

Alameda County

SEP 10 2005

Environmental Health

September 5, 2002

**GROUNDWATER MONITORING WELL INSTALLATION
& INITIAL MONITORING REPORT**

1240 Powell Street
Emeryville, California

Project No. 5272

Prepared For

Wells Fargo Bank
1298 E. 14th Street, Suite 320
San Leandro, CA 94577

Prepared By

AEI Consultants
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1.0 INTRODUCTION

AEI Consultants (AEI) has prepared this report on behalf of Mr. Bill Rauch of Wells Fargo Bank and documents the groundwater investigation performed at the property located at 1240 Powell Street in Emeryville, California (Figure 1: Site Location Map). The investigation was conducted to further characterize the extent and the magnitude of the dissolved hydrocarbon plume in the groundwater beneath the site.

2.0 SITE DESCRIPTION AND BACKGROUND

The subject property (hereinafter referred to as the "site" or "property" is located at 1240 Powell Street at the northwest corner of Powell Street and Vallejo Street in the City of Emeryville. The property is approximately 10,000 square feet in size and is currently improved with a two-story office building occupying approximately 60% of the property. The eastern portion of the property is improved with parking and driveway areas as well as landscaping.

AEI was retained in December 2001 to perform a Phase I Environmental Site Assessment (ESA) on the property. The ESA revealed that the property was used as a gasoline service station from the late 1950s through 1974. Records reviewed at the Emeryville Building Department revealed that the service station was originally equipped with two 6,000-gallon fuel underground storage tanks (USTs), one 2,000-gallon UST, and one 550-gallon waste-oil UST. In 1969, one of the 6,000-gallon USTs was reportedly replaced with a 10,000-gallon UST. Permits to demolish the station in 1974 indicated the removal of "all aboveground and below ground facilities." No records of any soil and/or groundwater sample analyses were found. Approximate locations of the former USTs and associated dispensers are shown in Figure 2.

An additional 4,000-gallon UST was associated with the current building, and was used to fuel delivery trucks. The Emeryville Fire Department issued a permit in 1991 for removal of the 4,000-gallon UST. No other documentation was available regarding the removal of this UST. The approximate location of this UST is also shown in Figure 2.

Based on the former presence of numerous fuel USTs and associated dispensing systems, and the lack of other records, it was concluded in the ESA that the property could have been impacted by petroleum hydrocarbons.

On February 7, 2002 AEI advanced a total of eight (8) soil borings (labeled SB-1 through SB-8). Refer to Figure 2 for their locations. Total petroleum hydrocarbons as gasoline (TPH-g) and total petroleum hydrocarbons as diesel (TPH-d) were detected in only one soil sample (SB-1 8' at 47 mg/kg and 5.8 mg/kg, respectively). Hydrocarbons were detected in four of the seven groundwater samples, with TPH-g detected up to 1,400 µg/l and TPH-d detected up to 1,400 µg/l. Both benzene and methyl tertiary butyl ether (MTBE) were detected up to 5.7 µg/l in the groundwater. The analytical results from the February 7, 2002 investigation are included in Tables 2 & 3. Please refer to *Phase II Subsurface Investigation Report*, issued on February 15, 2002 by AEI, for more details.

3.0 GEOLOGY AND HYDROGEOLOGY

The site is located approximately 30 feet above mean sea level and about 3,000 feet east of the San Francisco Bay. The site is located on alluvial deposits transported from the Berkeley Hills. The local topography slopes moderately to the west.

The near surface sediments encountered during well installation activities consisted of sandy and gravelly clays to approximately 10 to 14 feet below ground surface (bgs), underlain by a layer of stiff clay with less gravel. Under the clays was a clay rich sand beginning at 14 to 16 feet bgs. Groundwater was encountered in the temporary borings between approximately 15 and 20 feet bgs.

Well locations were surveyed relative to each other and msl by David Logan (California Professional Land Surveyor No. 5003) on August 15, 2002.

Water level measurements were made during the first groundwater monitoring and sampling episode conducted on August 13, 2002. Water table elevations ranged between 7.69 and 8.58 feet above mean sea level (msl). The hydraulic gradient was calculated at 0.028 ft/ft with flow towards the southwest.

4.0 PERMITS

Prior to the start of drilling activities, well construction permits were submitted and approved by Mr. James Yoo of the Alameda County Public Works Agency (ACPWA). An encroachment permit was received from the City of Emeryville Department of Public Works for construction of MW-2 in the #1 lane of westbound Powell Street. Copies of the permit documentation are included in Appendix A.

5.0 WELL INSTALLATION & CONSTRUCTION

On August 2, 2002, a total of three soil borings were advanced and converted to groundwater monitoring wells. Please refer to Figure 2 for locations of the newly constructed wells. These borings were advanced with a hydraulic rotary drill rig running 8-inch diameter hollow-stem augers. Cuttings generated during the well installation activities were stored on-site in sealed, labeled 55-gallon drums.

Soil samples were collected at approximately every 5 feet in each boring. Soil samples obtained during drilling activities were screened in the field via sensory perceptions and a portable organic vapor meter. The borings were logged using the unified soil classification system (USCS). Please refer to Appendix B for detailed logs of the borings. Soil samples were sealed within brass liners using Teflon® tape and plastic caps and stored over ice during transportation to the laboratory.

The three soil borings were converted to groundwater monitoring wells (MW-1 through MW-3). All three wells were constructed with 2" diameter casing to a total depth of 20 feet. The wells were constructed of approximately 10 feet of 0.020" factory-slotted well screen and 10 feet of flush threaded blank Schedule 40 PVC casing that was installed through the hollow augers. The well screen in each well was fitted with a flush-threaded bottom cap. No. 2/16 Monterey sand was poured through the auger to form a sand pack from the bottom of the well to 2 feet above the slotted well screen. Approximately 1.5 to 2 feet of bentonite pellets were placed above the sand and hydrated with tap water. The remainder of the boring was filled to 0.5 feet below grade with neat cement grout. A flush mounted traffic rated well box was installed over the casing, and an expanding, locking inner cap was placed on the casing top. Refer to the boring logs (Appendix B) for an illustration of well construction details.

6.0 WELL DEVELOPMENT AND SAMPLING

The three newly installed wells were developed on August 7, 2002. The wells were developed by first using a surge block to clear the sand pack and screen of any fine sands, and then a minimum of 10 well volumes of water were pumped from each well.

Groundwater samples were collected from the wells on August 13, 2002. No hydrocarbon odor or product sheen was observed during the sampling of the wells. Depth to groundwater was measured prior to sampling activities. Prior to the collection of water samples, at least three well volumes of water were purged from each well. Please refer to Appendix C for Groundwater Well Sampling Field Forms, which include details on the sampling of each well.

The groundwater samples were collected from each well using clean disposable plastic bailers. Water was poured from the bailers into 1 L amber glass bottles and 40 ml VOA vials and capped so that neither headspace nor air bubbles were visible within the sample containers. The samples were labeled and placed on ice and transported under chain of custody protocol for analysis to McCampell Analytical Inc. (DOHS Certification Number 1644) of Pacheco, California.

7.0 SAMPLE ANALYTICAL RESULTS

For each of the three borings, the soil sample from 11 feet bgs was analyzed for TPH-d (EPA Method 8015), TPH-g (EPA Method 5030/8015), benzene, toluene, ethylbenzene and xylenes (BTEX), and MTBE by EPA Method 5030/8020.

No detectable concentrations of hydrocarbons were detected in any of the soil samples. Please refer to Table 3 for details of the soil sample analytical results.

Groundwater samples collected during the first sampling episode were analyzed for TPH-d (EPA Method 8015), TPH-g (EPA Method 5030/8015), BTEX and MTBE (EPA Method 5030/8015), and Volatile Organics (EPA 8260). MTBE was also analyzed by EPA Method 8260B.

Elevated concentrations of TPH-d were detected in MW-2 and MW-3 (81 and 130 µg/L respectively). No TPH-d was detected in MW-1. No detectable concentrations of TPH-g or BTEX compounds were found in any of the wells. No volatile organic compounds were detected in any of the wells, with the exception of 5.1 µg/L of 1,2-DCA in MW-2. The groundwater sample analytical data are summarized in Table 5. Laboratory results and chain of custody documentation are included in Appendix C.

8.0 SUMMARY AND RECOMMENDATIONS

This investigation was designed to further assess the extent and stability of the dissolved phase hydrocarbon plume identified during AEI's investigation performed in February 2002. Based on the lack of an identified off-site source, the release appeared to have originated at the subject property.

AEI advanced a total of three soil borings during this investigation, which were converted to groundwater monitoring wells. Only one soil sample from these two events contained detectable levels of hydrocarbon contamination (SB-1). Water sample analyses indicated that the highest levels of contamination exist in the region of the former tanks. The low concentrations of TPH-d in MW-2 and MW-3 and absence of other contaminants indicate that the dissolved phase hydrocarbon plume is centered on at the former tank locations and is limited in extent.

Due to access limitations, samples could not be collected near the former dispenser islands or the former waste-oil tank. The possibility remains that impacted soil and/or groundwater exists beneath the current building in either or both of these locations. MW-2 is located down-gradient of the former locations of the dispensers and waste-oil tank, and currently contains only minor concentrations of TPH-d.

Continued groundwater monitoring and sample collection are recommended to assess the mobility of the contaminants. The next episode of sampling is scheduled for November 2002.

9.0 REFERENCES

1. Phase I ESA, December 20, 2001, prepared by AEI Consultants.
2. Phase II Subsurface Investigation, June 2001, prepared by AEI Consultants.

10.0 REPORT LIMITATIONS AND SIGNATURES

This report presents a summary of work completed by AEI, including observations and descriptions of site conditions. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information, but it cannot be assumed that they are entirely representative of all areas not sampled. All conclusions and recommendations are based on these analyses, observations,

and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

These services were performed in accordance with generally accepted practices in the environmental engineering and construction field that existed at the time and location of the work.

Sincerely,

ORIGINAL SIGNED BY

Nathan Garfield,
Staff Geologist

ORIGINAL SIGNED BY

Joseph P. Derhake
Senior Project Engineer, Principal

Table 1
Groundwater Elevation Data

Well ID	Date Collected	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MW-1	8/13/02	28.17	7.69	20.48
MW-2	8/13/02	26.17	8.58	17.59
MW-3	8/13/02	28.62	8.28	20.34

All well elevations are measured from the top of the casing
ft msl = feet above mean sea level

Table 2
Soil Sample Analytical Data

Sample ID	Date	TPH as gasoline mg/kg	TPH as diesel mg/kg	MTBE mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylenes mg/kg	TOG mg/kg	VOCs (8260) mg/kg
SB-1 8'	2/7/2002	47	5.8	<0.5	<0.05	<0.05	<0.05	<0.05	-	-
SB-3 4'	2/7/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	-	-
SB-4 8'	2/7/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	-	-
SB-5 6'	2/7/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	-	-
SB-6 8'	2/7/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	-	-
SB-7 8'	2/7/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	-	-
SB-7 12'	2/7/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	-	-
SB-7 15'	2/7/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	<50	ND
SB-8 10'	2/7/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	-	-
MW-1-11'	8/2/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	-	-
MW-2-11'	8/2/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	-	-
MW-3-11'	8/2/2002	<1.0	<1.0	<0.05	<0.005	<0.005	<0.005	<0.005	-	-
MDL		1.0	1.0	0.05	0.005	0.005	0.005	0.005	50	<0.005*

MDL = Method Detection Limit

- = Sample not analyzed by this method

ug/kg = micrograms per kilogram (ppb)

mg/kg = milligrams per kilogram (ppm)

ND = Not detected above method detection limit

* = reporting limit varies by chemical, see Appendix B

Table 2 Supplement: LUFT Five Metals

Sample ID	Cadmium	Chromium	Lead	Nickel	Zinc
SB-7 12'	<0.5	26	6	40	41

All results in Table 2 Supplement in mg/kg

Table 3
Groundwater Sample Analytical Results

Sample ID	DATE	TPH as gasoline µg/L	TPH as diesel µg/L	MTBE µg/L	Benzene µg/L	Toluene µg/L	Ethyl- benzene µg/L	Xylenes µg/L	(EPA 8260) 1,2-DCA µg/L
SB-1 W	2/7/2002	320	230	<5.0	<0.5	<0.5	5.2	3.3	-
SB-2 W	2/7/2002	1,400	1,400	<5.0	5.7	3.0	3.3	4.0	-
SB-3 W	2/7/2002	<50	<50	5.7	<0.5	<0.5	<0.5	<0.5	-
SB-4 W	2/7/2002	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
SB-5 W	2/7/2002	71	200	<5.0	<0.5	1.5	<0.5	<0.5	-
SB-6 W	2/7/2002	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
SB-8 W	2/7/2002	<50	580	<5.0	<0.5	<0.5	<0.5	<0.5	-
MW-1	8/13/2002	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2	8/13/2002	<50	81	<5.0	<0.5	<0.5	<0.5	<0.5	5.1
MW-3	8/13/2002	<50	130	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
MDL		50	50	5.0	0.5	0.5	0.5	0.5	0.5

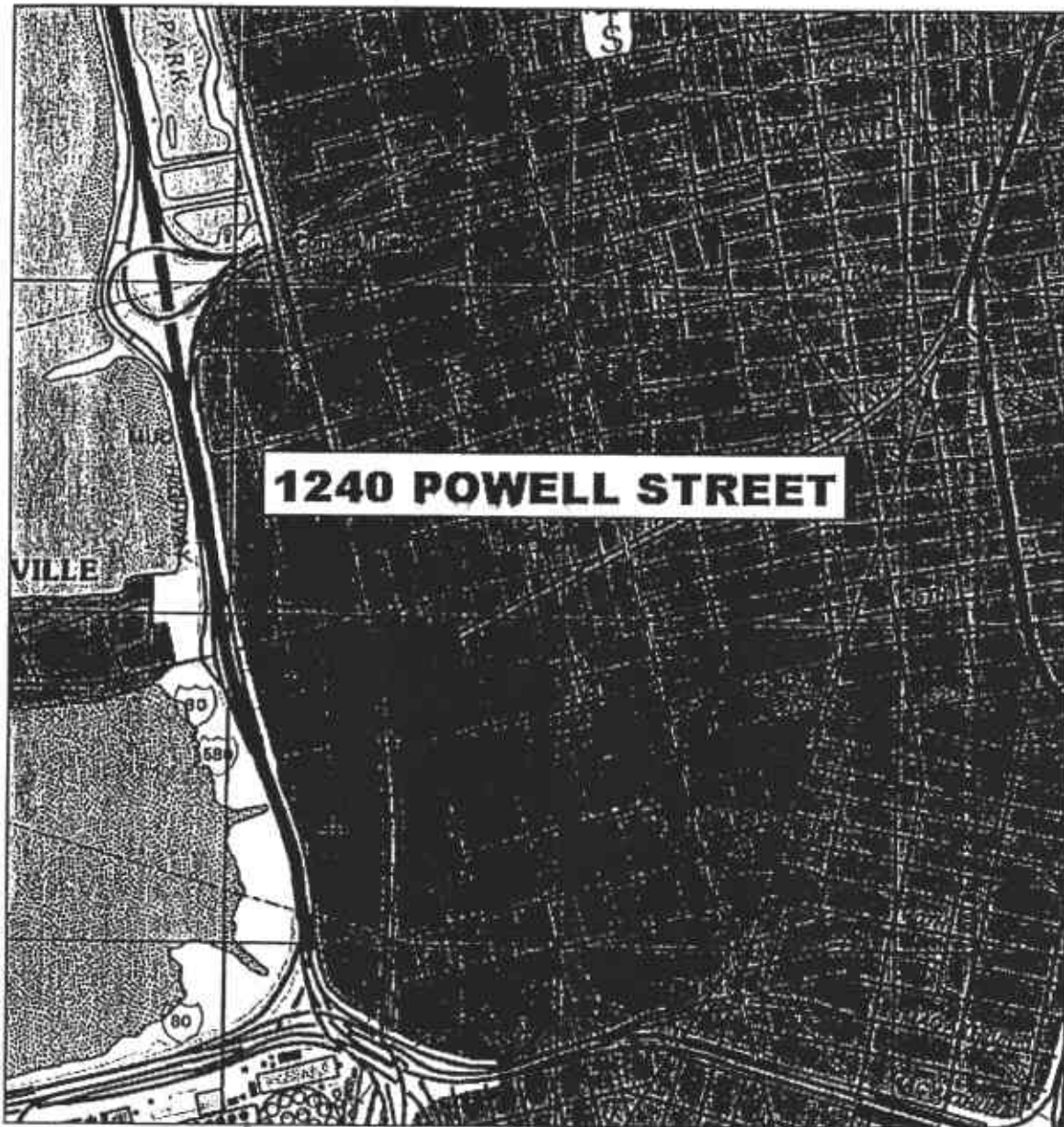
MDL = Method Detection Limit

ND = Not detected above the Method Detection Limit (unless otherwise noted)

µg/L = micrograms per liter (ppb)

mg/L = milligrams per liter (ppm)

- = Sample not analyzed by this method



1240 POWELL STREET

TN / MN
15°

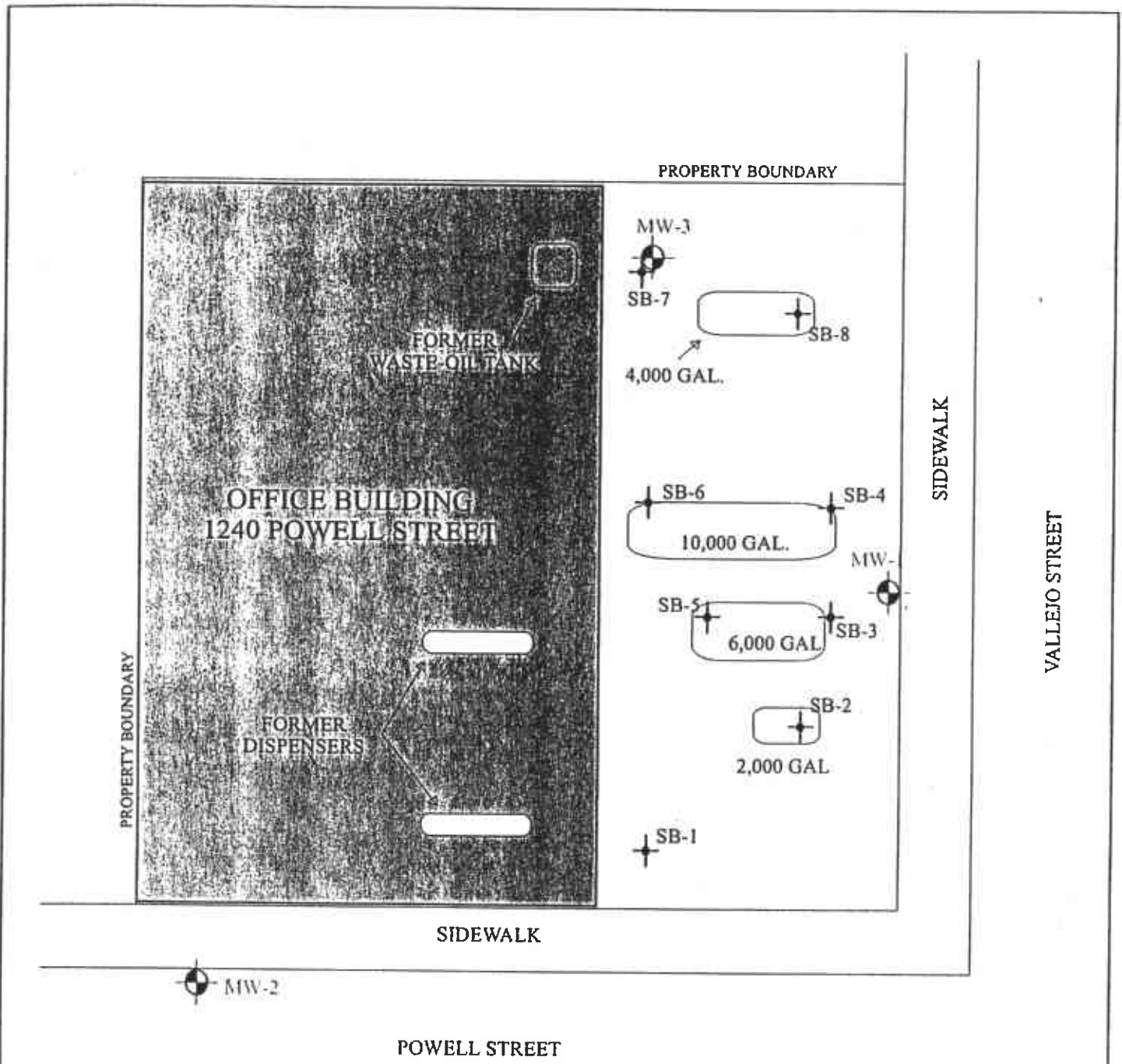
0 1000 FEET 0 500 1000 METERS
MILE
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AEI CONSULTANTS
3210 OLD TUNNEL RD, STE B, LAFAYETTE, CA



SITE LOCATION MAP


1240 POWELL STREET
EMERYVILLE, CALIFORNIA


FIGURE 1
PROJECT No. 5272



LEGEND

-  LOCATION OF MONITORING WELLS INSTALLED 8/2/02
-  LOCATION OF SOIL BORINGS ADVANCED 2/7/02
- APPROXIMATE LOCATIONS OF FORMER TANKS SHOWN WITH SIZE

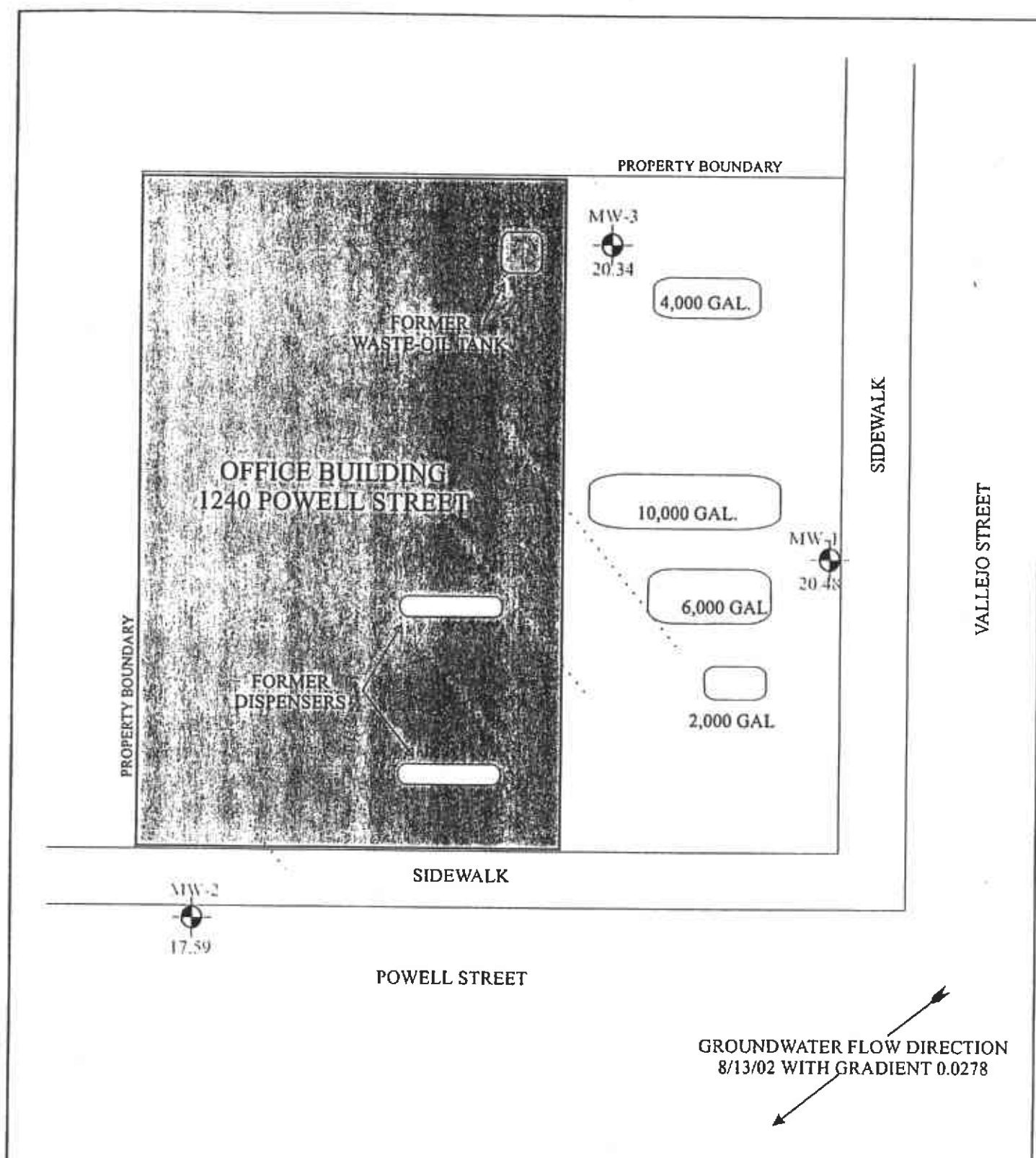





AEI CONSULTANTS
3210 Old Tunnel Road, Ste B, Lafayette, CA


SITE PLAN

1240 POWELL STREET EMERYVILLE, CALIFORNIA	FIGURE 2 PROJECT NO 5272
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LEGEND


 LOCATION OF MONITORING WELLS
 INSTALLED 8/2/02



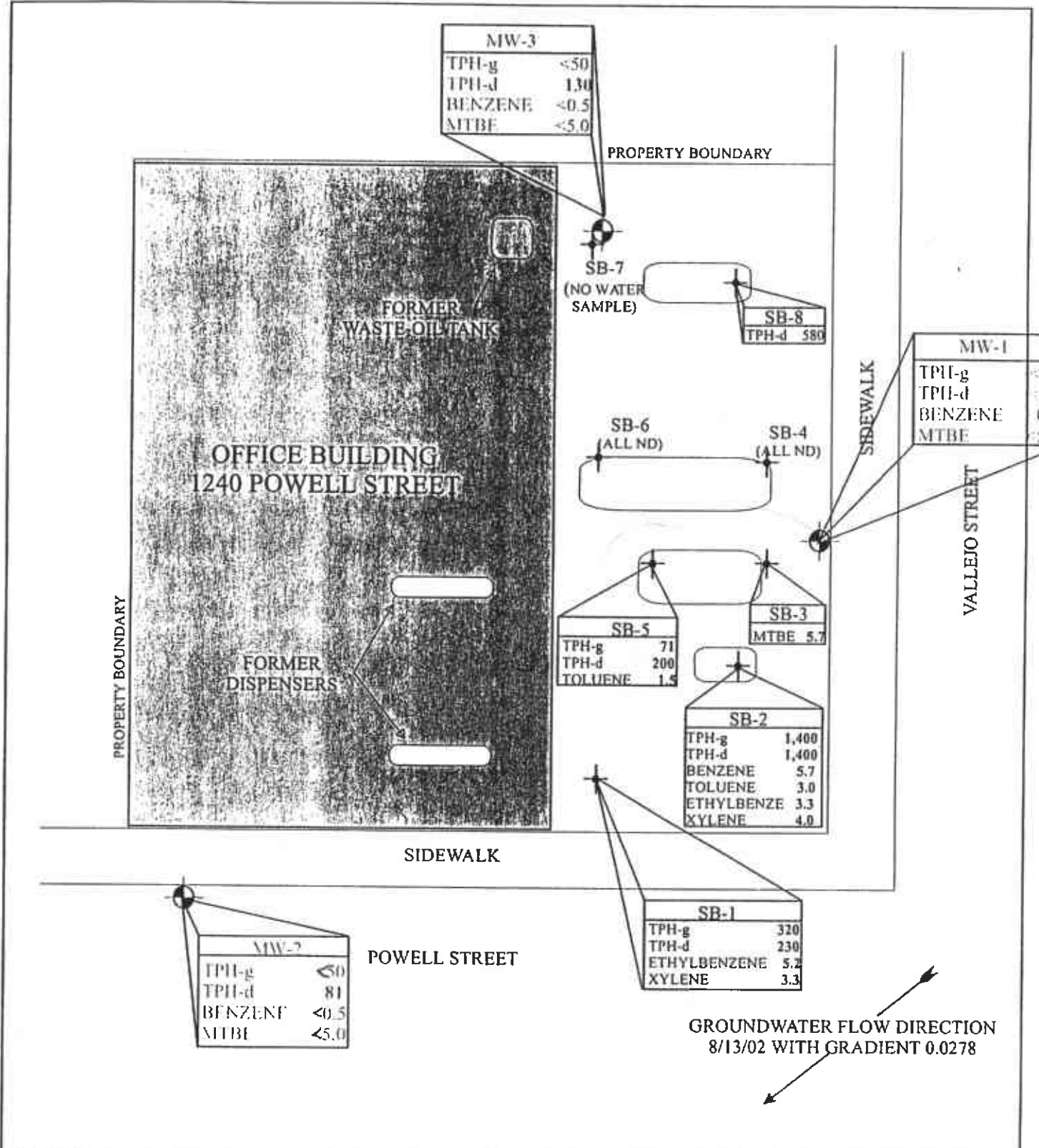
APPROXIMATE LOCATIONS OF
 FORMER TANKS SHOWN WITH SIZE



AEI CONSULTANTS
 3210 Old Tunnel Road, Ste B, Lafayette, CA

GROUNDWATER ELEVATION

1240 POWELL STREET EMERYVILLE, CALIFORNIA	FIGURE 3 PROJECT NO 5272
--	------------------------------------



MW-3	
TPH-g	<50
TPH-d	1.30
BENZENE	<0.5
MTBE	<5.0

SB-8	
TPH-d	580

MW-1	
TPH-g	<50
TPH-d	<50
BENZENE	0.5
MTBE	<5.0

SB-5	
TPH-g	71
TPH-d	200
TOLUENE	1.5

SB-3	
MTBE	5.7

SB-2	
TPH-g	1,400
TPH-d	1,400
BENZENE	5.7
TOLUENE	3.0
ETHYLBENZE	3.3
XYLENE	4.0

SB-1	
TPH-g	320
TPH-d	230
ETHYLBENZE	5.2
XYLENE	3.3

MW-2	
TPH-g	<50
TPH-d	81
BENZENE	<0.5
MTBE	<5.0


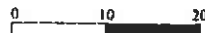
GROUNDWATER FLOW DIRECTION
8/13/02 WITH GRADIENT 0.0278

LEGEND

LOCATION OF MONITORING WELLS WITH HYDROCARBON CONCENTRATIONS EXPRESSED IN ug/L

LOCATION OF SOIL BORINGS WITH DETECTED COMPOUNDS EXPRESSED IN ug/L

APPROXIMATE LOCATIONS OF FORMER TANKS SHOWN WITH SIZE

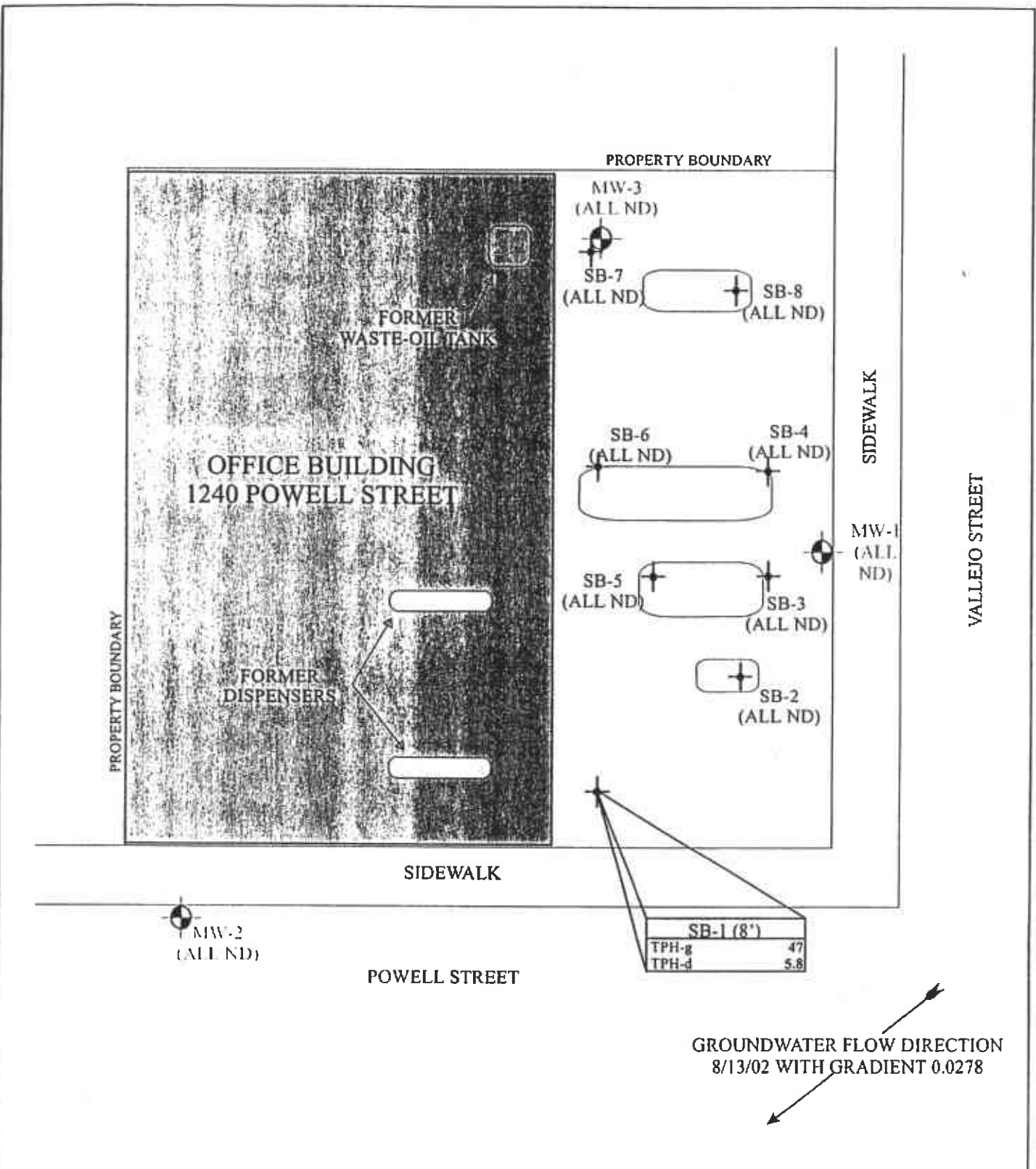



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DISSOLVED HYDROCARBONS

1240 POWELL STREET
EMERYVILLE, CALIFORNIA

FIGURE 4
PROJECT No 5272



LEGEND

MW- LOCATION OF MONITORING WELLS WITH HYDROCARBON CONCENTRATIONS EXPRESSED IN mg/L

SB-3 LOCATION OF SOIL BORINGS WITH DETECTED COMPOUNDS EXPRESSED IN mg/L

APPROXIMATE LOCATIONS OF FORMER TANKS SHOWN WITH SIZE

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SOIL ANALYTICAL RESULTS

1240 POWELL STREET
EMERYVILLE, CALIFORNIA

FIGURE 5
PROJECT NO 5272

Project No: 5272

Sheet: 1 of 1

Project Name: POWELL ST., EMERYVILLE

Log of Borehole: MW-1

Client: WELLS FARGO

Location:

Depth	USCS		Subsurface Description	Sample Data				Well Data	Remarks
	Symbol	Label		Sample Label	Type	Blow/ft	Recovery		
0			Ground Surface						Traffic rated well box / locking cap
2			CL CLAY Clay with sand and gravel up to 3 cm (30%), stiff, brown						PID = <1.0
4									
6				MW-1 5.5'	SS	31	75		
8									
10			SC SAND Interbedded sand and clay, sand clay mixtures, saturated	MW-1 11'	SS	15	60		PID = 0.3
12									
14				gravels decrease to 5%					
16				SS	13	0			Saturated soils, no recovery
18									10' 0.020 2" screen to TD
20				SS	15	NA			# 2/16 Monterey sand to 8'
22			End of Borehole						

Drill Date 8/2/02

Reviewed by: JPD

AEI Consultants
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Lafayette, CA 94549
(925) 283-6000

Drill Method: HSA

Logged by: NG / PJM

Total Depth: 20

Depth to Water: 15' (during drilling)

Project No: 5272

Sheet: 1 of 1

Project Name: Powell Street, Emeryville

Log of Borehole: MW-2

Client: WFB

Location:

Depth	USCS		Subsurface Description	Sample Data				Well Data	Remarks		
	Symbol	Label		Sample Label	Type	Blow/ft	Recovery				
0	CL	CL	Ground Surface						Traffic rated well box / locking cap		
0											
2					CLAY Clay with sand and gravel up to 3 cm (30%), stiff, brown						
4											
6						MW-2 6'	SS	22	90		PID = <1.0
8											Grey, stained soil. Moderate HC odor
10					gravels decrease to 5%						PID = <1.0
12											
14											
16				SC	SAND Interbedded sand and clay, sand clay mixtures, saturated						Saturated soils, no recovery
18											
20											10' 0.020 2" screen to TD # 2/16 Monterey sand to 8'
22			End of Borehole								

Drill Date 8/2/02

Reviewed by: JD

AEI Consultants
3210 Old Tunnel Road, Suite B
Lafayette, CA 94549
(925) 283-6000

Drill Method: HSA

Logged by: NG / PJM

Total Depth: 20

Depth to Water: 15 during drilling

Project No: 5272



Sheet: 1 of 1

Project Name: Powell Street, Emeryville

Log of Borehole: MW-3

Client: WFB

Location:

Depth	USCS		Subsurface Description	Sample Data				Well Data	Remarks
	Symbol	Label		Sample Label	Type	Blow/ft	Recovery		
0			Ground Surface						
0 - 13		CL	CLAY Clay with sand and gravel up to 3 cm (35%), stiff, brown						Traffic rated well box / locking cap
6				MW-3 6'	SS	19	60		PID = <1.0
10			gravels decrease to 5%						PID = <1.0
11				MW-3 11'	SS	18	60		
13 - 16		SC	SAND Interbedded sand and clay, sand clay mixtures, saturated						
16				MW-3 16'	SS	12	100		
16 - 20									10' 0.020 2" screen to TD # 2/16 Monterey sand to 8'
20			End of Borehole						Saturated soils, no recovery

Drill Date 8/2/02

Reviewed by: JD

AEI Consultants
3210 Old Tunnel Road, Suite B
Lafayette, CA 94549
(925) 283-6000

Drill Method: HSA

Logged by: NG / PJM

Total Depth: 20

Depth to Water: 20 during drilling



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1335
PHONE (510) 470-5224 MARLON MAGALLANES / FRANK CORD (510) 670-5753
FAX (510) 782-1739 (510) 670-6633 James You

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT
1240 Powell Street
Emeryville, CA

PERMIT NUMBER W02-0695
WELL NUMBER
APN

CLIENT
Name Wells Fargo Bank
Address 3645 Cardiff Ave Phone 310 559 7050
City Los Angeles, CA Zip 90034

PERMIT CONDITIONS
Circled Permit Requirements Apply

APPLICANT
Name AEI Consultants (Peter McIntyre)
Address 3210 Old Tunnel Rd Phone 925/283-6121
City Lafayette, CA Zip 94549

A. GENERAL

- 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

- 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

- 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout and mixture. Upper two-three feet replaced in kind or with compressed airings.

E. CATHODIC

Fill hole inside zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS - SCH 1 Affected.

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

TYPE OF PROJECT
Well Construction
Cathodic Protection
Water Supply
Monitoring
Geotechnical Investigation
General
Contamination
Well Destruction

PROPOSED WATER SUPPLY WELL USE
New Domestic
Municipal
Industrial
Replacement Domestic
Irrigation
Other

DRILLING METHOD:
Mud Rotary
Cable
Air Rotary
Other
Auger
EC

DRILLER'S NAME Spectrum Exploration

DRILLER'S LICENSE NO. C57 512 268

WELL PROJECTS
Drill Hole Diameter 1 1/4 in.
Casing Diameter 2 in.
Surface Seal Depth 8 ft.
Maximum Depth 20 ft.
Owner's Well Number MW1

GEOTECHNICAL PROJECTS
Number of Borings
Hole Diameter
Maximum Depth

ESTIMATED STARTING DATE 7/29/02
ESTIMATED COMPLETION DATE 7/29/02

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 71-66.

APPLICANT'S SIGNATURE Peter McIntyre DATE 7/19/02

PLEASE PRINT NAME Peter McIntyre Rev. 5-11-00

APPROVED

[Signature]

DATE 7-27-02

07/20/2002 11:06 9252936121

AEI CONSULTANTS (SF)
PHONE (510) 879-8554 MARJORIE GALLAGHER/BANK CORD (410) 670-5243
FAX (510) 783-1939

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ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1195
PHONE (510) 879-8554 MARJORIE GALLAGHER/BANK CORD (410) 670-5243
FAX (510) 783-1939
(510) 670-6633 - James Yu

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT
1240 Powell Street
Emeryville, CA

PERMIT NUMBER W12-0696
WELL NUMBER _____
APN _____

CLIENT
Name Wells Fargo Bank
Address 3645 Cardiff Ave Phone 310 859 7050
City Los Angeles, CA Zip 90034

APPLICANT
Name AEI Consultants (Peter McIntyre) Fax 925/283-6121
Address 3210 Old Tunnel Rd Phone 925/283-6000
City Lafayette, CA Zip 94549

TYPE OF PROJECT
Well Construction Geotechnical Investigation
Cathodic Protection General
Water Supply Contamination
Monitoring Well Destruction

PROPOSED WATER SUPPLY WELL USE
New Domestic Replacement Domestic
Municipal Irrigation
Industrial Other _____

DRILLING METHOD:
Mud Rotary Air Rotary Auger
Cable Other

DRILLER'S NAME Spectrum Exploration
DRILLER'S LICENSE NO. C57 512 268

WELL PROJECTS
Drill Hole Diameter 8 1/4 in. Maximum Depth 20 ft.
Casing Diameter 2 in. Owner's Well Number MW-2
Surface Seal Depth 6 ft.

GEOTECHNICAL PROJECTS
Number of Borings _____ Maximum Depth _____ ft.
Bore Diameter _____ in.

ESTIMATED STARTING DATE 7/29/02
ESTIMATED COMPLETION DATE 7/29/02

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-08.

APPLICANT'S SIGNATURE Peter McIntyre DATE 7/19/02

PLEASE PRINT NAME Peter McIntyre Rev. 5-13-00

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-thirds feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole annular zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 25 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

DATE 7-22-02



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

399 ELMHURST ST. HAYWARD CA. 94544-1399
PHONE (510) 770-5500 MARION MACALLANER PLANK CORD (415) 670-5775
FAX (510) 782-1939

(510) 670-6633 James YDU

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT
1240 Powell Street
Emeryville, Ca

PERMIT NUMBER W02-0697
WELL NUMBER _____
APN _____

CLIENT
Name Wells Fargo Bank
Address 3645 Cardiff Ave Phone 310 559 7050
City Los Angeles, CA Zip 90034

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT
Name AEI Consultants (Peter McIntyre)
Address 3210 Old Tunnel Rd Phone 925/283-6000
City Lafayette, CA Zip 94549

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

TYPE OF PROJECT

- Well Construction
- Cathodic Protection
- Water Supply
- Monitoring
- Geotechnical Investigation
- General
- Contamination
- Well Destruction

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 20 feet for municipal and industrial wells or 30 feet for domestic and irrigation wells unless a lesser depth is specially approved.

PROPOSED WATER SUPPLY WELL USE

- New Domestic
- Municipal
- Industrial
- Replacement Domestic
- Irrigation
- Other

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

DRILLING METHOD:

- Mud Rotary
- Cable
- Air Rotary
- Other
- Auger

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted casing.

DRILLER'S NAME Spectrum Exploration

DRILLER'S LICENSE NO. C57 512 268

E. CATHODIC

Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

WELL PROJECTS

Drill Hole Diameter 8 1/4 in. Maximum Depth 20 ft.
Casing Diameter 2 in. Owner's Well Number W02-3
Surface Seal Depth 5 ft.

GEOTECHNICAL PROJECTS

Number of Borings _____ Maximum Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 7/29/02

ESTIMATED COMPLETION DATE 7/29/02

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-06.

APPLICANT'S SIGNATURE Peter McIntyre

DATE 7/19/02

PLEASE PRINT NAME Peter McIntyre

Rev. 5-13-00

APPROVED [Signature]

DATE 7-22-02



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

399 ELMHURST ST. HAYWARD, CA. 94544-1395

PHONE (510) 670-6633 James Yoo FAX (510) 782-1939

PERMIT NO. W02-0695

WATER RESOURCES SECTION GROUNDWATER PROTECTION ORDINANCE

G. SPECIAL CONDITIONS #1

PLACEMENT OF MONITORING WELLS IN PUBLIC RIGHT-OF-WAY

1. Prior to installation of any monitoring wells into any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permits(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
2. Wells in the public right-of-way shall have a minimum surface seal depth of five (5) feet or the maximum depth practicable or twenty (20) feet.
3. Wells in the Public right-of-way shall have a Christy box or similar structure (flush with the road), with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or road construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
4. Drilling Permit(s) can be voided/ canceled only in writing. It is the applicants responsibilities to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
5. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days.
6. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.

City of Emeryville, Department of Public Works
ENCROACHMENT PERMIT
 (rev. 9/22/00)

FOR CITY USE ONLY	
Permit No. <u>02 0702</u>	Date <u>7/3/02</u>
Permit Admin. Fee	<u>150.00</u>
Est. Inspection Time <u>2</u>	
Permit Insp. Deposit (2 hr. min.)	<u>150.00</u>
Required Security Deposit:	
<input checked="" type="checkbox"/> \$1,000 cash check	<u>1,000</u>
<input type="checkbox"/> \$10,000 Bond	
Bond No.	
<input type="checkbox"/> 100% Perf. Bond	
Bond Value	
Bond No.	
Total Payment Required:	
Received: _____	Date _____
Receipt No. _____	

APPLICANT AET Consultants
 CONTACT PERSON Peter McIntyre
 ADDRESS 3210 Old Tunnel Rd. Suite 15
 PHONE 925 944-2899 FAX 925 944-2895
Laguna Hills, CA 94549
 OWNER/DEVELOPER OF FACILITIES Wells Fargo Bank
 ADDRESS 3645 Cordie Ave. #200
 PHONE 310 559 7050 FAX _____
 Yes no CURRENT CITY BUSINESS LICENSE ON FILE

CONTRACTOR DOING WORK AET Consultants
 CONTACT PERSON Peter McIntyre
 ADDRESS 3210 Old Tunnel Rd. Ste. 15
 PHONE 925 944-2899 FAX 925 944-2895
 LICENSE NO. 659 919 CLASS A Haz.
 Yes no CURRENT CITY BUSINESS LICENSE ON FILE
 Yes no PROVIDE PROOF OF INSURANCE

EST. START DATE 7/22/02 EST. COMPLETION DATE 7/26/02 EST. COST IN CITY R/W 2,400

LOCATION OF WORK 1240 Powell Street, Emeryville

FULLY DESCRIBE PROPOSED WORK WITHIN CITY RIGHT-OF-WAY (additional space on reverse if needed).
 Attach & complete sets of plans, if applicable.

Install one (1) 2" diameter PVC monitoring well within 8 1/4" Parity - Constructed per DWA reg 5. See Attachment

I hereby agree to protect and indemnify the City of Emeryville and hold it harmless in every way from all claims of suits for injuries or damage to persons or property as set forth in the Standard Provisions. I agree not to begin construction until all materials to be used are on hand; to perform all work in accordance with the plans submitted (if any); the Standard Provisions to Encroachment Permits; and all applicable Special Conditions of Approval; and to pay all inspection and engineering costs in addition to those paid at the time of issuance of this permit. I further agree to complete the work to the satisfaction of the City Engineer and if for any reason the City of Emeryville is required to complete this work, I will pay all costs for such work.

Applicant Signature [Signature] Date 7/2/02

FOR CITY USE ONLY

The following documents are attached and incorporated into this permit and have been given to the applicant:

- yes no Standard Provisions to Encroachment Permit
- yes no Special Conditions of Approval
- yes no City Standard Details (List Details)
- yes no Handout: Urban Runoff BMP's
- yes no Other _____

Remarks:

- yes no 48 HOUR NOTICE PRIOR TO START OF WORK.
- yes no PROVIDE CONSTRUCTION SCHEDULE 5 DAYS PRIOR TO START OF WORK.
- yes no AS-BUILT PLANS REQUIRED.
- yes no PLEASE CALL FOR INSPECTION AT 510-596-4333.
- yes no PLEASE NOTIFY POLICE (510-596-4700) AND FIRE (510-596-3750) 24 HOURS IN ADVANCE.

This permit is void unless the work is completed before 7/22/02, 2002
 This permit is to be strictly construed and no other work than is specifically mentioned is hereby authorized.

APPROVED: [Signature] TITLE Sr Civil Eng DATE: 8 July 02

FINAL INSPECTION APPROVED: _____ TITLE _____ DATE _____

After final inspection is approved, please contact the Public Works Department at 510-596-4330 to determine final cost, and for final payment or reimbursement of deposit.

COPY

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	WFB	Date of Sampling:	8/13/2002
Job Number:	5272	Name of Sampler:	N. Garfield
Project Address:	1240 Powell Street, Emeryville		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	28.17		
Depth of Well	20.00		
Depth to Water (from top of casing)	7.69		
Water Elevation (feet above msl)	20.48		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	5.9		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	brown, turbid. Clears quickly		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				4 40mL VOA, 1 1L amber			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
1:20	1.5	24.5	6.63	1044			
1:21	3	22.5	7.06	1048			
1:23	4.5	21.5	7.16	1061			
1:24	6	20.9	7.13	1066			

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

No odor

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	WFB	Date of Sampling:	8/13/2002
Job Number:	5272	Name of Sampler:	N. Garfield
Project Address:	1240 Powell Street, Emeryville		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK ▼
Elevation of Top of Casing (feet above msl)	26.17
Depth of Well	20.00
Depth to Water (from top of casing)	8.58
Water Elevation (feet above msl)	17.59
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	5.5
Actual Volume Purged (gallons)	
Appearance of Purge Water	
Free Product Present?	No
Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				4 40mL VOA, 1 1L amber			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name:	WFB	Date of Sampling:	8/13/2002
Job Number:	5272	Name of Sampler:	N. Garfield
Project Address:	1240 Powell Street, Emeryville		

MONITORING WELL DATA			
Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	28.62		
Depth of Well	20.00		
Depth to Water (from top of casing)	8.28		
Water Elevation (feet above msl)	20.34		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	5.6		
Actual Volume Purged (gallons)			
Appearance of Purge Water			
Free Product Present?	Yes / No	Thickness (ft):	

GROUNDWATER SAMPLES							
Number of Samples/Container Size				4 40mL VOA, 1 1L amber			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

SEP 15 2005

Environmental Health



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
 Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Soma Corporation 1412 62nd Street Emeryville, CA 94608	Client Project ID: 1240 Powell Street	Date Sampled: 10/27/04
		Date Received: 10/28/04
	Client Contact: Estelle Shiroma	Date Reported: 11/02/04
	Client P.O.:	Date Completed: 11/03/04

WorkOrder: 0410425

November 03, 2004

Dear Estelle:

Enclosed are:

- 1). the results of 5 analyzed samples from your 1240 Powell Street project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
 Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Soma Corporation 1412 62nd Street Emeryville, CA 94608	Client Project ID: 1240 Powell Street	Date Sampled: 10/27/04
		Date Received: 10/28/04
	Client Contact: Estelle Shiroma	Date Extracted: 10/30/04
	Client P.O.:	Date Analyzed: 10/30/04

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0410425


Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	Trip Blank	W	ND	ND	ND	ND	ND	ND	1	99.0
002A	MW-2	W	ND	ND	ND	ND	ND	ND	1	98.0
003A	MW-1	W	ND	ND	ND	ND	ND	ND	1	99.0
004A	MW-3	W	ND	ND	ND	ND	ND	ND	1	99.0
005A	MW-DUP	W	ND	ND	ND	ND	ND	ND	1	103

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.

 Angela Rydelius, Lab Manager



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
 Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Soma Corporation 1412 62nd Street Emeryville, CA 94608	Client Project ID: 1240 Powell Street	Date Sampled: 10/27/04
		Date Received: 10/28/04
	Client Contact: Estelle Shiroma	Date Extracted: 10/28/04
	Client P.O.:	Date Analyzed: 10/29/04-10/30/04

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

Extraction method: SW3510C

Analytical methods: SW8015C

Work Order: 0410425


Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0410425-002C	MW-2	W	ND	1	88.0
0410425-003C	MW-1	W	ND	1	94.0
0410425-004C	MW-3	W	ND	1	94.0
0410425-005C	MW-DUP	W	ND	1	94.0

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/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 McC Campbell 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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range/jet fuel range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

 Angela Rydelius, Lab Manager



Soma Corporation 1412 62nd Street Emeryville, CA 94608	Client Project ID: 1240 Powell Street	Date Sampled: 10/27/04
		Date Received: 10/28/04
	Client Contact: Estelle Shiroma	Date Extracted: 10/29/04-11/01/04
	Client P.O.:	Date Analyzed: 10/29/04-11/01/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0410425

Lab ID	0410425-002B
Client ID	MW-2
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	4.2	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

352
-200

Surrogate Recoveries (%)

%SS1:	97.0	%SS2:	103
%SS3:	118		

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content; m) the concentration for this compound was above our upper calibration standard and is reported as an estimated value. This data was requested 3 weeks after initial analysis thereby precluding re-analysis at the correct dilution.



Soma Corporation 1412 62nd Street Emeryville, CA 94608	Client Project ID: 1240 Powell Street	Date Sampled: 10/27/04
		Date Received: 10/28/04
	Client Contact: Estelle Shiroma	Date Extracted: 10/29/04-11/01/04
	Client P.O.:	Date Analyzed: 10/29/04-11/01/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0410425

Lab ID	0410425-003B
Client ID	MW-1
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	0.71	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

Surrogate Recoveries (%)

%SS1:	98.0	%SS2:	101
%SS3:	116		

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content; m) the concentration for this compound was above our upper calibration standard and is reported as an estimated value. This data was requested 3 weeks after initial analysis thereby precluding re-analysis at the correct dilution.



Soma Corporation 1412 62nd Street Emeryville, CA 94608	Client Project ID: 1240 Powell Street	Date Sampled: 10/27/04
		Date Received: 10/28/04
	Client Contact: Estelle Shiroma	Date Extracted: 10/29/04-11/01/04
	Client P.O.:	Date Analyzed: 10/29/04-11/01/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0410425

Lab ID	0410425-004B
Client ID	MW-3
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

Surrogate Recoveries (%)

%SS1:	96.0	%SS2:	102
%SS3:	118		

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content; m) the concentration for this compound was above our upper calibration standard and is reported as an estimated value. This data was requested 3 weeks after initial analysis thereby precluding re-analysis at the correct dilution.



Soma Corporation 1412 62nd Street Emeryville, CA 94608	Client Project ID: 1240 Powell Street	Date Sampled: 10/27/04
		Date Received: 10/28/04
	Client Contact: Estelle Shiroma	Date Extracted: 10/29/04-11/01/04
	Client P.O.:	Date Analyzed: 10/29/04-11/01/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0410425

Lab ID	0410425-005B
Client ID	MW-DUP
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

Surrogate Recoveries (%)

%SS1:	96.0	%SS2:	100
%SS3:	106		

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil / sludge / solid samples in µg/kg, wipe samples in µg/wipe, product / oil / non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content; m) the concentration for this compound was above our upper calibration standard and is reported as an estimated value. This data was requested 3 weeks after initial analysis thereby precluding re-analysis at the correct dilution.



QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W

WorkOrder: 0410425

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 13741			Spiked Sample ID: 0410425-001A			
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex) [£]	ND	60	97.4	95.4	2.12	81.1	80.4	0.937	70	130
MTBE	ND	10	86.1	89.4	3.83	107	106	0.617	70	130
Benzene	ND	10	105	112	6.03	99.5	100	0.979	70	130
Toluene	ND	10	100	107	6.74	91.8	93.3	1.69	70	130
Ethylbenzene	ND	10	103	107	3.91	96.1	97	0.946	70	130
Xylenes	ND	30	91	95.3	4.65	85.3	86	0.778	70	130
%SS:	99.0	10	112	115	2.81	107	105	1.49	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

QA/QC Officer



QC SUMMARY REPORT FOR SW8015C

Matrix: W

WorkOrder: 0410425

EPA Method: SW8015C		Extraction: SW3510C			BatchID: 13740		Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	N/A	7500	N/A	N/A	N/A	90.5	89.3	1.36	70	130
%SS:	N/A	2500	N/A	N/A	N/A	86	86	0	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

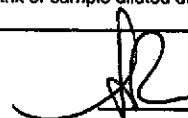
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

 QA/QC Officer



QC SUMMARY REPORT FOR SW8260B

Matrix: W

WorkOrder: 0410425

EPA Method: SW8260B		Extraction: SW5030B			BatchID: 13739			Spiked Sample ID: 0410414-003B		
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	10	83.1	78.7	5.45	85.2	82.2	3.59	70	130
Benzene	ND	10	116	114	1.33	119	120	1.34	70	130
t-Butyl alcohol (TBA)	ND	50	88.1	86.5	1.85	91.1	90.9	0.217	70	130
Chlorobenzene	ND	10	102	97.9	4.58	112	111	0.536	70	130
1,2-Dibromoethane (EDB)	ND	10	100	85.2	16.0	105	102	2.60	70	130
1,2-Dichloroethane (1,2-DCA)	ND	10	109	101	7.56	120	112	6.99	70	130
1,1-Dichloroethene	ND	10	120	111	7.84	122	124	1.28	70	130
Diisopropyl ether (DIPE)	ND	10	121	120	1.00	124	120	2.80	70	130
Ethyl tert-butyl ether (ETBE)	ND	10	117	113	3.51	122	117	4.04	70	130
Methyl-t-butyl ether (MTBE)	ND	10	109	98.2	10.0	113	107	4.93	70	130
Toluene	ND	10	107	103	4.10	116	118	1.38	70	130
Trichloroethene	ND	10	114	110	3.12	123	120	2.30	70	130
%SS1:	108	10	103	100	3.71	104	100	3.29	70	130
%SS2:	104	10	102	97	4.98	104	104	0	70	130
%SS3:	119	10	106	108	1.50	110	111	1.08	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.


N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

QA/QC Officer

McC Campbell Analytical, Inc.

 110 Second Avenue South, #D7
 Pacheco, CA 94553-5560
 (925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0410425

ClientID: SCE

Report to:

Estelle Shiroma
 Soma Corporation
 1412 62nd Street
 Emeryville, CA 94608

TEL: (510) 654-3900
 FAX: (510) 654-1960
 ProjectNo: 1240 Powell Street
 PO:

Bill to:

Estelle Shiroma
 Soma Corporation
 1412 62nd Street
 Emeryville, CA 94608

Requested TAT: 5 days

Date Received: 13:19 PM

Date Printed: 10/28/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)																
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
0410425-002	MW-2	Water	10/27/04 2:48:00	<input type="checkbox"/>	B	A	C														
0410425-003	MW-1	Water	10/27/04 3:31:00	<input type="checkbox"/>	B	A	C														
0410425-004	MW-3	Water	10/27/04 4:17:00	<input type="checkbox"/>	B	A	C														
0410425-005	MW-DUP	Water	10/27/04 4:47:00	<input type="checkbox"/>	B	A	C														

Test Legend:

1	8260B_W	2	G-MBTX_W	3	TPH(D)_W	4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

0410425

McCAMPBELL ANALYTICAL, INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560

Website: www.mccampbell.com Email: main@mccampbell.com

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Estelle Shiroma Bill To: Same as Report to
 Company: SOMA Corporation
1412 62nd Street
Emeryville, CA 94608 E-Mail:
 Tele: (510) 654-3900 Fax: (510) 654-1960
 Project #: Project Name: 1240 Powell Street
 Project Location: 1240 Powell Street, Emeryville, CA
 Sampler Signature: [Signature]

Analysis Request

Other Comments

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8260	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)	Filter Samples for Metals analysis: Yes / No		
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other																			
Trip Blank		10/27/04	13:00	2	40 ml vac	X					X	X																					
MW-2		10/27/04	14:48	4	100 ml 500 ml	X					X	X		X	X									X									
MW-1		10/27/04	15:31	4	↓	X					X	X		X	X									X									
MW-3		10/27/04	16:17	4	↓	X					X	X		X	X									X									
MW-DUP		10/27/04	16:47	4	↓	X					X	X		X	X									X									

(+) (+) (+) (+)

Relinquished By: [Signature] Date: 10/28/04 Time: 10:27 Received By: [Signature]
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____

ICE/T ✓
 GOOD CONDITION ✓
 HEAD SPACE ABSENT ✓
 DECHLORINATED IN LAB ✓
 APPROPRIATE CONTAINERS ✓
 PRESERVED IN LAB ✓
 COMMENTS:
 VOAS | O&G | METALS | OTHER
 PRESERVATION | pH<2

10/28/04