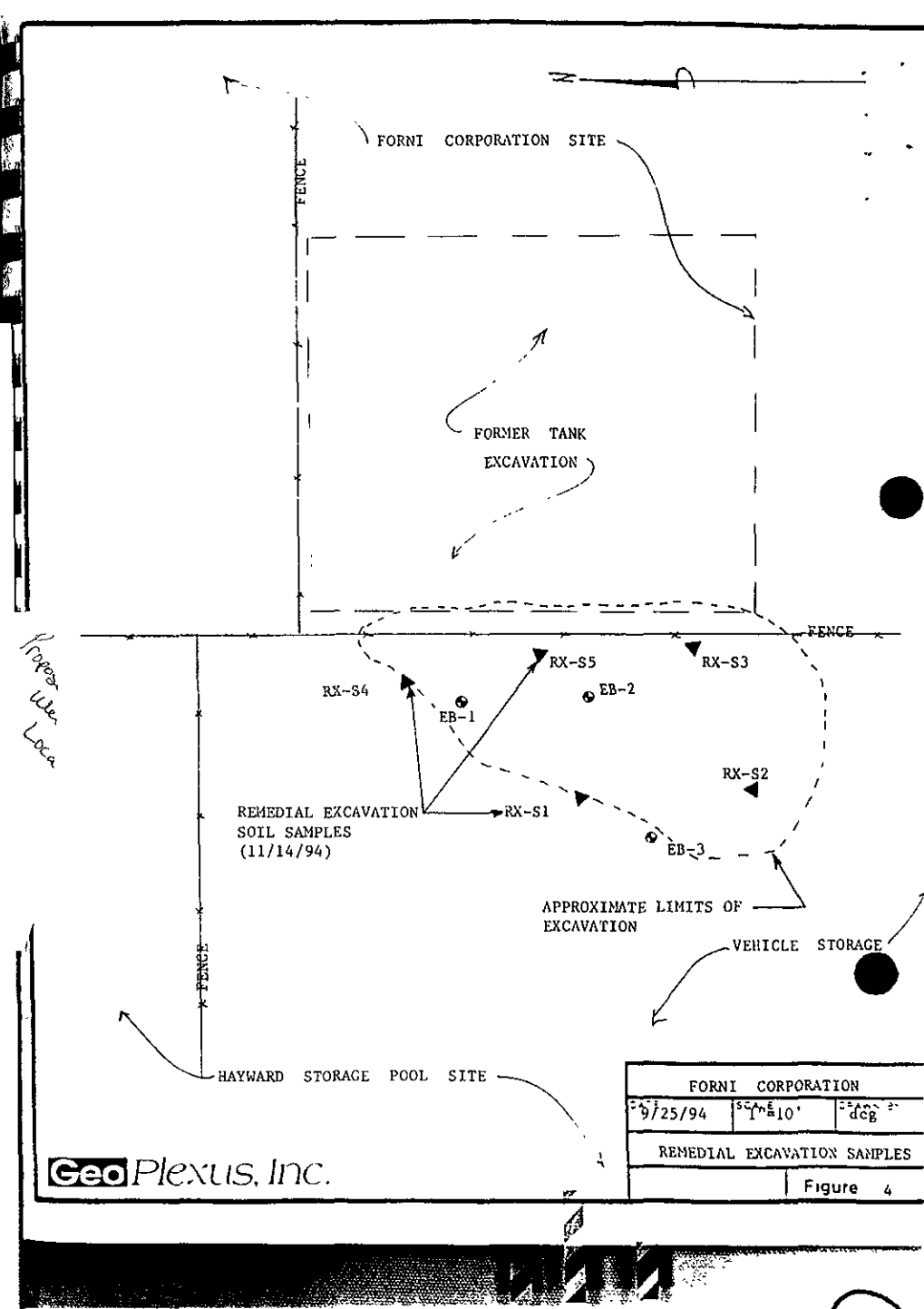
Note: Concentrations in parts per million (mg/kg).
 ND- Indicates compound not detected

TABLE 2

SUMMARY OF GROUND WATER SAMPLE ANALYTICAL TEST DATA

Sample	Total Petroleum Hydrocarbons	Benzene	Toluene	Ethyl-Benzene	Total Xylenes
Soil Borings					
EB1-WS1	6,800	200	180	290	870
EB2-WS1	16,000	190	470	470	2,000
EB3-WS1	6,600	460	220	220	770

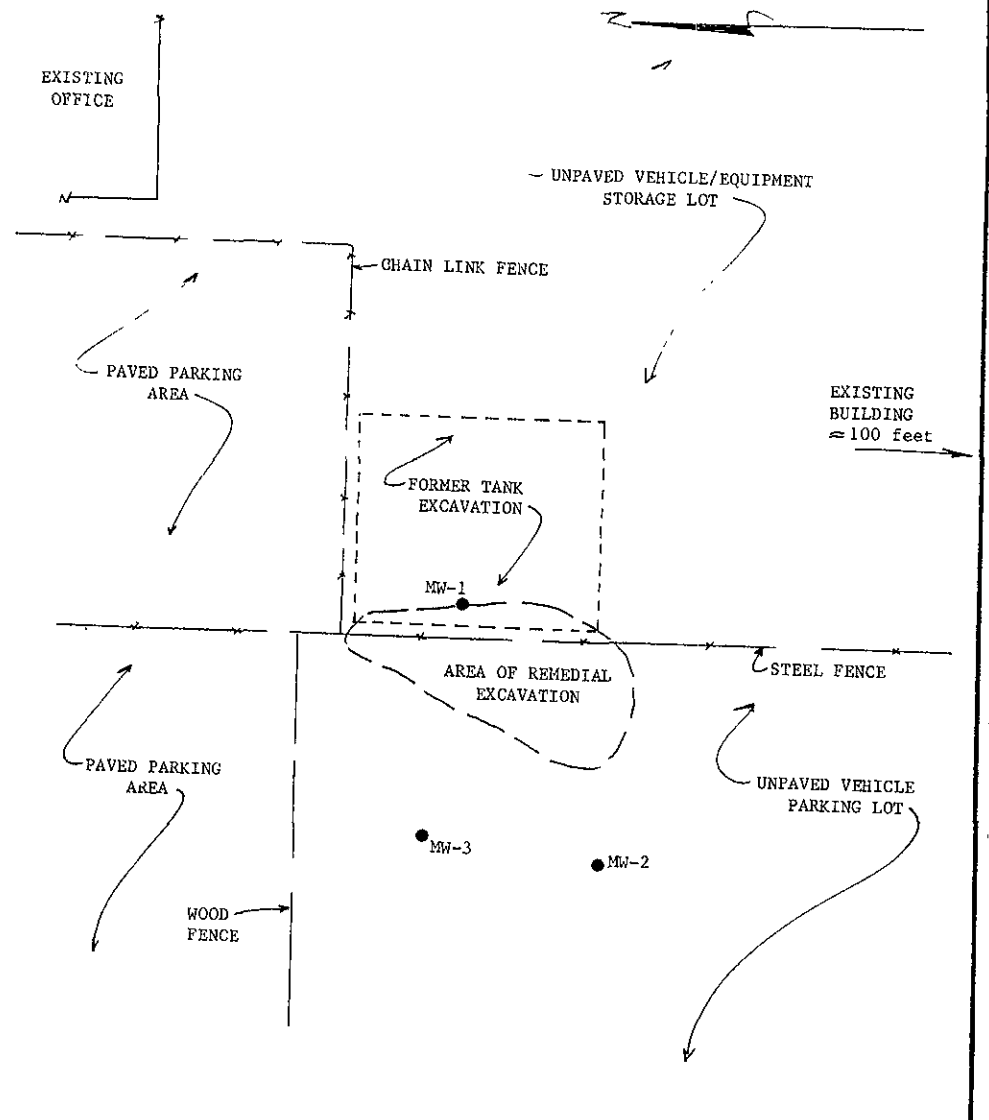
Note: Concentrations in parts per billion (ug/l).



GeoPlexus, Inc.

FORNI CORPORATION		
9/25/94	SCALE 10'	dwg
REMEDIAL EXCAVATION SAMPLES		
Figure 4		

(W)

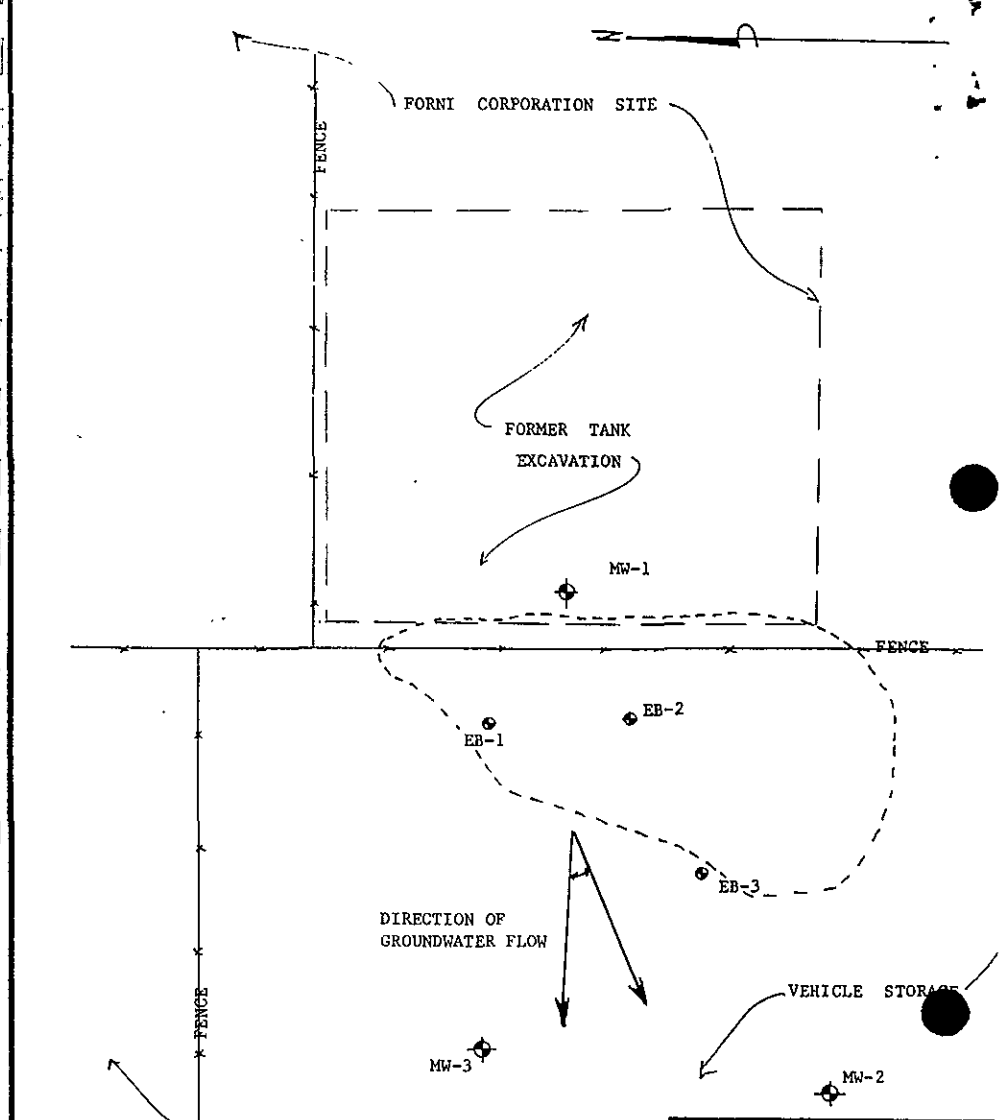


EXISTING BLDG
≈ 250 feet

Scale
~ 20 ft

Forni CORPORATION		
DATE 11/10/96	SCALE 1"=20'	DRAWN BY dcg
PROJECT SITE AREA MAP		
Figure 6		

GeoPlexus, Inc.



Scale
~ 10 ft.

Forni CORPORATION		
DATE 11/10/96	SCALE 1"=10'	DRAWN BY dcg
GROUND WATER FLOW DIRECTION		
Figure 5		

GeoPlexus, Inc.

BORING LOG

LOCATION FORNI CORPORATION

DATE 11/30/94 4

DRILLER Exploration Geoservices

BORING No. MW-1

DEPTH (ft.)	DESCRIPTION	U.S.C.	OVM/PID	WELL DESIGN		SAMPLE	BLOW COUNT	COMMENTS
				grout	casing			
5	<u>GRAVELLY SAND</u> , (FILL) with concrete rubble, moist, medium dense	GP		b				
10	<u>SILTY CLAY</u> , gray-brown, firm, moist	CH	7.5	#2/12 sand	0.010 slot			
10	<u>SAND</u> , fine-grained, green, saturated, loose	SP				S1	18	
10	<u>SILTY CLAY</u> , brown, wet, firm	CH	6.5					
15	<u>SILTY CLAY</u> , dark-brown, dry, stiff		1.6			S2	39	
	Bottom of Boring 15.0 feet							



BORING LOG

(4)

LOCATION FORNI CORPORATION

DATE 11/30/94

DRILLER Exploration Geoservices

BORING No. MW-2

DEPTH (ft.)	DESCRIPTION	U.S.G.	OVM/PID	WELL DESIGN	SAMPLE	BLOW COUNT	COMMENTS
5	<u>SANDY GRAVEL (FILL)</u> , light-gray, moist, dense	GP	2.2	#2/12 sand 0.010 slot	S1	35	Below 10.5 to 15.0 feet backfilled with bentonite
	<u>SILTY CLAY</u> , dark-gray, moist, stiff	CL					
	<u>SILTY SAND</u> , olive-green, moist, dense	SM					
10	<u>SILTY CLAY</u> , medium-brown, moist, stiff	CH	2.2		S2	19	
15	<u>SILTY CLAY</u> , medium-brown, dry, stiff	CH	2.1	//	S3	39	
	Bottom of boring 16.5 feet. Boring backfilled to 15.0 feet with bentonite.						

BORING LOG

LOCATION FORNI CORPORATION

DATE 11/30/94 4

DRILLER Exploration Geoservices

BORING No. MW-3

DEPTH (ft.)	DESCRIPTION	U.S.C.	OVM/PID	WELL DESIGN	SAMPLE	BLOW COUNT	COMMENTS	
	<u>SANDY GRAVEL (FILL)</u> , light-gray, moist, dense	GP		b grout casing				
5	<u>SILTY CLAY</u> , dark-gray, moist, stiff	CL	0.5					
	<u>SILTY CLAY</u> , olive-green, moist, stiff	CH				S1	36	
10	<u>SAND</u> , fine-grained, brown, saturated, loose	SM	2.1	#2/12 sand 0.010 slot				
	<u>SILTY CLAY</u> , medium-brown, moist, stiff	CH				S2	28	
15			1.7			S3	38	
	Bottom of Boring 15.0 feet.							

TABLE 1

SUMMARY OF GROUND WATER ANALYTICAL TEST DATA

Sample	TPH	Benzene	Toluene	Ethylbenzene	Total Xylenes
<u>MW-1</u>					
12-15-94	870	43	4.1	27	74
3-17-95	710	43	2.7	33	40
6-22-95	480	28	1.4	15	22
9-26-95	760	51	2.4	47	32
9-23-96	580	37	2.4	38	21
<u>MW-2</u>					
12-15-94	5800	140	88	180	830
3-17-95	2000	140	11	94	120
6-22-95	800	57	8.5	47	58
9-26-95	490	34	2.7	30	23
9-23-96	330	23	0.69	32	12
<u>MW-3</u>					
12-15-94	2200	49	16	80	320
3-17-95	600	26	2.9	43	69
6-22-95	750	29	2.1	58	32
9-26-95	280	6.3	0.52	12	7.0
9-23-96	340	3.6	0.69	9.1	16

DTW
 8.83 SW
 8.47 NW
 9.04 W
 9.23 W
 9.25 W
 7.56
 7.34
 7.97
 8.20
 8.24
 7.74
 7.54
 8.13
 8.33
 8.37

Note: Concentrations in parts per billion (ug/l).
 TPH - Total Petroleum Hydrocarbons as gasoline.