

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



SENT
04-28-06

April 25, 2006

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

Mr. Peter Puckett
Berkeley Farms
P.O. Box 4616
Hayward, CA 94540-4616

Ms. Carol Light
Emeryville Farms, LLC
1201 Park Avenue
Emeryville, CA 94608-3632

Ms. Natasha Moiseyev
4550 San Pablo LLC/Peter and Leslie Matthews Trust
1450 El Camino Avenue
Menlo Park, CA 94025

Dear Mr. Puckett, Ms. Light, and Ms. Moiseyev:

Subject: Fuel Leak Site Case Closure; Berkeley Farms, 4550 San Pablo Avenue, Emeryville, CA;
Case No. RO0000248

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) 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 at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

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

- Residual concentrations of up to 1,300 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons as diesel remain in soil at the site.
- Residual concentrations of up to 1,275 micrograms per liter ($\mu\text{g/L}$) of total petroleum hydrocarbons as gasoline remain in groundwater at the site.
- Residual concentrations of up to 8,450 $\mu\text{g/L}$ of total petroleum hydrocarbons as diesel remain in groundwater at the site.

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

Donna L. Drogos, P.E.
LOP and Toxics Program Manager

Enclosures:

1. Remedial Action Completion Certificate
2. Case Closure Summary

cc:

Ms. Cherie McCaulou (w/enc)
SF- Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Toru Okamoto (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120

Mr. Ignacio Dayrit (w/enc)
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608-3517

Mr. Mansour Sepehr (w/enc)
Soma Environmental Engineering, Inc.
6620 Owens Drive, Suite A
Pleasanton, CA 94588-3334

Jerry Wickham (w/orig enc), D. Drogos (w/enc), R. Garcia (w/enc)

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REMEDIAL ACTION COMPLETION CERTIFICATE

Dear Mr. Puckett, Ms. Light, and Ms. Moiseyev:

Subject: Fuel Leak Site Case Closure; Berkeley Farms, 4550 San Pablo Avenue, Emeryville, CA;
Case No. RO0000248

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks 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, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

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

Sincerely,

William W. Pitcher
William Pitcher
Interim Director
Alameda County Environmental Health

**CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM**

I. AGENCY INFORMATION

Date: April 6, 2006

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: Berkeley Farms		
Site Facility Address: 4550 San Pablo Avenue, Emeryville, CA 94608		
RB Case No.: 01-2259	Local Case No.: 6558	LOP Case No.: RO0000248
URF Filing Date: 09/11/1998	SWEEPS No.: ---	APN: 049-1174-031-03
Responsible Parties	Addresses	Phone Numbers
Peter Puckett Berkeley Farms	P.O. Box 4616, Hayward, CA 94540-4616	510-265-8600
Carol Light Emeryville Farms, LLC	1201 Park Avenue, Emeryville, CA 94608-3632	
4550 San Pablo LLC and Peter and Leslie Matthews Trust	1450 El Camino Avenue, Menlo Park, CA 94025	

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	10,000 gallons	Diesel	Removed	09/11/1988
2	10,000 gallons	Gasoline	Removed	09/11/1988
3	2,000 gallons	Fuel Oil	Removed	2/4/1999
Piping			Removed	09/11/1998

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown. No holes, cracks, or other signs of failure were observed in the tanks during removal.		
Site characterization complete? Yes	Date Approved By Oversight Agency: ----	
Monitoring wells installed? Yes	Number: 2	Proper screened interval? --
Highest GW Depth Below Ground Surface: 4 feet	Lowest Depth: 8 ft.	Flow Direction: West Northwest
Most Sensitive Current Use: Potential Drinking water source.		

Summary of Production Wells in Vicinity: Based on well survey information from adjacent site at 4343 San Pablo Avenue, no water supply wells are within ½ mile of the site.

Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: San Francisco Bay 3,200 feet to west
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	Two - 10,000 gallon tanks	Transported to Erickson, Inc., Richmond, CA for disposal	09/11/1998
	One - 2,000 gallon tank	Transported to Erickson, Inc., Richmond, CA for disposal	2/4/1999
Piping	150 feet	Transported to Erickson, Inc., Richmond, CA for disposal	09/11/1998
Free Product	200 gallons of water with oil sheen	Transported to Alviso Independent, Inc, in Alviso, CA for disposal	09/10/1988
Soil	1,152 cubic yards	Transported to Forward Landfill in Manteca, CA for disposal	9/25/1998 through 10/23/1998
Groundwater	33,000 gallons	Transported to Seaport Environmental, Inc. in Redwood City, CA for disposal	10/1/1998

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
 (Please see Attachments 1 through 6 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	22	<0.1	1,275	1,275
TPH (Diesel)	6,700	1,300	447,000(1)	8,450(1)
TPH (Motor Oil)	120	120	<10	<10
Oil and Grease	NA	NA	NA	NA
Benzene	2.1	<0.005	42	42
Toluene	1.3	<0.005	132	132
Ethylbenzene	0.77	<0.005	40	40
Xylenes	3.7	<0.005	199	199
Heavy Metals	110(2)	110(2)	NA	NA
MTBE	<0.1	<0.1	180(3)	180(3)
Other (8240/8270)	0.34(4)	0.34(4)	13(5)	13(5)

- (1) The maximum concentration before cleanup of 447,000 ppb of TPHd was detected during the initial sampling of well MW-1 on March 4, 1998. The maximum concentration after cleanup is from the most recent groundwater sampling event on December 13, 2000.
- (2) Total lead; all other metals were within range of ambient concentrations.
- (3) Maximum MTBE concentration by EPA Method 8020 was 180 ppb. Maximum MTBE concentration confirmed by EPA Method 8260 was 70 ppb. No other fuel oxygenates analyzed. 1,2-dichloroethane was <0.5 ppb.
- (4) Phenol; no other VOCs, SVOCs, ammonia, or PCBs detected in soil.
- (5) Bis(2-ethylhexyl)phthalate detected at 13 ppb; 1,2,4-trimethylbenzene detected at 2.2 ppb; 1,3,5-trimethylbenzene detected at 2.0 ppb; fluorene detected at 12 ppb; phenanthrene detected at 13 ppb; and pyrene detected at 5.5 ppb; no other VOCs or SVOCs detected in groundwater.

Site History and Description of Corrective Actions:

The site operated as a dairy facility from approximately 1946 to December 1997. Currently, a two-story building occupies the northwestern portion of the property and the remainder of the site is paved. One 10,000-gallon gasoline underground storage tank (UST) and one 10,000-gallon diesel UST were removed from the site in September 1998. Although no holes were observed in the USTs, obvious contamination was observed in soil and groundwater in the tank excavation. Soil samples collected from the tank pit on September 14, 1998 contained up to 6,700 milligrams per kilogram (MG/kg) of total petroleum hydrocarbons as diesel (TPHd). TPHg was detected in only one of 7 soil samples at a concentration of 2.1 mg/kg. Approximately 1,152 cubic yards of soil were overexcavated from the north, south, and west sidewalls of the tank excavation in September 1998. The soils were disposed off-site at the Forward Landfill in Manteca, CA. Soil was also excavated along the former product piping trenches and the former dispenser island area. Confirmation soil samples collected from the tank pit on September 25, 1998 contained 59 to 770 mg/kg of TPHd. Confirmation soil samples collected from the product piping trenches did not contain TPHd or TPHg at detectable concentrations.

Two monitoring wells were installed on site in March 1999. Well MW-1 was located in the source area within 5 feet of the former tank excavation. Well MW-2 was located approximately 130 feet west northwest (downgradient) of the former tank excavation. Three off-site monitoring wells were installed downgradient of the site on the former Berkeley Farms truck maintenance facility and yard to the west across San Pablo Avenue. Two of the three off-site monitoring wells provide data for leaking fuel case RO000245, which addresses a former waste oil tank at the former Berkeley Farms truck maintenance facility at 4575 San Pablo Avenue. The third off-site monitoring well provides data for leaking fuel case RO0002452 to address former fuel tanks at 4501 San Pablo Avenue. The on-site and off-site monitoring wells were sampled quarterly from March 1999 to December 2000. During the December 2000 groundwater monitoring event, TPHg and benzene were detected in groundwater from the source area well (MW-1) at concentrations of 1,275 and 42 ppb, respectively. Within the downgradient portion of the plume (MW-2), the concentrations of TPHg and benzene in groundwater decreased to 322 and 10 ppb, respectively. During the December 2000 groundwater monitoring event, TPHd was detected in groundwater at a concentration of 8,450 ppb in the source area well (MW-1) and 188 ppb in the downgradient well (MW-2). The two on-site monitoring wells were decommissioned in July 2001.

A Supplemental Site Investigation, consisting of sampling and analysis of six soil borings, was conducted at the site in December 1999 to investigate the potential for contamination from chemicals other than fuels that were used in the dairy operations. No VOCs, BTEX, TPHg, ammonia, nitrate, nitrite, or PCBs were detected in the soil samples. Phenol was the only SVOC detected at a concentration of 0.34 mg/kg. Lead was the only metal detected at a concentration above ambient levels at a concentration of 110 mg/kg in one soil sample.

A 2,000-gallon fuel oil tank was removed on February 4, 1999. Two soil samples were collected from the north and south sidewalls of the tank excavation. Fuel hydrocarbons were not detected in the soil samples and no further excavation was considered warranted.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? --		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? --		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: Case closure for the fuel leak site is granted for commercial land use only. If a change in land use to residential or other conservative scenario occurs at this property, Alameda County Environmental Health must be notified and the case needs to be re-evaluated. These site management requirements are to be entered into the City of Emeryville's OSIRIS (One Stop Interactive Resource Information System) Map Server.		
Should corrective action be reviewed if land use changes? Yes		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: Yes	Number Decommissioned: 2	Number Retained: 0
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

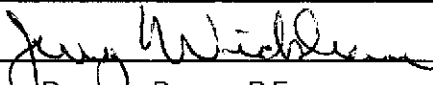
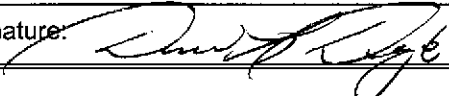
TAME, ETBE, DIPE, TBA, and EDC not analyzed.

Residual TPH as gasoline and TPH as diesel remain in shallow groundwater at concentrations exceeding ESLs in the area of the former USTs and a limited area downgradient from the former gasoline and diesel USTs. However, based on the low concentrations of aromatic fuel hydrocarbons and limited extent of the plume, degradation of fuel hydrocarbons appears to be occurring. Therefore, TPH concentrations in soil and groundwater and the size of the plume are expected to decrease over time due to natural attenuation processes.

Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Jerry Wickham	Title: Hazardous Materials Specialist
Signature: 	Date: 04/28/06
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: 	Date: 04/28/06

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB: 4/6/06
Signature: <i>Cherie McCaulou</i>	Date: 4/13/06

VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: Not requested	Date of Well Decommissioning Report: 8/16/2001	
All Monitoring Wells Decommissioned: Yes	Number Decommissioned: 2	Number Retained: 0
Reason Wells Retained: --		
Additional requirements for submittal of groundwater data from retained wells: --		
ACEH Concurrence - Signature: <i>Jerry Wiselwan</i>	Date: 04/25/2006	

Attachments:

1. Site Vicinity Map
2. Potentiometric Surface Map (3/12/1999)
3. Sample Location Map (Figure 2); Location of Supplemental Soil Borings (Figure 4); Site Plan (Figure 1)
4. Soil Analytical Data
5. Groundwater Analytical Data
6. Boring Logs

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.

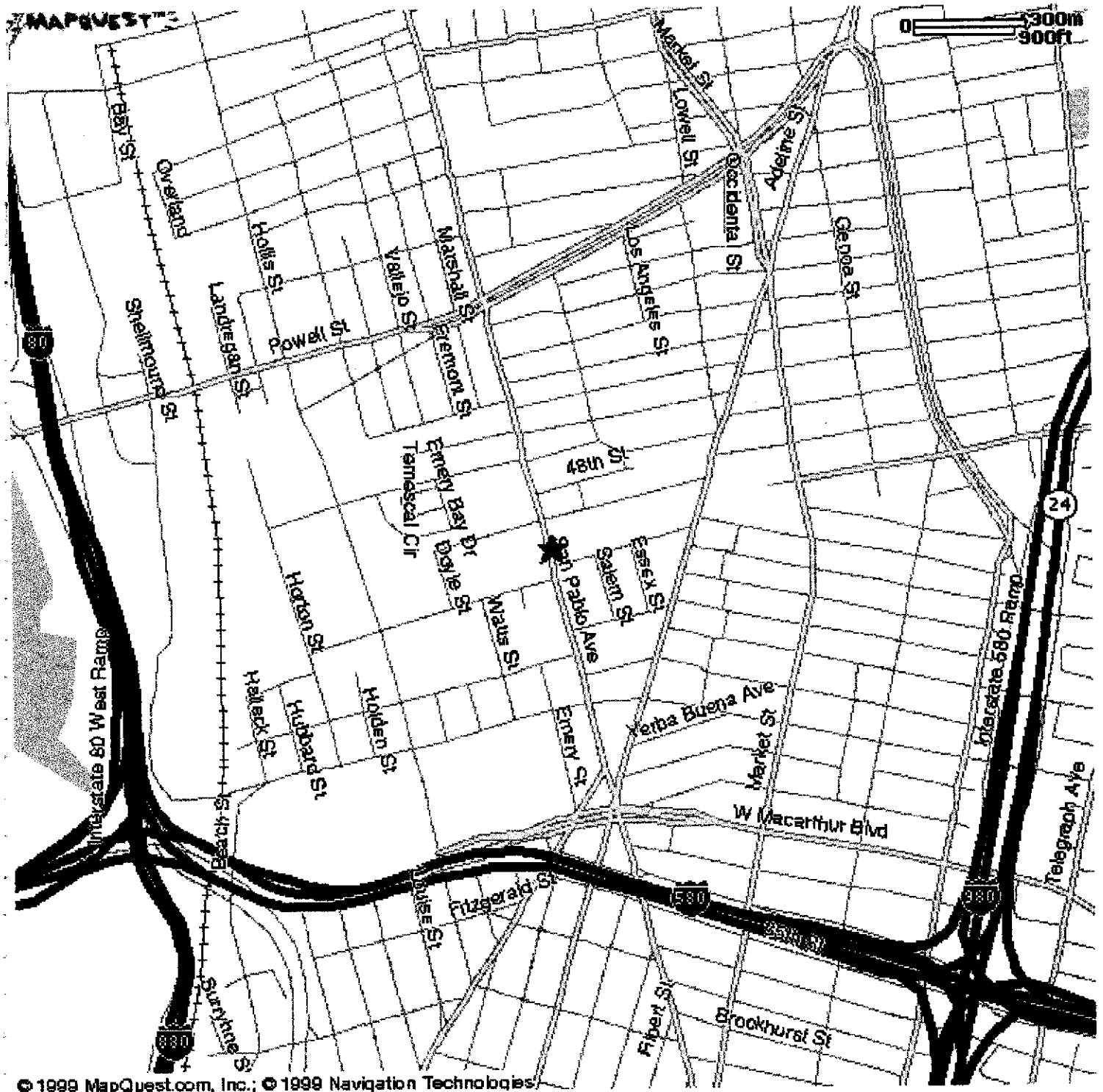
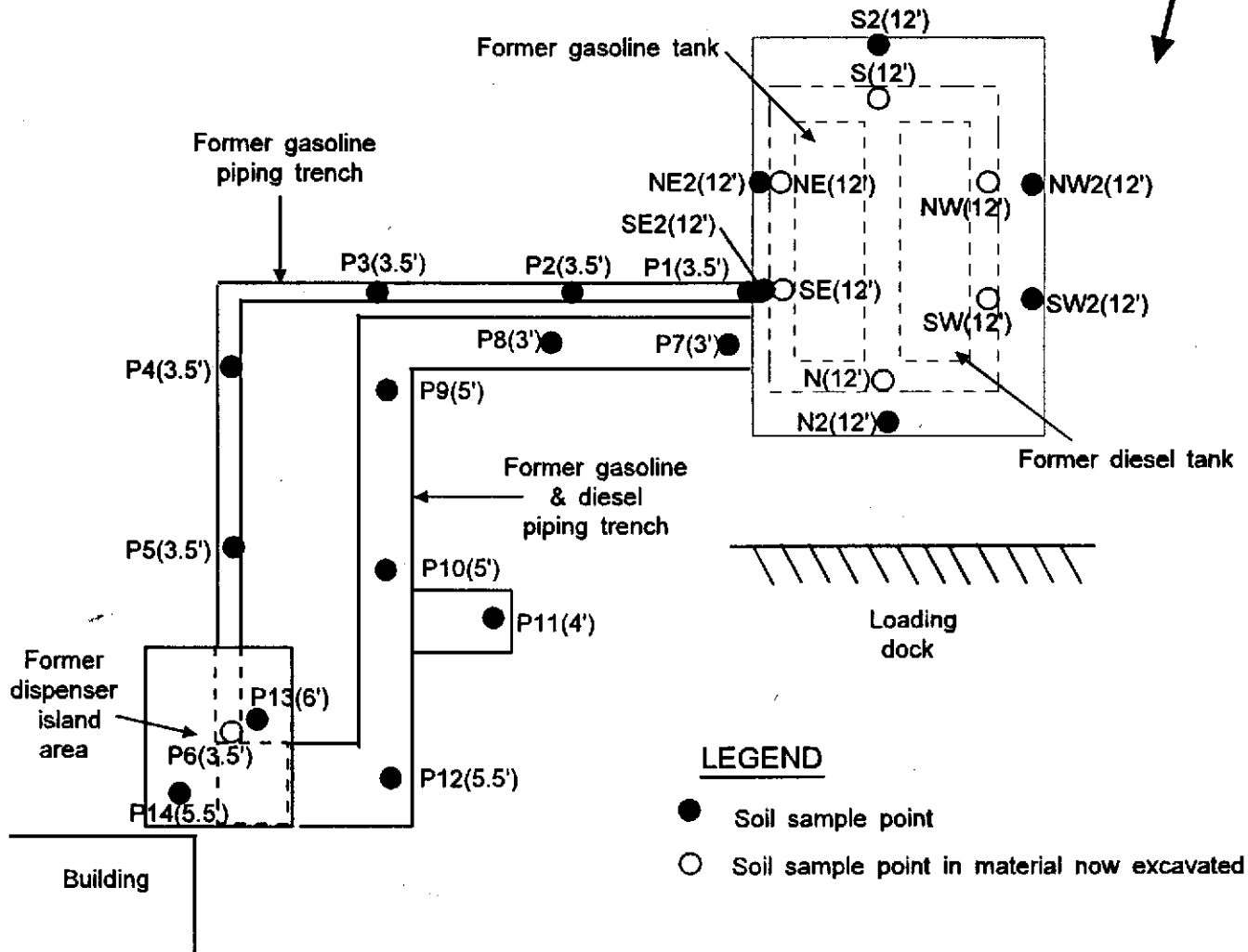


Figure 1: Site Vicinity Map

N



LEGEND

- Soil sample point
- Soil sample point in material now excavated

SCALE: 1" = 20'

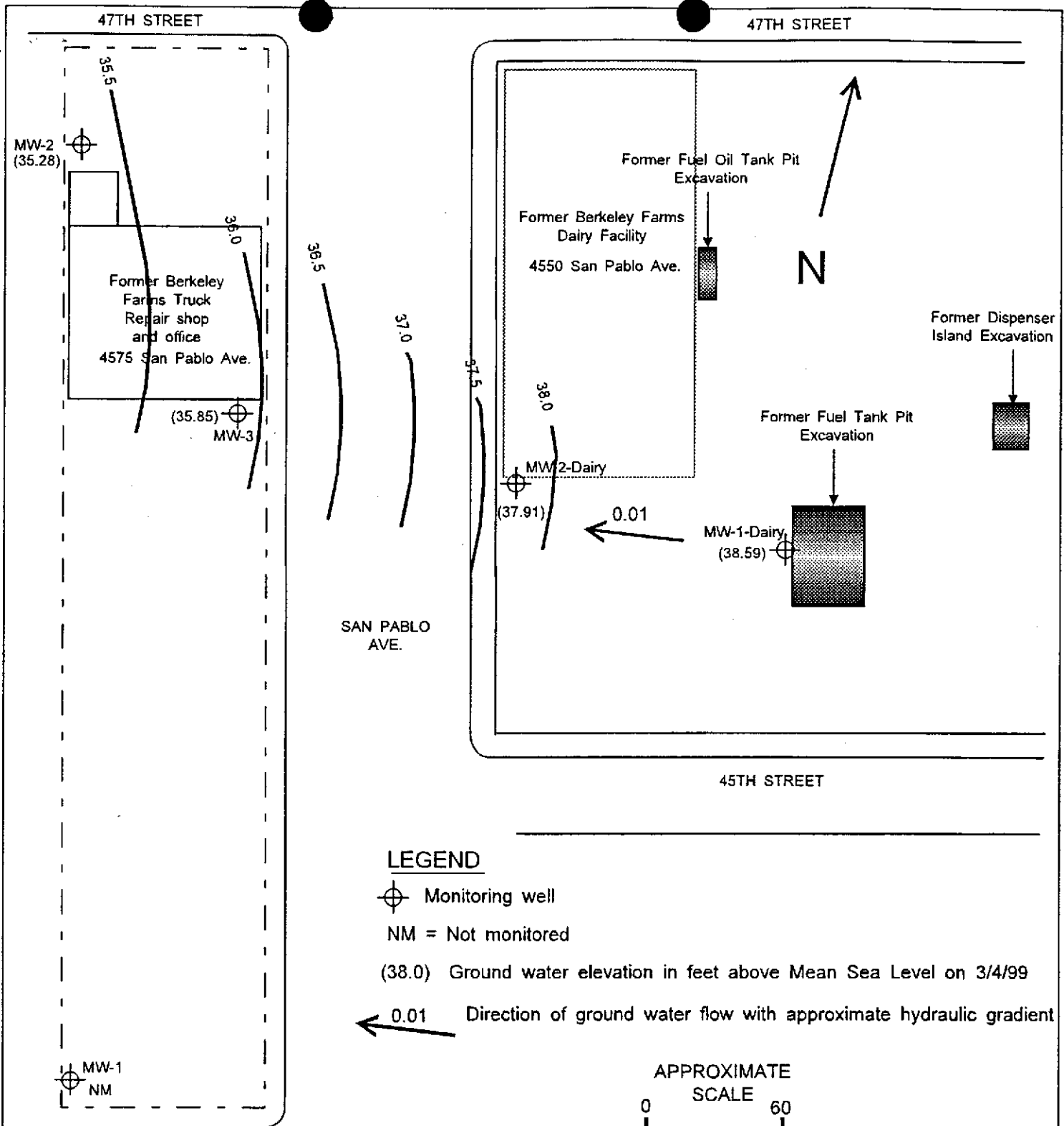
FORMER BERKELEY FARMS DAIRY
 4550 SAN PABLO AVENUE
 EMERYVILLE, CALIFORNIA

Figure No:
 2

Date: November 20, 1998

Drawn By: JG/Geo-Logic

Sample Location Map ATTACHMENT 3



Former Berkeley Farms Dairy Facility
4550 San Pablo Avenue
Emeryville, California

Figure No:

1

Date: March 12, 1999

Drawn By: JG/Geo-Logic

Potentiometric Surface Map ATTACHMENT 2

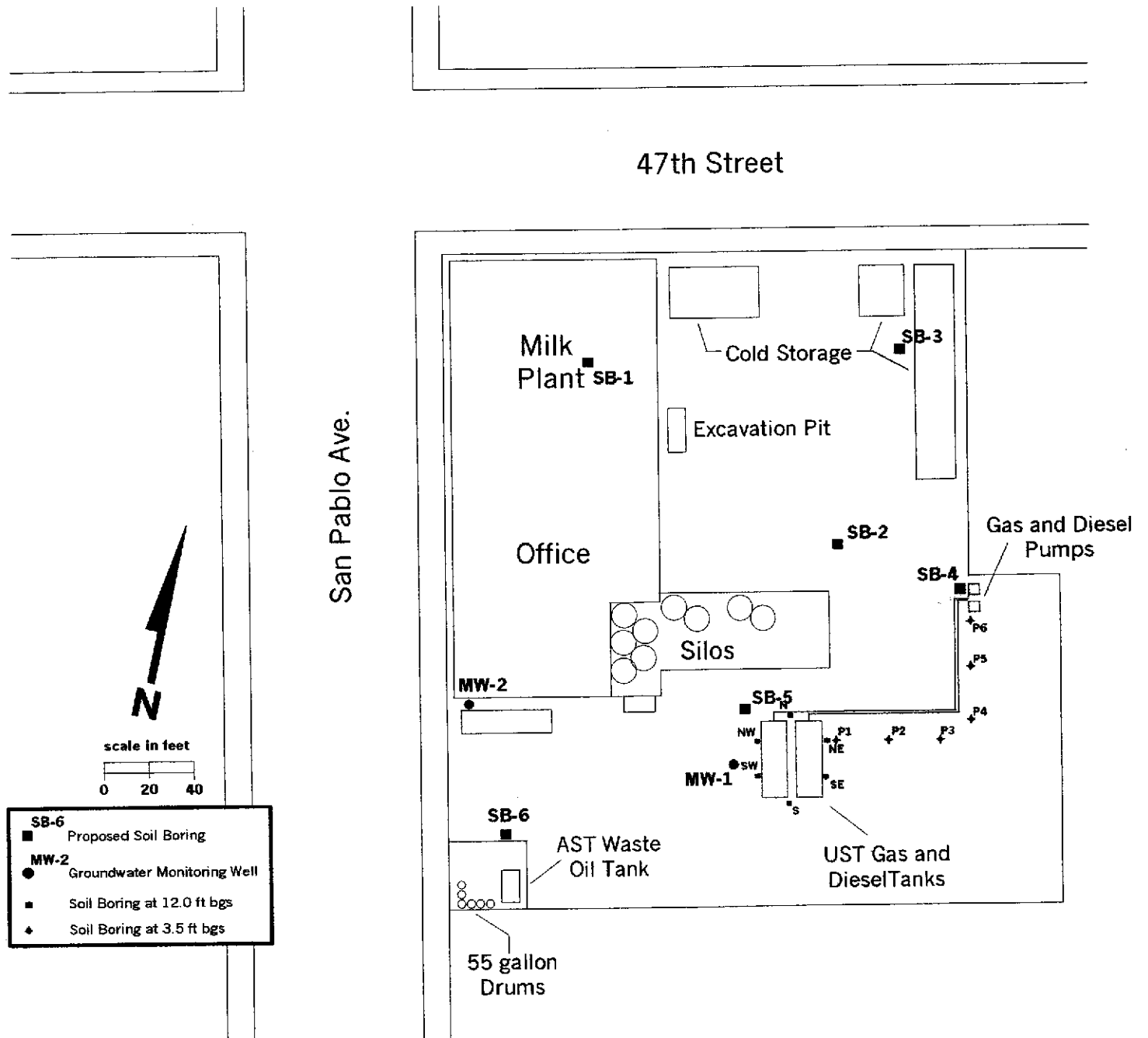
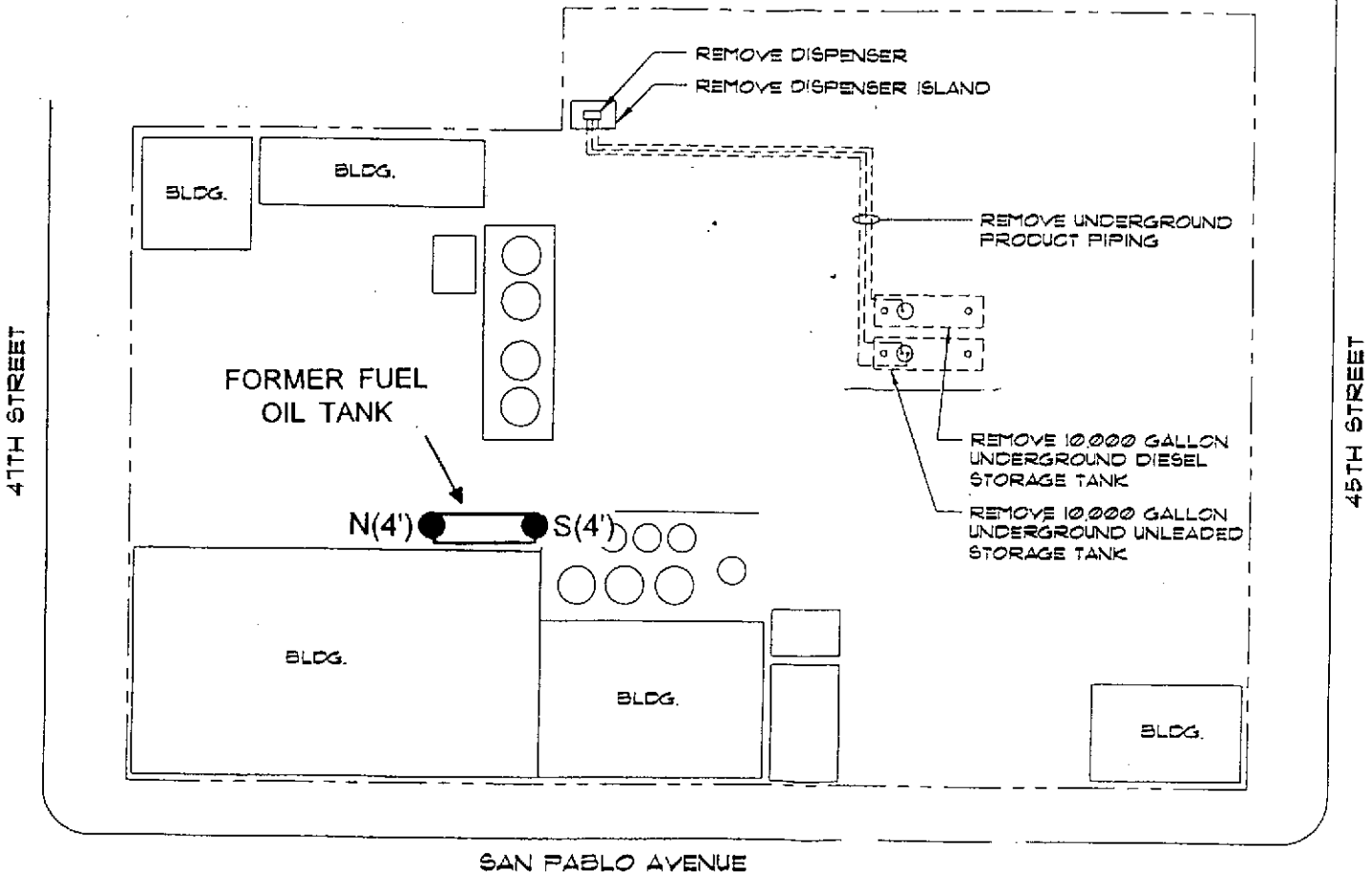


Figure 4: Location of Supplemental Soil Borings



NOT TO SCALE

FORMER BERKELEY FARMS DAIRY
4550 SAN PABLO AVENUE
EMERYVILLE, CALIFORNIA

Figure No:

1

Date: March 9, 1999

Drawn By: JG/Geo-Logic

Site Plan

Table 1
UST Excavation Confirmatory Soil Sample Results

Confirmatory Soil Sample Location	Sample Collection Date	Sample Depth (feet)	TRPH-g (mg/kg)	TRPH-d (mg/kg)	Benzene (mg/kg)	Ethylbenzene (mg/kg)	Toluene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)
N	14-Sep-98	12	<0.1	290	<0.005	<0.005	<0.005	<0.005	<0.1
S	14-Sep-98	12	<0.1	6,700	<0.005	<0.005	<0.005	<0.005	<0.1
NE	14-Sep-98	12	22	72	2.1	0.77	1.3	3.7	<0.1
SE	14-Sep-98	12	<0.1	150	<0.005	<0.005	<0.005	<0.005	<0.1
SW	14-Sep-98	12	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
NW	14-Sep-98	12	<0.1	410	<0.005	<0.005	<0.005	<0.005	<0.1
Composite	14-Sep-98	12	<0.1	1,110	<0.005	<0.005	<0.005	<0.005	<0.1
N2	25-Sep-98	12	NS	120	NS	NS	NS	NS	NS
S2	25-Sep-98	12	NS	770	NS	NS	NS	NS	NS
NE2	25-Sep-98	12	<0.1	100	<0.005	<0.005	<0.005	<0.005	<0.005
SE2	25-Sep-98	12	NS	59	NS	NS	NS	NS	NS
NW2	25-Sep-98	12	NS	66	NS	NS	NS	NS	NS
SW2	25-Sep-98	12	NS	230	NS	NS	NS	NS	NS
P1	11-Sep-98	3.5	<0.1	NA	<0.005	<0.005	<0.005	<0.005	<0.1
P2	11-Sep-98	3.5	<0.1	NA	<0.005	<0.005	<0.005	<0.005	<0.1
P3	11-Sep-98	3.5	<0.1	NA	<0.005	<0.005	<0.005	<0.005	<0.1
P4	11-Sep-98	3.5	<0.1	NA	<0.005	<0.005	<0.005	<0.005	<0.1
P5	11-Sep-98	3.5	<0.1	NA	<0.005	<0.005	<0.005	<0.005	<0.1
P6	11-Sep-98	3.5	<0.1	NA	<0.005	<0.005	<0.005	<0.005	<0.1
P7	5-Oct-98	3	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
P8	5-Oct-98	3	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
P9	5-Oct-98	5	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
P10	5-Oct-98	5	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
P11	5-Oct-98	4	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
P12	5-Oct-98	5.5	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
P13	5-Oct-98	6	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
P14	5-Oct-98	5.5	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005

NS Not Sampled

NA Not Analyzed

Geo-Logic
Paradiso Job No. 1011
March 10, 1999

TABLE 1

SUMMARY OF LABORATORY ANALYSES
SOIL

<u>Sample/depth</u>	<u>TPH as Fuel Oil</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl- benzene</u>	<u>Xylenes</u>	<u>MTBE</u>
	(Collected on February 4, 1999)					
N (4')	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
S (4')	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
	(Collected on January 26, 1999)					
Comp S1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1
Method Blank/ Detection Limit	<0.1	<0.005	<0.005	<0.005	<0.005	<0.1

Results are in milligrams per kilogram (mg/kg).

Geo-Logic
Paradiso Job No. 1011
March 18, 1999

TABLE 3

SUMMARY OF LABORATORY ANALYSES
SOIL

(Samples collected on February 26, 1999)

<u>Sample No./Depth</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl- benzene</u>	<u>Xylenes</u>	<u>MTBE</u>
MW1 (10')	1,300	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
MW1 (12')	97	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
MW2 (12')	<0.1	1.7	0.049	0.026	0.047	0.076	<0.005
MW2 (13')	<0.1	0.28	<0.005	0.058	0.092	0.081	<0.005
Comp S1 *	<0.1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005
Method Blank/ Det. Limit	0.1	0.1	0.005	0.005	0.005	0.005	0.005

* Total Lead was detected at a concentration of 29 ppm.

Results are in parts per million.

Table 3
Summary of Soil Analytical Results

Analyte/Method	Number of Samples	Number of Detections	Maximum Reported Concentration	Sample Location	Sample Depth (feet bgs)
BTEX (Method 8020)	6	0	N.D. (<0.005 mg/kg)		
TRPH-g (Method 8015M)	12	0	N.D. (<0.05 mg/kg)		
TRPH-d (Method 8015M)	12	4	1,976 mg/kg	SB-4	5
VOCs (Method 8260)	6	0	N.D. (<0.5 µg/kg)		
SVOCs (Method 8270) Phenol	6	3	0.34 mg/kg	SB-2	0.5
Ammonia (Method 350.3)	4	0	N.D. (<1 mg/kg)		
Nirite as N (Method 354.1)	4	0	N.D. (<1 mg/kg)		
Nitrate as N (Method 300)	4	0	N.D. (<1 mg/kg)		
PCBs (Method 8080)	1	0	N.D. (<0.02 mg/kg)		
Metals (Method 6010)					
Arsenic	6	0	N.D. (<5 mg/kg)		
Barium	6	6	170 mg/kg	SB-2	0.5
Beryllium	6	0	N.D. (< 1 mg/kg)		
Cadmium	6	0	N.D. (< 1 mg/kg)		
Cobalt	6	6	13 mg/kg	SB-1,-2	0.5
Chromium (III)	6	6	31 mg/kg	SB-1,-2	0.5
Copper	6	6	38 mg/kg	SB-2	0.5
Mercury	6	2	0.42 mg/kg	SB-4	0.5
Molybdenum	6	0	N.D. (< 1 mg/kg)		
Nickel	6	6	48 mg/kg	SB-1	0.5
Lead	6	6	110	SB-3	0.5
Antimony	6	0	N.D. (< 5 mg/kg)		
Selenium	6	0	N.D. (<5 mg/kg)		
Thallium	6	3	7.5 mg/kg	SB-4	0.5
Vanadium	6	6	37 mg/kg	SB-6	0.5
Zinc	6	6	60 mg/kg	SB-3	0.5

**Table 4
Comparison of Site Metals to Background**

Detected Metals	Range of Reported Concentrations (mg/kg)	Range of Background Concentrations in California Soils ¹ (mg/kg)	Is The Detected Metal Within Background?
Antimony	< 5.0	0.15 - 1.95	Yes ²
Arsenic	< 5.0	0.6 - 11	Yes
Barium	91 - 170	133 - 1,400	Yes
Beryllium	< 1.0	0.25 - 2.7	Yes
Cadmium	< 1.0	0.05 - 1.7	Yes
Chromium	5.5 - 31	23 - 1,579	Yes
Cobalt	6.9 - 13	2.7 - 46.9	Yes
Copper	16 - 38	9.1 - 96.4	Yes
Lead	6.5 - 110	12.4 - 97.1	No
Mercury	< 0.06 - 0.42	0.1 - 0.9	Yes
Molybdenum	< 1.0	0.1 - 9.6	Yes
Nickel	19 - 48	9 - 509	Yes
Selenium	< 5.0	0.015 - 0.43	Yes ²
Silver	< 1.0	0.1 - 8.3	Yes
Thallium	< 5.0 - 7.5	0.17 - 1.10	No
Vanadium	14 - 37	39 - 288	Yes
Zinc	39 - 60	88 - 236	Yes

¹ Bradford, G.R. et al. Background Concentrations of Trace and Major Elements in California Soils. University of California, Riverside.

² Even though the detection limit is outside the range of background, this metal is an uncommon site contaminant, is not associated with any site uses and would most likely be naturally occurring.

**Table 5
Groundwater Analytical Results**

Analyte/Method	Sampled 08-Dec-99		Sampled 13-Jan-00	
	Reported Concentration MW-1 (µg/L)	Reported Concentration MW-2 (µg/L)	Reported Concentration MW-1 (µg/L)	Reported Concentration MW-2 (µg/L)
BTEX (Method 8020) Xylene, total	N.D. (< 0.5)	25.9	N.D. (< 5.0)	N.D. (< 5.0)
TRPH-g (Method 8015M)	N.D. (< 50))	130	N.D. (< 50)	N.D. (< 50)
TRPH-d (Method 8015M)	219,200	N.D. (< 100)	NA	NA
VOCs (Method 8260) 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes, total	N.D. (<0.5)	2.18 2.03 22.4	NA	NA
SVOCs (Method 8270) Bis(2-ethylhexy)phthalate Fluorene Phenanthrene Pyrene	27 12 13 5.5	N.D. (< 2.0)	NA	NA

NA Not Analyzed

Table 4
Historical Groundwater Analytical Data
4550 San Pablo Avenue, Emeryville, CA

Well	Date	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylene (µg/L)	MTBE (µg/L)
<i>On-site Wells</i>								
MW-1	12/13/00	1,275	8,450	42.4	132	40	199	70
	9/19/00	< 50	43,100	6.5	9.1	< 0.5	23	180
	4/6/00	680	25,000	< 0.5	< 0.5	< 0.5	0.65	47
<i>Off-site Wells</i>								
MW-1A	12/13/00	1,400	250	96	12	< 0.5	10	170
	9/19/00	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	13
MW-2	12/13/00	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
	9/19/00	2,000	330	210	8.7	5.5	6	180
MW-3	12/13/00	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	9.3
	9/19/00	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5

Geo-Logic
Paradiso Job No. 1011
March 18, 1999

TABLE 2


SUMMARY OF LABORATORY ANALYSES
WATER

<u>Sample Number</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl- benzene</u>	<u>Xylenes</u>	<u>MTBE</u>
(Samples collected on March 4, 1998)							
MW1 -Dairy	447,000	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW2 -Dairy	16,000	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
Method Blank/ Det. Limit	5.0	5.0	0.5	0.5	0.5	0.5	0.5

Results are in parts per billion.

BORING LOG

Project No. 1011	Boring and casing diameter: 8", 2"	Logged By: JG
Project: Former Berkeley Farms Dairy	Well Cover Elevation: 43.27	Date drilled: 2/26/99
Boring No. MW-1-Dairy	Drilling Method: Hollow Stem Auger	Drilling Company: Woodward Drilling

Penetration Blows/6" PID	G.W. level	Sample Depth (ft)	Stratigraphy (USCS)	Description
		0		8" of concrete pavement over 4" of sand and gravel base.
3/6/12/15	PID-0 	5	CL	@1' - Silty clay (CL), black (5Y 2.5/2), moist, very stiff. @5' - Silty clay (CL), very dark gray (5Y 3/1), moist, very stiff, estimated 10% subangular gravels to 1/4" diameter. @7' - As above except gray (5Y 5/1), very moist, very stiff, slight odor of hydrocarbons.
5/6/10/14		10	ML	@9' - Clayey silt with gravel (ML), dark greenish gray (5G 4/1), wet, estimated 15-30% variable gravel content, mod. odor of hydrocarbons.
9/14/14/15		11	GW	@11' - Sandy gravel, dk. greenish gray (5G 4/1), saturated, v. stiff, v. fine to med.-grained, angular gravels to 1/2", est. 10% silt, str. odor.
15/15/8/11		12.4		@12.4' - Sandy silt (ML), yellowish brown (10YR 5/4), saturated, slight odor of hydrocarbons.
18/26/50-6"		16	ML	@16' - Sandy silt, as above except very hard.
16/20/20/36		20		@20' - Clayey silt with gravel (ML), yellowish brown (10YR 5/4), saturated, hard, up to 15% variable subangular gravels to 3/8" diameter, trace to 10% v. fine-grained sand, sl. of hydrocarbons.
		25		Total Depth: 22 feet Screen: 0.010 slot from 6-22 feet Sandpack: #2/12 sand from 5-22 feet Seal: Bentonite 3,5-5 feet, neat cement grout 0-3.5 feet.
		30		


Former Berkeley Farms Dairy 4550 San Pablo Avenue Emeryville, California	MW1 -Dairy	Date: March 12, 1999 Drawn By: JG/Geo-Logic
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Boring Log and Well Completion Details

ATTACHMENT 6

BORING LOG

Project No. 1011	Boring and casing diameter: 8", 2"	Logged By: JG
Project: Former Berkeley Farms Dairy	Well Cover Elevation: 42.43	Date drilled: 2/26/99
Boring No. MW-2-Dairy	Drilling Method: Hollow Stem Auger	Drilling Company: Woodward Drilling

Penetration Blows/6" PID	G.W. level	Sample Depth (ft)	Stratigraphy (USCS)	Description
		0		8" of concrete pavement over 4" of sand and gravel base.
			CL	@ 1' - Silty clay (CL), black (5Y 2.5/2), moist, very stiff.
5/6/10/12	PID-0 	5		@ 5' - Clayey silt (ML), dark olive gray (5Y 3/2), moist, very stiff, trace angular gravels to 3/8" diameter.
10/14/15/15		10	ML	@ 10' - Clayey silt with gravel (ML), olive gray (5Y 5/3), very moist, very stiff, estimated 15-25% variable gravel content, gravels are angular, to 1.5" diameter.
13/6/15/20		15		@ 11.5' - Sandy silt (ML), yellowish brown (10YR 5/4), v. moist, v. stiff. @ 13' - Silt (ML), light olive gray (5Y 6/2), saturated, very stiff, locally with up to 15% angular gravels to 1/2" diameter, locally clayey to sandy. Abundant FeO staining.
8/12/19/22		20	SM ML	@ 20' - Silty sand with gravel, weak red (2.5Y 4/2), saturated, medium dense, sand very fine to coarse-grained, 15% subangular gravels to 1/4" diameter, 10-15% silt and clay. @ 20.5' - Clayey silt (ML), olive gray (5Y 5/3), saturated, hard, trace angular gravels to 1/8" diameter, abundant FeO and MnO staining.
		25		Total Depth: 22 feet Screen: 0.010 slot from 6-22 feet Sandpack: #2/12 sand from 5-22 feet Seal: Bentonite 3,5-5 feet, neat cement grout 0-3.5 feet.
		30		

Former Berkeley Farms Dairy 4550 San Pablo Avenue Emeryville, California	MW2 -Dairy	Date: March 12, 1999 Drawn By: JG/Geo-Logic
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Boring Log and Well Completion Details

Ground water remediation for VOCs is underway in the central and western portions of Del Monte's plant under oversight of the ACDEH and RWQCB. Del Monte plans to complete its soil remediation and to continue ground water extraction and monitoring until ACDEH and RWQCB concur that it is appropriate to discontinue (RWQCB April 19, 1995).

New Century Beverage Company (Pepsi)

The Pepsi property is immediately south of the Site, as shown on Figure 2, and is currently occupied by a Pepsi beverage canning plant. Pepsi has occupied the property since approximately 1958 and their operations have included canning, storage, vehicle and equipment maintenance, and gasoline and diesel fueling (Weiss 1994). During 1994, Pepsi conducted extensive investigations on their property and identified four petroleum ground water plumes, two originating at two fuel USTs, and two apparently originating upgradient (Weiss 1994). Pepsi removed one inactive 10,000-gallon fuel UST with associated piping and two pump islands. The other UST, an 8,000-gallon diesel UST, was removed by Pepsi in 1987. Weiss prepared a Remedial Action Plan, which we understand has been approved by the ACDEH (Weiss 1995). The approved Remedial Action Plan provides for excavating soil with TPH at concentrations greater than 100 mg/kg or with BTEX compounds exceeding EPA Preliminary Remediation Goals, and ground water monitoring.

AC Transit

The AC Transit property is located immediately north of the Site, across 45th Street (Figure 2). This property has been used for bus maintenance and fueling since approximately 1937, though it was previously operated by the Key System Transit Lines. During construction of the facility during the 1980's, petroleum-contaminated soil was remediated under oversight of the ACDEH. An UST tank farm was the site of a 16,000 gallon diesel spill in 1989, resulting in diesel contamination of soil and ground water. Cleanup was conducted under oversight by the RWQCB. Residual gasoline contamination associated with the pre-1986 activities at this property also was detected (AC Transit 1989).

Emeryville Fire Station

This property is immediately south of the Site, as shown on Figure 2. This property consists of a vacant fire station building constructed in 1959, paved parking, two small support buildings and a vehicle fueling station. Sanborn maps and Pacific Aerial Survey photographs indicate that the property has been used as a fire station since at least 1911 and the property appears undeveloped on the 1903 Sanborn map. The station had a 550-gallon UST and pump island, which the City of Emeryville removed during 1994. Soil adjacent to the former UST which