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STID 1754

FOURTH QUARTER 2000
GROUNDWATER MONITORING REPORT

Emeryville Farms Property
4550 San Pablo Avenue
Emeryville, California

Project 99-2371

January 19, 2001

Prepared for

Emeryville Farms and Associates
1201 Park Avenue, Suite 100
Emeryville, California 94608

Prepared by

SOMA Environmental Engineering, Inc.
2680 Bishop Drive, Suite 203
San Ramon California 94583

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1.0 Introduction

This groundwater monitoring report has been prepared by SOMA Environmental Engineering, Inc. (SOMA) on behalf of Emeryville Farms and Associates, the current owner of the site. The site is located at 4550 San Pablo Avenue, Emeryville, California (the "Site"), as shown in Figure 1. The purpose of this monitoring report is to evaluate the current status of groundwater contamination beneath the Site, which reportedly has been impacted by petroleum hydrocarbons. The report also presents the results of the fourth quarter monitoring event of the off-site monitoring wells, which were monitored concurrently with the on-site wells on December 13, 2000 by Geo-Logic. The off-site monitoring wells are located at the Former Berkeley Truck Shop and Yard located on the opposite side of the Site across San Pablo Avenue, as shown in Figure 2.

2.0 Site Background

The former Berkeley Farms operation consisted of a dairy facility, a truck shop and a yard located on the opposite side of the Site across San Pablo Avenue, between 47th and 45th Streets in Emeryville, California. The property was purchased in 1946 and had operated as a dairy facility since that time. The dairy facility, which is the subject of this report, is located at 4550 San Pablo Avenue (see Figure 1). The Site is bound on the west by San Pablo Avenue, on the north by 47th Street, and on the south by 45th Street, as shown in Figure 2. Currently, a two-story building is under construction in the northwestern portion of the property. The remainder of the property is also under construction, and enclosed within a concrete block wall and fences. Eventually, most of the grounds will be covered with concrete, with some landscaping. The facility is accessed through secured gates on both San Pablo Avenue and 47th Street.

Berkeley Farms suspended operations at the Site in December of 1997. Two 10,000-gallon underground storage tanks were used by Berkeley Farms to store diesel fuel and unleaded gasoline at the Site. In 1998, the underground storage tanks were removed by Geo-Logic, a consultant firm hired by Berkeley Farms.

Emeryville Farms and Associates purchased the property in December 1999. In December 1999, Emeryville Farms hired SOMA to conduct additional site investigation and prepare a Site closure report. The result of SOMA's Comprehensive Site Closure Report (SOMA, February 2000) was submitted to Alameda County Department of Health Services (ACDHS). On April 12, 2000, ACDHS, in concurrence with SOMA's recommendations, issued a no further action (NFA) letter to the Site's owners. In the NFA letter, ACDHS required that three additional quarterly groundwater monitoring events be conducted at the Site. ACDHS specified that the groundwater samples from MW-1 and MW-2 must be analyzed for total petroleum hydrocarbon as diesel (TPH-d), TPH as gasoline (TPH-g), benzene, toluene, ethylbenzene, xylene, methyl tertiary butyl ether (MTBE), and semi-volatile organic compounds using EPA Method 8270.

As explained above, the former Berkeley Farms operation consisted of an operating dairy facility, a truck shop and a yard located on the opposite side of San Pablo Avenue of the Site, between 47th and 45th Streets in Emeryville, California. The truck shop and yard are located on the opposite side of San Pablo Avenue and still belong to Berkeley Farms. At the Site, there are still three groundwater monitoring wells, which are being monitored by Geo-Logic on a quarterly basis. In order to evaluate the mobility of the groundwater plume and consistency of the groundwater flow direction, ACDHS, in their letter dated April 12, 2000, requested that Emeryville Farms coordinate the groundwater monitoring event with the Berkeley Farms' consultant (Geo-Logic). Due to the fact that the second quarter groundwater

monitoring event was performed by SOMA on April 6, 2000, before receiving the ACDHS's letter, such coordination was not possible for the second quarter. However, based on our arrangement with Geo-Logic, this and the previous monitoring events (i.e., fourth and third quarter, 2000) were conducted simultaneously.

2.1 Hydrogeology

The Site is located at or near the mapped contact between medium-grained and fine-grained alluvium deposits (Helley et al., 1979). Based on field observations, the soils underlying the Site appear to be fine-grained alluvium, consistent with "Bay Mud." The alluvium has been described as unconsolidated plastic material that is moderately to poorly sorted and clay that is rich in organic material (Helley et al., 1979).

The results of all quarterly groundwater monitoring events indicate that the groundwater flow direction beneath the Site is consistently toward the west with an average flow gradient of approximately 0.009 ft/ft. Based on the available historical data gathered by Geo-Logic and SOMA, the depth to groundwater in MW-1 ranges from 4.35 to 8.40 feet, and the depth to groundwater in MW-2 ranges from 4.21 to 8.70 feet. A Review of the lithologic logs of the groundwater monitoring wells indicates that the saturated sediments beneath the Site are comprised of clayey silt with occasional occurrence of fine sand. Assuming that the hydraulic conductivity of the saturated material is about 5×10^{-5} cm/sec and its porosity is 0.40, then the estimated groundwater flow velocity is approximately 1.2 feet per year.

3.0 Field Activities

On December 13, 2000, SOMA's field crew conducted the fourth quarter 2000 groundwater monitoring event in accordance with the procedures and guidelines of the Regional Water Quality Control Board (RWQCB), San Francisco Bay Region. During this groundwater monitoring event, two groundwater monitoring wells (MW-1 and MW-2) were monitored. As discussed earlier, Geo Logic monitored the three off-site monitoring wells at the same time and date. The locations of the on- and off-site monitoring wells are shown in Figure 2.

Depths to watertable were measured from the top of the casings to the nearest 0.01 foot using an electric sounder. No free product was detected in any of the monitoring wells. Before the samples were collected, each well was purged, by removing at least three casing volumes of groundwater (see the Field Notes in Appendix A for details). A battery operated 2-inch diameter pump was used to purge each well. A disposable bailer was used to collect samples from each monitoring well for laboratory analyses. The groundwater samples were immediately transferred into two 40-mL VOA vials and two one-liter glass containers. The VOA vials and the one-liter containers were sealed properly to prevent the development of any air bubbles within the head-space area. The samples were placed in an ice chest and delivered to Delta Environmental Laboratories for analyses of TPH-g, TPH-d, BTEX, MTBE (using EPA Methods 8015M and 8020), and Semi-Volatile Organics (using EPA method 8270). MTBE results were confirmed with EPA Method 8260.

4.0 Results

Table 1 presents the measured depth to groundwater and the calculated static water levels in the on- and off-site monitoring wells. At each groundwater monitoring well, the depth to watertable and the elevation of the top of casing were used to calculate the static water levels. Depths to watertable ranged from 7.41 feet in off-site monitoring well MW-3 to 9.33 feet in the off-site monitoring well MW-1A. The depth to water table in the on-site monitoring wells was 7.68 feet in MW-1 and 8.05 feet in MW-2. Groundwater elevations ranged from 32.56 feet in the off-site well MW-2 to 34.35 feet in on-site well MW-1. In general, the groundwater was found to flow in a westerly direction, at an approximate gradient of 0.004 ft/ft, which is a slightly lower gradient than noted during most of the historical monitoring events, but greater than that during the preceding (third quarter) event. Figure 3 displays the groundwater elevation contour map.

Table 2 displays the historical groundwater elevations. In each well, the water table elevation has risen since the previous event, with the rises in elevation ranging from 0.52 feet in off-site MW-2 to 0.78 feet in off-site MW-3. This slight rise in elevations is probably attributable to the onset of the rainy season.

Table 3 presents the results of the laboratory chemical analyses of the water samples. TPH-g was detected in both of the on-site monitoring wells, at a concentration of 1,275 µg/l in MW-1 and 322 µg/l in MW-2. One of the three off-site monitoring wells, MW-1A, showed detectable levels of TPH-g, with a concentration of 1,400 µg/l. Figure 4 displays the TPH-g concentration contour map.

TPH-d was detected in three of the five on- and off-site wells. The maximum concentration was 8,450 µg/l in the on-site well MW-1. Figure 5 displays the TPH-d concentration contour map.

MTBE was detected in three of the five on- and off-site wells. The maximum concentration was 170 µg/l in the off-site well MW-1A. Figure 6 displays the MTBE concentration contour map.

Benzene was detected in three of the five wells, with a maximum concentration of 96 µg/l in off-site well MW-1A. Figure 7 displays the benzene concentration contour map. Toluene was detected in three of the five wells, with a maximum concentration of 132 µg/l in on-site well MW-1. Ethylbenzene was detected in both of the on-site wells, with a maximum concentration of 40 µg/l in MW-1. Total Xylenes were detected in three of the five wells, with a maximum concentration of 199 µg/l in on-site MW-1. Table 4 displays the historical records of the groundwater analyses.

Neither of the wells exhibited detectable concentrations of any of the semi-volatile organics that were tested for using EPA method 8270. Appendix A includes the laboratory results of the semi-volatile analysis.

5.0 Conclusions

This fourth quarter groundwater monitoring event indicates that the groundwater flow direction is toward the west, with an approximate hydraulic gradient of 0.004 ft/ft, which is consistent with the previous monitoring events. The estimated groundwater flow velocity is approximately 1.2 feet per year

The laboratory analyses of the groundwater samples indicates elevated levels of TPH-d in MW-1. However, in MW-2 and in the off-site monitoring wells located downgradient from MW-1, the concentration of TPH-d was low (a maximum of 188 µg/l). As Table 4 indicates, MTBE was again detected in the groundwater in MW-1 at a concentration of 70 µg/l, which is less than half its concentration in the previous monitoring event. Again we conclude that MTBE has impacted the groundwater, however, it appear to be decreasing in concentration. The results of the groundwater monitoring event indicated that the groundwater is also impacted with low levels of BTEX.

For cost saving purposes, the groundwater samples were not analyzed for SVOCs during this monitoring event. Bis(2-ethylhexyl)phthalate was the only SVOC detected during the second quarter 2000 monitoring event. Generally, due to the low mobility of the SVOCs in groundwater it is not expected that SVOCs would migrate to off-site areas in the foreseeable future.

6.0 References

Bradford, G.R., A.C. Chang, A.L. Page, D. Bakhtar, J.A. Frampton and H. Wright. Background Concentrations of Trace and Major Elements in California Soils. Department of Soil and Environmental Sciences, University of California, Riverside; Department of Toxic Substances Control (DTSC), California Environmental Protection Agency (Cal/EPA).

Cal/EPA 1994. California Cancer Potency Factors: Update. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment (OEHHA).

DTSC 1994. Preliminary Endangerment Assessment Guidance Manual. California Environmental Protection Agency, Department of Toxic Substances Control (DTSC).

EPA 1991, Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors, OSWER Directive 9285.6-03.

Johnson, P.C. and R.A. Ettinger (1991), Heuristic Model for Predicting the Intrusion Rate of Contaminant Vapors into Buildings. Environ. Sci. Technol. 25: 1445-1452.

Geo-Logic, August 14, 1997 "Phase I Environmental Site Assessment, Berkeley Farms, at Emeryville, 4550 and 4575 San Pablo Avenue, Emeryville, California 94608.

Geo-Logic, September 23, 1998, " Report of Soil and Groundwater During Removal of Fuel Tanks and Product Piping, Former Berkeley Farms Dairy Facility, 4550 San Pablo Avenue, Emeryville, California, 94608.

Geo-Logic, November 20, 1998, " Report of Additional Soil Sampling During Over-excavation of Former Fuel Tank Pit, Piping Trenches, and Dispenser Island, Former Berkeley Farms Dairy Facility, 4550 San Pablo Avenue, Emeryville, California, 94608.

Geo-Logic, March 18, 1999, " Installation of Monitoring Wells, Former Berkeley Farms Dairy Facility, 4550 San Pablo Avenue, Emeryville, California, 94608.

Geo-Logic, June 11, 1999, " Second Quarterly Sampling of Monitoring Wells, Former Berkeley Farms Dairy Facility, 4550 San Pablo Avenue, Emeryville, California, 94608.

Helley, et al., 1979, "Fatland Deposits – Their Geology and Engineering Properties and Their Importance to Comprehensive Planning" USGS Professional Paper 943.

2000 Third Quarter Groundwater Monitoring Report for Emeryville Farms Property, by SOMA Environmental Engineering, Inc., November 21, 2000.

2000 Second Quarter Groundwater Monitoring Report for Emeryville Farms Property, by SOMA Environmental Engineering, Inc., May 15, 2000.

TABLES

Table 1

Water Table Elevations in the On-site and Off-site Monitoring Wells Measured December 13, 2000

4550 San Pablo Avenue, Emeryville, CA

Monitoring Well	Casing Elevation (feet)	Depth to Water (feet)	Water Table Elevation (feet)
On-site Wells			
MW-1	42.03	7.68	34.35
MW-2	42.12	8.05	34.07
Off-site Wells			
MW-1A	42.01	9.33	32.68
MW-2	40.78	8.22	32.56
MW-3	41.08	7.41	33.67

Table 2
Historical Water Table Elevations
4550 San Pablo Avenue, Emeryville, CA

Monitoring Well	Date	Water Table Elevation (feet)
On-site Wells		
MW-1	Dec. 13, 2000	34.35
	Sep. 19, 2000	33.63
	Apr. 6, 2000	35.78
MW-2	Dec. 13, 2000	34.07
	Sep. 19, 2000	33.42
	Apr. 6, 2000	35.57
Off-site Wells		
MW-1A	Dec. 13, 2000	32.68
	Sep. 19, 2000	32.10
MW-2	Dec. 13, 2000	32.56
	Sep. 19, 2000	32.04
MW-3	Dec. 13, 2000	33.67
	Sep. 19, 2000	32.89

Table 3
Laboratory Analysis of Groundwater Samples
Taken December 13, 2000
4550 San Pablo Avenue, Emeryville, CA

Well	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylene (µg/L)	MTBE (µg/L)
On-site Wells							
MW-1	1,275	8,450	42.4	132	40	199	70
MW-2	322	188	9.63	32.7	12.1	58.4	ND
Off-site Wells							
MW-1A	1,400	250	96	12	ND	10	170
MW-2	ND	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND	9.3

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)
On-site Wells								
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
MW-2	12/13/00	322	188	9.63	32.7	12.1	58.4	< 5
	9/19/00	< 50	90	< 0.5	1.9	4.9	12	< 5
	4/6/00	< 50	150	< 0.5	1.1	< 0.5	3.9	15
Off-site Wells								
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

FIGURES

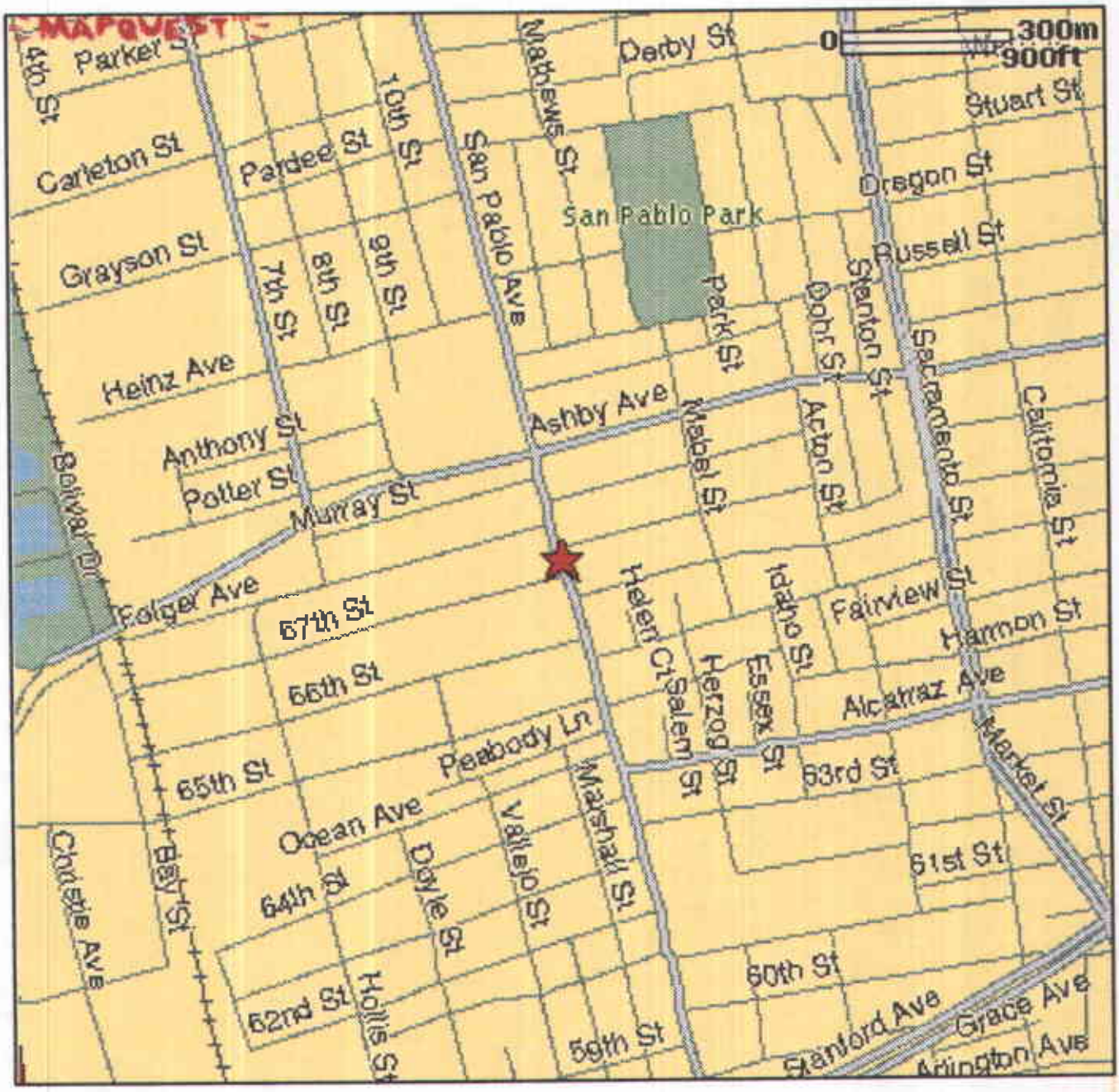

Figure 1: Site Vicinity Map

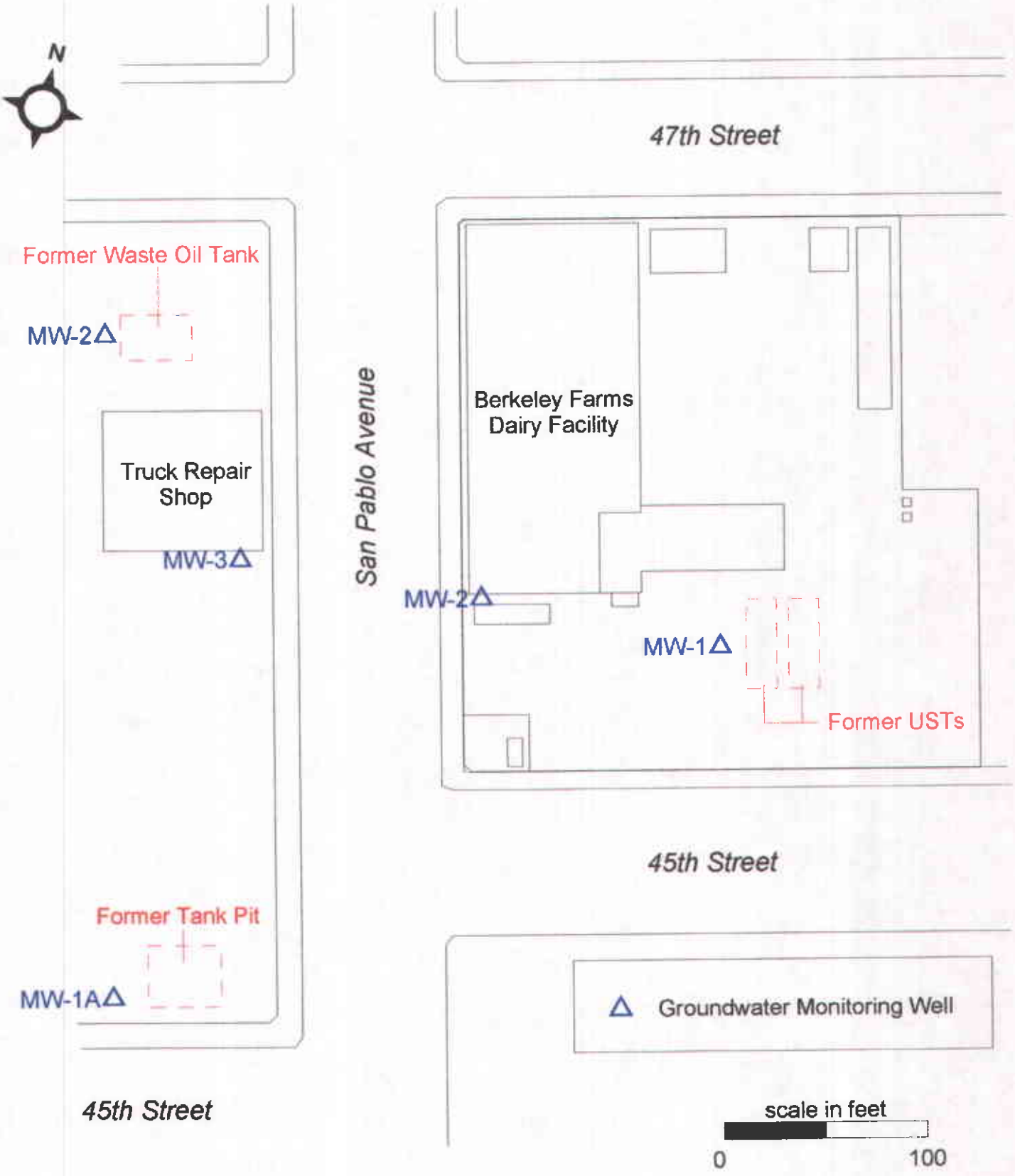

Figure 2: Site Map Showing Location of On- and Off-Site Groundwater Monitoring Wells

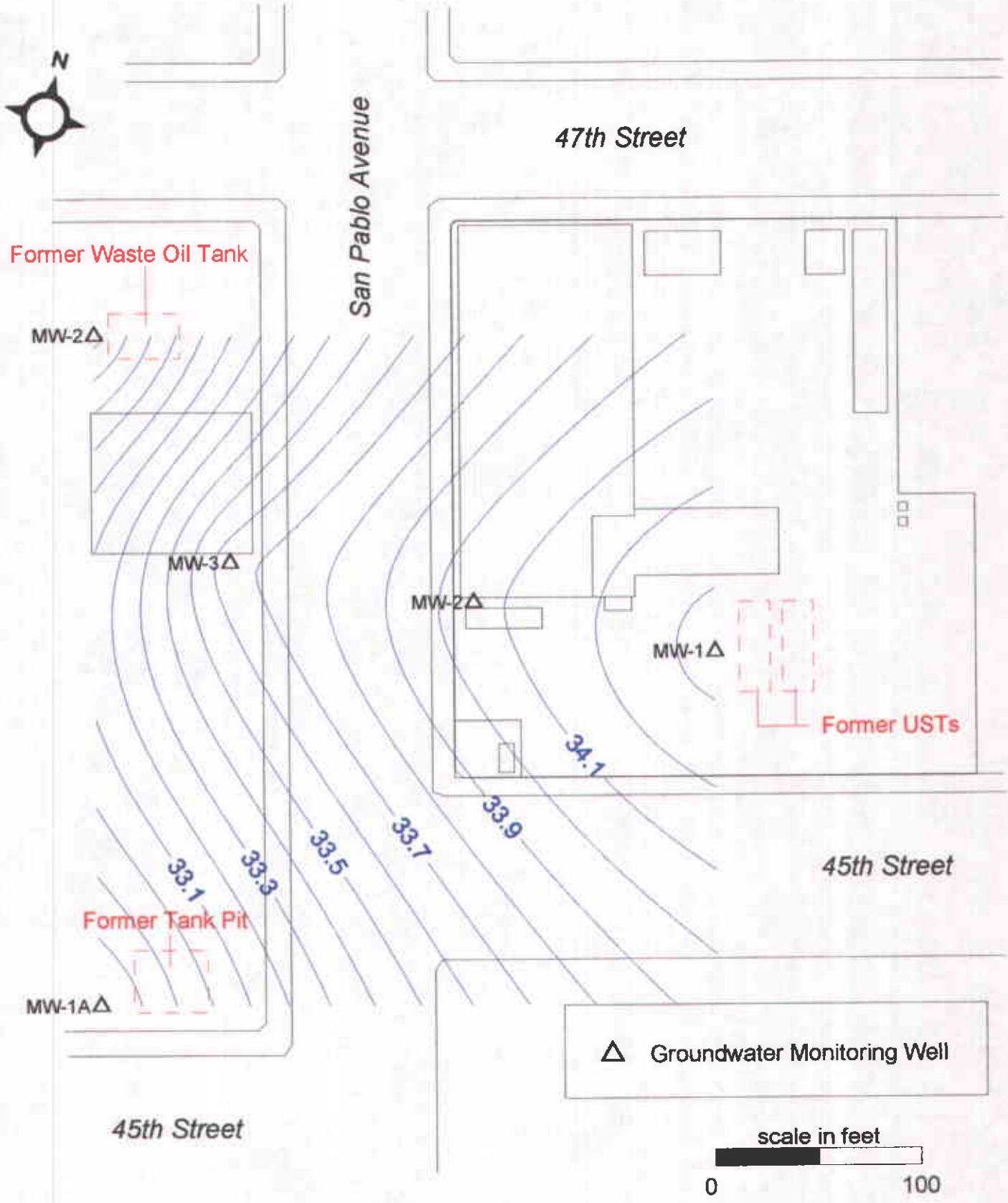

Figure 3: Contour Map of Groundwater Elevations, December 13, 2000

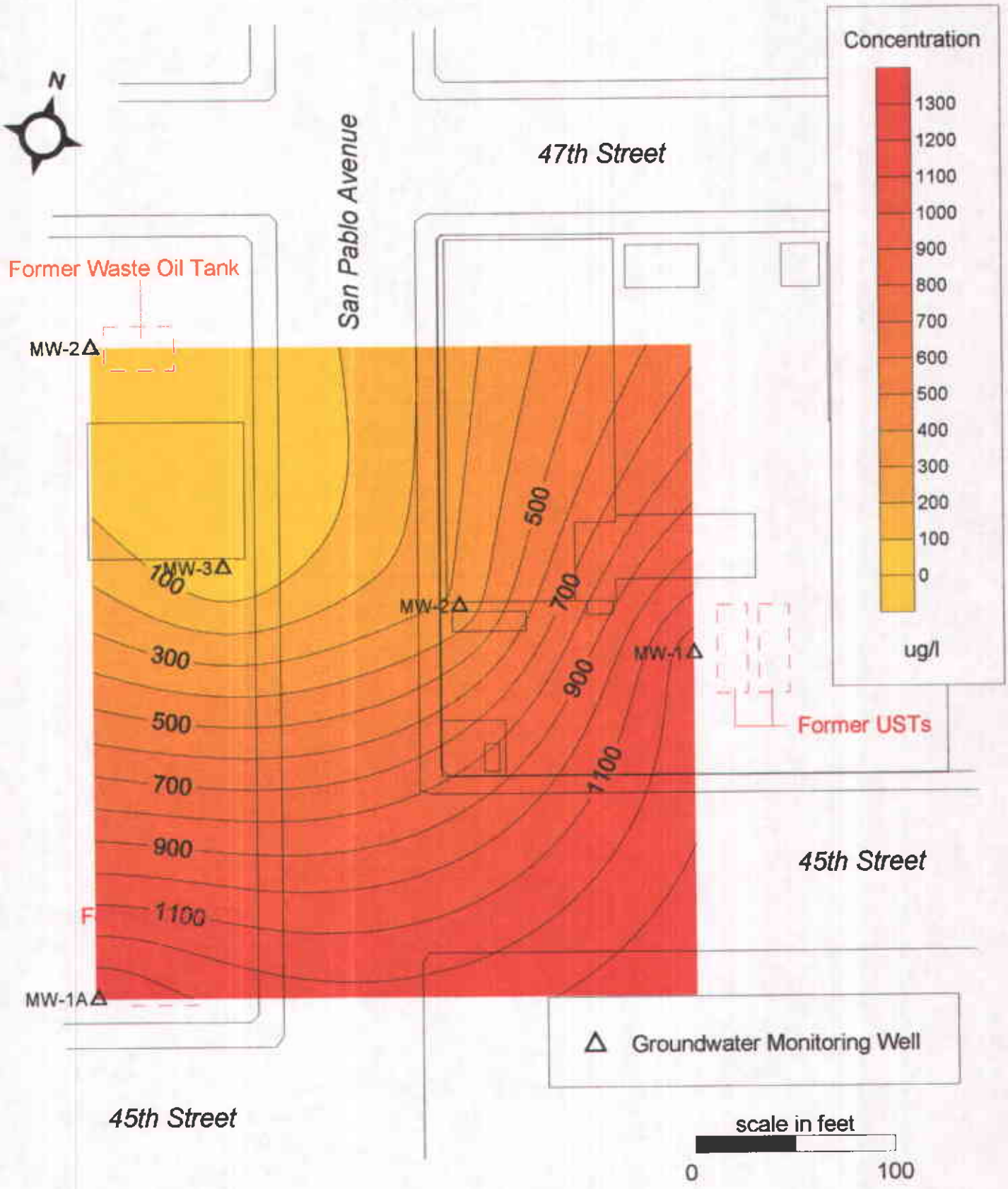

Figure 4: Contour Map of TPH-g Concentrations in Groundwater (ug/L), December 13, 2000

SOMA ENVIRONMENTAL ENGINEERING, INC.

Figure 5: Contour Map of TPH-d Concentrations in Groundwater (ug/L), December 13, 2000

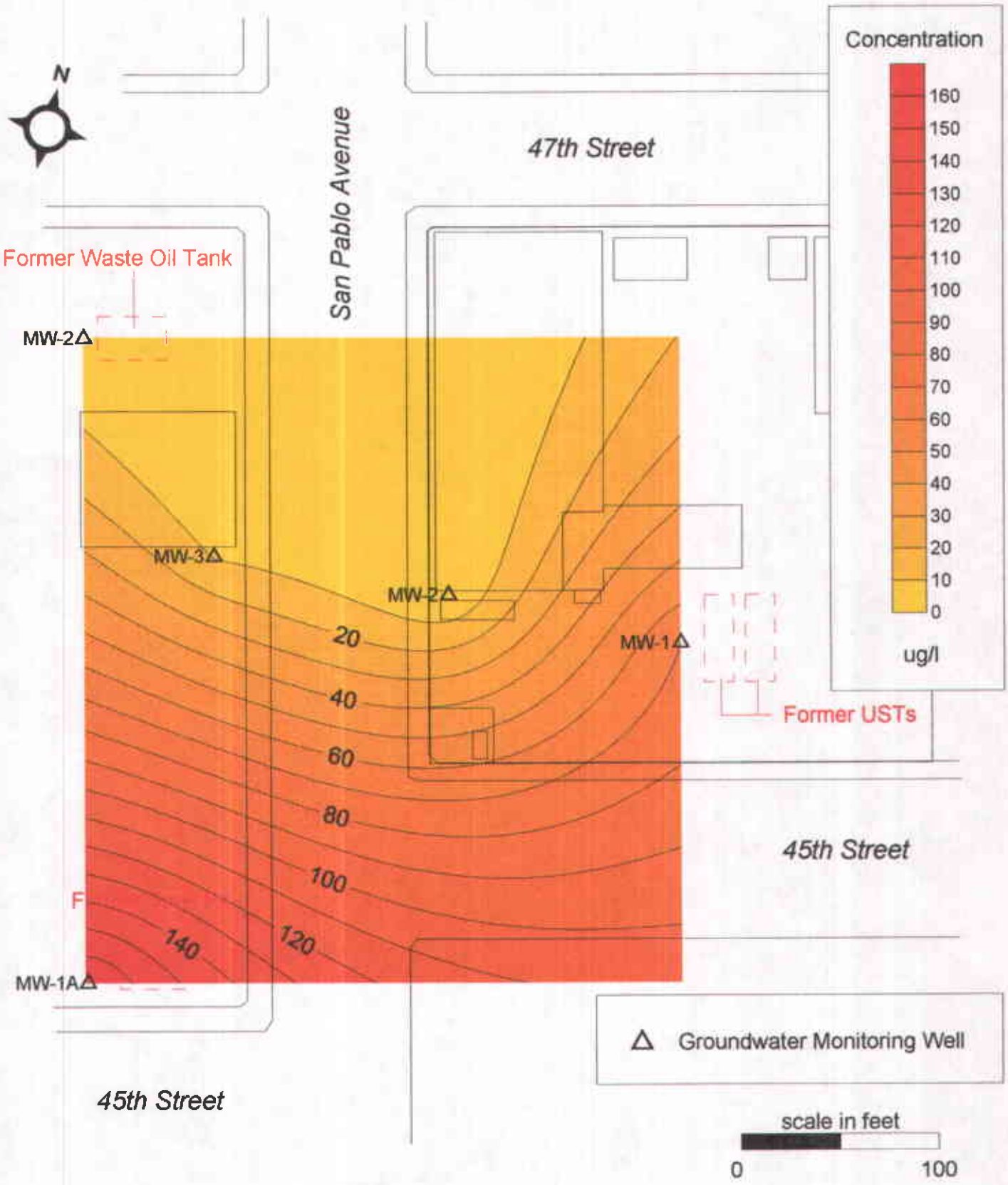

Figure 6: Contour Map of MtBE Concentrations in Groundwater (ug/L), December 13, 2000

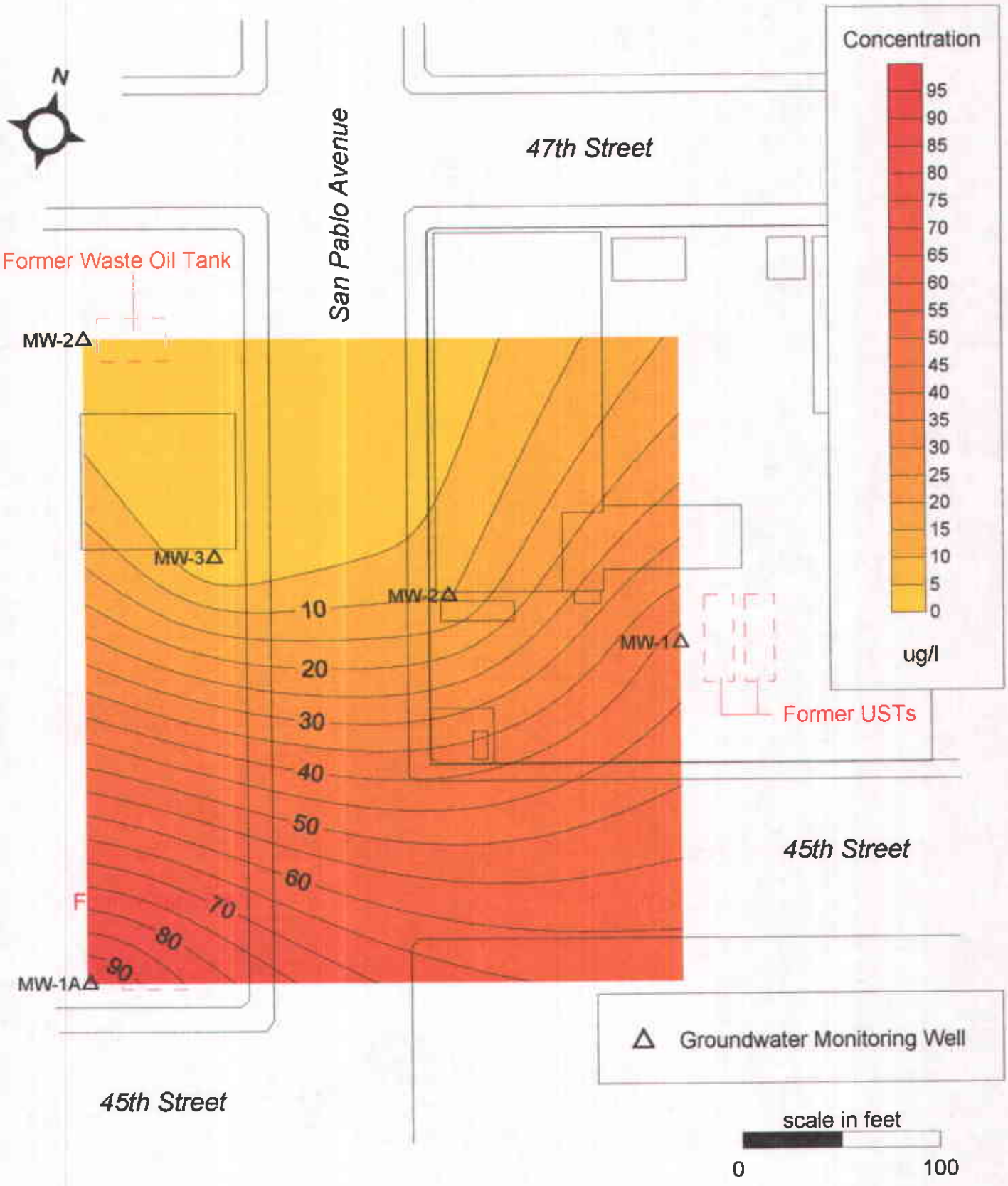

Figure 7: Contour Map of Benzene Concentrations in Groundwater (ug/L), December 13, 2000

APPENDIX A

Field Notes

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-1		**Project No.:**	2370
Casing Diameter:	2	inch	**Address:**	Emeryville Farms Property
Depth of Well:	22.00	ft		4550 San Pablo Avenue
Elevation of the Casing:	42.03	ft		Emeryville, California
Depth to Water Table:	7.68	ft	**Date:**	12/13/2000
Elevation of Water Table:	34.35	ft	**Sampler:**	Frank Cioffi
Height of Water:	14.32	ft		
Purged Volume:	6.00	Gallons		

Purging Method:	**Bailer**	☐	**Pump** ■		
Sampling Method:	**Bailer**	■	**Pump** ☐		
Color:	**Yes** ☐	**No** ■	**Describe**		
Sheen:	**Yes** ■	**No** ☐	**Describe**	Rainbow Sheen	
Odor:	**Yes** ■	**No** ☐	**Describe**	Mild petroleum odor	

Field Measurements

Time	pH	Temp °C	EC µs/cm
2:30	7.20	12.2	565

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-2		**Project No.:**	2370
Casing Diameter:	2	inch	**Address:**	Emeryville Farms Property
Depth of Well:	22.00	ft		4550 San Pablo Avenue
Elevation of the Casing:	42.12	ft		Emeryville, California
Depth to Water Table:	8.05	ft	**Date:**	12/13/2000
Elevation of Water Table:	34.07	ft	**Sampler:**	Frank Cioffi
Height of Water:	13.95	ft		
Purged Volume:	6.00	Gallons		

Purging Method:	**Bailer**	☐	**Pump** ■
Sampling Method:	**Bailer**	■	**Pump** ☐
Color:	**Yes** ☐	**No** ■	**Describe**
Sheen:	**Yes** ☐	**No** ■	**Describe**
Odor:	**Yes** ☐	**No** ■	**Describe**

Field Measurements

Time	pH	Temp °C	EC µs/cm
2:30	7.40	11.2	512

APPENDIX B

Laboratory Analytical Reports and Chain of Custody Forms

WATER • WASTE WATER • HAZARDOUS WASTE • FUEL • AIR • SOIL

DELTA ENVIRONMENTAL LABORATORIES, Ltd

SOMA
2680 Bishop Drive, Suite 203
San Ramon, CA 94583

Client project ID:
2371
San Pablo Ave.
Emeryville, CA

Ref.: R5549400
Method: 5030 GCFID/ 8020/ 8260/8015M
Sampled: 12/13/2000
Received: 12/13/2000
Matrix: Water
Analyzed: 12/19-21/2000
Reported: 12/20/2000
Units: ug/L
Analyst: DS

Attention: Frank Coiffi

Laboratory Results for TPH + BTEX & MTBE Analysis

Analyte	EPA Method	Detection Limit ug/L	Results Sample ID	
			MW-1	MW-2
BTEX				
Benzene	8020	0.5	42.4	9.63
Toluene	8020	0.5	132	32.7
Ethylbenzene	8020	0.5	40	12.1
Total-Xylene	8020	1.0	199	58.4
MTBE	8020/8260	5.0	70*	ND
TPH-g	5030/GCFID	50	1275	322
TPH-Diesel	8015M	50	8,450	188

ND:Not Detected(<MDL)

* Result reported was a confirmed value for MTBE by GC/MS; EPA 8260.

Delta Environmental Laboratories

Hossein Khosh Khoo, Ph.D.

Delta Environmental Laboratories

Chain of Custody (COC) Form

685 Stone Road #11 & 12
Benicia, Ca. 94510
(707) 747-6081, 800-747-6082 FAX (707) 747-6082

Results to: Frank Ciotti
Client Name SOMA
Address
City
Telephone 925-244-6600 Fax: 925-244-660
SAMPLER (signature) Frank Ciotti
Turnaround Time Standard

Project Name 2371 ~~Bachelor~~ San Pablo Ave Emeryville

LAB ID
Ref #

5549

Special Instructions::

#	Sample ID	Date	Time	Matrix	No. of containers	pH	Temperature	Analysis Requested: TPH-G + BTEX + MTBE	TPH-D	EPA 8270	confirm MTBE 8260	Comments
	MW-1	12/13	11:30	H2O	3			✓	✓	✓		
	MW-2	12/13	11 AM	H2O	3			✓	✓	✓		

Relinquished by: Frank Ciotti	Date 12/13/00	1)	Have all samples received been stored on ice? YES
Received By:	Date 12-13-00	2)	Did any VOA samples received have any head space? YES ONLY ONE OF THE MW-2 SAMPLES
Relinquished by:	Date	3)	Were samples in appropriate containers and packaged properly? YES
Received By:	Date	4)	Were samples received in good condition? YES

For Lab Use Only:

WATER • WASTE WATER • HAZARDOUS WASTE • FUEL • AIR • SOIL

DELTA ENVIRONMENTAL LABORATORIES, Ltd

SOMA
2680 Bishop Drive, Suite 203
San Ramon, CA 94583

Client project ID:
2371
San Pablo Ave.
Emeryville, CA

Attention: Frank Coiffi

Ref. R5643/5549/MC1644
Method: 8270
Sampled: 1/9/01
Received: 1/9/01
Matrix Water
Analyzed 1/11/01
Reported: 1/17/01
units: µg/L

Semi-volatile Organics
EPA 8270

Analyte	Detection Limit (µg/L)	Results Sample ID MW-1	MW-2
Acenaphthene	10	ND	ND
Acenaphthylene	10	ND	ND
Anthracene	10	ND	ND
Benzidine	50	ND	ND
Benzoic Acid	50	ND	ND
Benzo (a) anthracene	10	ND	ND
Benzo (b) fluoranthene	10	ND	ND
Benzo (k) fluoranthene	10	ND	ND
Benzo (g,h,i) perylene	10	ND	ND
Benzo (a) pyrene	10	ND	ND
Benzyl Alcohol	20	ND	ND
Bis (2-chloroethoxy) methane	10	ND	ND
Bis (2-choroethyl) Ether	10	ND	ND
Bis (2-Chloroisopropyl) Ether	10	ND	ND
Bis (2-ethylhexy) Phthalate	10	ND	ND
4-Bromophenyl Phenyl Ether	10	ND	ND
Butylbenzyl Phthalate	10	ND	ND
4- Chloroaniline	20	ND	ND
2-Chloronaphthalene	10	ND	ND
4-Chlorophenyl Phenyl Ether	10	ND	ND
Chrysene	10	ND	ND
Dibenzo (a,h) anthracene	10	ND	ND
Dibenzofuran	10	ND	ND
Di-n-butyl Phthalate	10	ND	ND
1,2-Dichlorobenzene	10	ND	ND
1,3-Dichlorobenzene	10	ND	ND
1,4-Dichlorobenzene	10	ND	ND
3,3'-Dichlorobenzidine	20	ND	ND
Diethyl Phthalate	10	ND	ND
Dimethyl Phthalate	10	ND	ND

685 Stone Road #11 & 12 • Benicia, CA 94510 • (707) 747-6081 • (800) 747-6082 • Fax (707) 747-6082

WATER • WASTE WATER • HAZARDOUS WASTE • FUEL • AIR • SOIL

DELTA
ENVIRONMENTAL LABORATORIES, Ltd

SOMA
2680 Bishop Drive, Suite 203
San Ramon, CA 94583

Client project ID:
2371
San Pablo Ave.
Emeryville, CA

Attention: Frank Coiffi

Ref.	R5643/5549/ MC1644
Method:	8270
Sampled:	1/9/01
Received:	1/9/01
Matrix	Water
Analyzed	1/11/01
Reported:	1/17/01
units:	µg/L

Semi-volatile Organics
EPA 8270

Analyte	Detection Limit (µg/L)	Results	
		Sample ID	
		MW-1	MW-2
2,4-Dinitrotoluene	10	ND	ND
2,6-Dinitrotoluene	10	ND	ND
Di-n-octyl Phthalate	10	ND	ND
Fluoranthene	10	ND	ND
Fluorene	10	ND	ND
Hexachlorobenzene	10	ND	ND
Hexachlorobutadiene	10	ND	ND
Hexachlorocyclopentadiene	10	ND	ND
Hexachloroethane	10	ND	ND
Indeno (1.2.3-cd) pyrene	10	ND	ND
Isophorone	10	ND	ND
2-Methylnaphthalene	10	ND	ND
Naphthalene	10	ND	ND
2-Nitroaniline	50	ND	ND
3-Nitroaniline	50	ND	ND
4-Nitroaniline	50	ND	ND
Nitrobenzene	10	ND	ND
N-Nitrosodiphenylamine	10	ND	ND
N-Nitrosodi-n-propylamine	10	ND	ND
Phenanthrene	10	ND	ND
Pyrene	10	ND	ND
1,2,4-Trichlorobenzene	10	ND	ND
4-Chloro-3-methylphenol	10	ND	ND

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WATER • WASTE WATER • HAZARDOUS WASTE • FUEL • AIR • SOIL

DELTA ENVIRONMENTAL LABORATORIES, Ltd

SOMA
2680 Bishop Drive, Suite 203
San Ramon, CA 94583

Attention: Frank Coiffi

Client project ID:
2371
San Pablo Ave.
Emeryville, CA

Ref. R5643/5549/MC1644
Method: 8270
Sampled: 1/9/01
Received: 1/9/01
Matrix Water
Analyzed 1/11/01
Reported: 1/17/01
units: µg/L

Semi-volatile Organics
EPA 8270

Analyte	Detection Limit (µg/L)	Results Sample ID MW-1	Results Sample ID MW-2
2-Chlorophenol	10	ND	ND
2,4-Dichlorophenol	10	ND	ND
2,4-Dimethylphenol	10	ND	ND
4,6-Dinitro-2-methylphenol	50	ND	ND
2,4-Dinitrophenol	50	ND	ND
2-Methylphenol	10	ND	ND
4-Methylphenol	10	ND	ND
2-Nitrophenol	10	ND	ND
4-Nitrophenol	50	ND	ND
Pentchlorophenol	50	ND	ND
Phenol	10	ND	ND
2,4,5-Trichlorophenol	10	ND	ND
2,4,6-Trichlorophenol	10	ND	ND

DELTA Environmental Laboratories
California Certification #1857

H.Khosh Khoo, PhD.,
Laboratory Director/President

Rtmp_8270_200W

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Delta Environmental Laboratories

Chain of Custody (COC) Form

685 Stone Road #11 & 12
Benicia, Ca, 94510
(707) 747-6081, 800-747-6082 FAX (707) 747-6082

Results to: Frank
Client Name SOMA
Address
City
Telephone 925-244-6600 Fax: 925-244-6601
SAMPLER (signature) Frank Tuttle
Turnaround Time 24 hours

CHANGED TO STANDARD

Project Name 2371 Emeryville Farms
LAB ID
Ref #

1642 / 1492

Special Instructions::

Analysis Requested

#	Sample ID	Date	Time	Matrix	No. containers	pH	Temperature	BTEX 8260	Comments
1	MW-1	1/9		H2O	1			✓	
2	MW-2	"		H2O	1			✓	

Relinquished by:	Frank Tuttle	Date 1/9/01	1) Have all samples received been stored on ice? Y N/A
Received By:		Date	2) Did any VOA samples received have any head space? Y N/A
Relinquished by:		Date 1/9/01	3) Were samples in appropriate containers and packaged properly? Y N
Received By:		Date	4) Were samples receicved in good condition? Y

For Lab Use Only:

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Geo-Logic 1140 5th Avenue Crocket, CA 94525	Client Project ID: #1113-02; Former Berkeley Farms/KFC	Date Sampled: 12/13/00
		Date Received: 12/13/00
	Client Contact: Joel Greger	Date Extracted: 12/14-12/18/00
	Client P.O:	Date Analyzed: 12/14-12/18/00

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)^	MTBE	Benzene	Toluene	Ethylben-zene	Xylenes	% Recovery Surrogate
55883	MW1A	W	1400,a	170	96	12	ND<2.0	10	102
55884	MW2	W	ND	ND	ND	ND	ND	ND	99
55885	MW3	W	ND	9.3	ND	ND	ND	ND	101
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

* cluttered chromatogram; sample peak coelutes with surrogate peak

^The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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http://www.mccampbell.com E-mail: main@mccampbell.com

Geo-Logic 1140 5th Avenue Crockett, CA 94525	Client Project ID: #1113-02; Former Berkeley Farms/KFC	Date Sampled: 12/13/00
		Date Received: 12/13/00
	Client Contact: Joel Greger	Date Extracted: 12/13/00
	Client P.O:	Date Analyzed: 12/13-12/19/00

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)^	% Recovery Surrogate
55883	MW1A	W	250,d	93
55884	MW2	W	ND	110
55885	MW3	W	ND	98
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L.

^ cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

"The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director