



# Environmental Services, Inc.

2111 Jennings Street, San Francisco, CA 94124-3224, Phone (415) 822-4555 FAX (415) 822-5290

21123 ME 2:20

## PROGRESS REPORT QUARTER ENDING DECEMBER 31, 1991

**BECK ROOFING**  
21123 Meekland Avenue  
Hayward, California

Prepared for:  
Charlie and Mary Beck  
21123 Meekland Avenue  
Hayward, CA 94541

L&W Project 2116  
January 7, 1992

Concerns 1-23-92 PE

① Well screening <5' above current G.W. level - (w/27.5')

② MW 2 is in presumed down gradient direction, but is 30' from excavation

Gradient consistent in both sampling events?

George Wilson  
Vice President

John Carver  
Civil Engineer 23772



Michael J. Killoran  
Geologist

③ Looking at levels in boring - it raises the ?? - could GW have been <25' in past?

General Engineering Contractors License No. 507442

Certified for Hazardous Substances Removal and Remedial Actions

## INTRODUCTION

### Purpose

This report summarizes and reports work carried out at 21123 Meekland Avenue ("the site") in Hayward, California. The data and information in this report cover the various activities performed at the site through December 31, 1991. Work accomplished during this quarter included overexcavation of contaminated soil, a Soil and Groundwater Investigation, installation of three monitoring wells, and initial monitoring, sampling and analyses of the three wells.

This report when forwarded to the Regional Water Quality Control Board, San Francisco Region will serve as a progress report for the three month period ending December 31, 1991.

### Background

Beck Roofing is a commercial roofing business that installed an underground gasoline tank as part of their operations to refuel roofing trucks. The only tank associated with the site was a 1000 gallon metal underground gasoline tank. Beck Roofing had the tank removed from the property on May 20, 1990. Upon excavation and tank removal, soil samples were analyzed and found to contain Total Petroleum Hydrocarbons as Gasoline (TPH-G) in excess of 1000 parts per million (ppm). ? 1991

Under local and state regulations, further work was required and was described in the letter dated August 5, 1991, from the Alameda County Health Care Services Agency. L&W Environmental Services Inc. responded with a Work Plan dated October 10, 1991 and a Work Plan Addendum dated October 29, 1991 describing the work to be carried out in response to the Alameda County Health Care Services Agency letter.

### Site Location and Description

Beck Roofing is located on the south side of Meekland Avenue at 21123 Meekland Avenue, Hayward, California. The location of the site is shown on the Vicinity Map, Figure 1 of Appendix A. The site is essentially rectangular in shape and is used as the yard of a roofing company. The locations of the tank excavation as well as the main building, a shed and Meekland Avenue are shown on Figure 2 of Appendix A.

### Site Setting

The site is located approximately 55 feet above sea level, in the province of San Francisco Bay and is geologically affected by the presence of the nearby bay to the west and the Berkeley Hills to the east. In general the site is within alluvial and bay sediments underlain at depth by basement rocks. Groundwater in this region is located at relatively shallow depths, in granular aquifers laid down by alluvial actions on the nearby Berkeley Hills. Groundwater is often contained in granular deposits layered and confined by various fine grained deposits at depths of about 20 feet below ground surface.

## WORK ACCOMPLISHED

### Excavation

A program of additional excavation was carried out to remove all the remaining backfill and adjacent contaminated soil. The approximate limits of the original tank removal excavation and the limits of the excavation as of December 16, 1991 are shown on the Site Plan, Figure 2 of Appendix A. The original excavation was about 9 feet deep which was the approximate elevation of the bottom of the tank. The depth of the excavation was extended during this quarter to about 17 feet below ground surface. The excavated soil has been stockpiled on site pending final characterization and the reopening of the Port Costa Material facility where it will be delivered for incineration and final destruction.

Sixteen confirmation soil samples were taken during the excavating activities and were analyzed for gasoline related contaminants. The locations of the sixteen confirmation samples are shown on the Sample Location Plan, Figure 3 of Appendix A. The results of the analyses are tabulated and discussed in the FINDINGS section of this report.

### Soil Exploration

The subsurface conditions at the site have been explored with five borings to date. The following chart lists the borings, dates drilled and total depths.

<u>Boring Number</u>	<u>Date Drilled</u>	<u>Total Depth</u>
MW1	10/30/91	45.5 feet
MW2	10/30/91	38 feet
B1	10/31/91	25.5 feet
B2	10/31/91	30.5 feet
MW3	10/31/91	38.0 feet

The borings were advanced with a CME 75 drill rig using 8 inch outside, 3-3/4 inch inside diameter hollow stem augers. The location of the five borings are shown on the Boring Location Plan, Figure 4 of Appendix A.

Soil samples were obtained at approximate 5 foot intervals by driving a California (2.5 inch diameter split-barrel) sampler containing brass tubes into the "undisturbed" soil beyond the augers. Driving energy was provided by a 140 pound hammer falling 30 inches in accordance with ASTM procedures. The California sampler and brass tubes were cleaned between samples using soap, TSP, and two clear water rinses to prevent cross or down-hole contamination. All down-hole equipment was steam cleaned prior to arriving on site. As samples were obtained, they were logged, sealed with teflon, taped, labeled, entered on a Chain-of-Custody form and stored in an ice chest containing ice.

Field logs of soil and groundwater conditions encountered in all of the borings were continually maintained by a staff geologist under the supervision of a registered Civil Engineer. Copies of the field logs are attached as Appendix D. The field logs were reviewed and the precise conditions encountered during the drilling of borings and wells are shown on the report boring logs, Figures 5 through 9 of Appendix A.

All the samples were then delivered to a California State Certified Laboratory for analytical testing. Each sample was analyzed for gasoline related contaminants. Results of the analyses on the samples from the five borings are tabulated and discussed in the FINDINGS section of this report.

#### Groundwater Exploration

After the soil borings MW1, MW2, and MW3 were finished they were immediately converted to Groundwater Monitoring Wells. The locations are shown on the Boring Location Plan, Figure 4 of Appendix A. Details of the well installations are shown on Figures 10, 11, and 12 of Appendix A. Copies of the State of California, Department of Water Resources Form DWR 188, Water Well Drillers Report are attached as Appendix C.

On November 4, 1991, the three wells were monitored and sampled. Initial groundwater surface elevations and preliminary observation samples were taken. Prior to sampling, each well was purged by removing at least four well volumes of water. An air lift pump was used to remove the water and place it into a DOT barrel. After purging and apparent stabilization of the water quality, pH, temperature, and conductivity, samples were obtained by lowering a disposable bailer into the water. Sufficient water was taken for the various analyses and stored in appropriate containers. The containers were labeled, entered on a Chain-of-Custody Form, refrigerated and delivered to a California State Certified Laboratory for the required analyses. Copies of Chain-of-Custody forms and original signed laboratory certificates are attached in Appendix B.

### FINDINGS

#### Subsurface Conditions

The site is underlain by alternating deposits of naturally occurring sandy and silty clays, and fine to medium sands. A silty clay layer was encountered from near the ground surface to a maximum depth of approximately 7 feet. This layer was encountered in all of the borings except MW2, where the near surface layer consisted of a gravel-sand-clay mixture and extended to about 3 feet. Fine sands and silty sands were the next soil type encountered. In MW2 this layer was about 20 feet thick, but was thinner in other borings, ranging from 10 to 14 feet in thickness. A 3-foot thick lens of clay was found in B1 within this sand layer from about 9 to 13 feet. Below the sand, another clay layer was found in all borings down to depths ranging from 30 to 33 feet below ground surface. Borings 1 and 2 were terminated before this clay layer was penetrated. Another sand layer was encountered below the clay in MW1, MW2, and MW3. Data obtained in the deepest boring, MW1, reveal that this

sand layer is approximately 5 feet thick and is underlain by more clay down to approximately 45 feet, and is followed by another sand layer of unknown thickness.

On November 4, 1991, the three wells were surveyed, observed and monitored for depth to groundwater, and the presence of oil sheen or free product. The observations and measurements are presented below:

Location	Date Measured	Top of Casing Elevation	Sheen or Free Product (feet)	Depth to Groundwater (feet)	Piezometric Surface Elevation
MW1	10/18/91	100.01	None	32.32	67.69
MW2	10/18/91	100.13	None	32.44	67.69
MW3	10/18/91	100.00	None	32.40	67.60

Groundwater Hydrology

Based on the results of the exploration program, the groundwater below the site appears to be an aquifer located near the interface of the clay and sand in all three wells. Groundwater was initially encountered at about 33 feet below ground surface in all three wells, and has apparently stabilized at about 33 feet below ground surface.

The groundwater gradient was calculated based on the measurements taken November 4, 1991. The gradient is about 0.1 foot per 80 feet to the northeast. Figure 13 of Appendix A is a graphic representation of the calculated groundwater gradient.

Analytical Results

The following table summarizes the analytical results of the soil samples taken by Blaine Technical Services during the tank removal and the 16 confirmation soil samples taken by L&W Environmental Services, Inc. during the overexcavation.

Blaine Technical Services  
(sample results during tank removal)

Sample ID	Date Sampled	TPH-G (ppm)	BTEX (ppm)	TOG (ppm)	LEAD (ppm)
#1	6/91	1,300	64/77/28/230	NT	0.22
#2	6/91	1,800	5.8/75/33/2107	NT	0.66
#3 A-D	6/91	11	ND/ND/ND/ND	NT	ND

L&W Environmental Services, Inc.  
(sample results during overexcavation)

Sample ID	Date Sampled	TPH-G (ppm)	BTEX (ppm)	TOG (ppm)	LEAD (ppm)
2116-G1	10/30/91	680	ND/4.7/4.5/110	NT	8.22
2116-G2	10/30/91	1330	6.3/140/50/280	NT	ND
2116-G3	10/30/91	940	0.53/16/12/150	NT	ND
2116-G4	10/30/91	2700	37/310/100/520	NT	7.50
2116-NW-17	10/30/91	2740	16/240/120/650	NT	ND
2116-F	10/30/91	5760	30/450/230/1270	NT	7.25
2116-SW-15	10/30/91	ND	.011/.071/.015/.087	NT	8.30
2116-SW-17	10/30/91	720	0.40/13/8.4/90	NT	9.35
2116-NW-15	10/30/91	1.5	0.008/0.05/0.016/0.21	NT	ND
2116-EW-14	11/6/91	170	ND/2.7/1.5/10	ND	NT
2116-C-16	11/6/91	780	0.83/15/6.3/48	ND	NT
2116-WW-16	11/7/91	1.0	ND/0.009/ND/0.029	NT	4.0
2116-CF-18	11/7/91	6800	40/440/140/770	NT	12.2
2116-NW-16	11/7/91	4200	6.3/240/100/550	NT	11.0
2116-SW-16	11/7/91	3200	1.8/100/60/350	NT	8.4
2116-EW-16	11/7/91	1.2	ND/0.040/0.008/0.048	NT	ND

Notes: TPH-G Total Petroleum Hydrocarbons as Gasoline  
 BTEX Benzene, Toluene, Ethylbenzene, Xylenes  
 TOG Total Oil and Grease  
 ND Non Detectable  
 NT Not Tested  
 ppm parts per million

Boring Soil Sample Analytical Results

The following table summarizes the results of the soil samples taken from the five borings.

Sample ID	Date Sampled	TPH-G (ppm)	BTEX (ppm)	LEAD (ppm)
2116-5-MW1	10/30/91	ND	ND/0.016/ND/0.014	ND
2116-10-MW1	10/30/91	ND	ND/0.010/ND/0.007	ND
2116-15-MW1	10/30/91	ND	ND/0.013/ND/0.007	ND
2116-20-MW1	10/30/91	ND	ND/0.010/ND/0.006	ND
2116-25-MW1	10/30/91	ND	ND/0.024/ND/0.007	ND
2116-30-MW1	10/30/91	ND	ND/0.011/ND/0.006	5.00
2116-35-MW1	10/30/91	ND	ND/0.010/ND/0.006	5.50
2116-40-MW1	10/30/91	ND	ND/0.016/ND/0.006	ND
2116-45-MW1	10/30/91	ND	ND/0.015/ND/0.006	4.3

Boring Soil Sample Analytical Results  
(continued)

Sample ID	Date Sampled	TPH-G (ppm)	BTEX (ppm)	LEAD (ppm)
2116-5-MW2	10/30/91	ND	ND/ND/ND/ND	ND
2116-10-MW2	10/30/91	ND	ND/ND/ND/ND	ND
2116-15-MW2	10/30/91	ND	ND/ND/ND/ND	ND
2116-20-MW2	10/30/91	ND	ND/ND/ND/ND	5.90
2116-25-MW2	10/30/91	1.4	0.10/0.085/0.014/0.090	ND
2116-30-MW2	10/30/91	ND	0.044/0.008/ND/ND	ND
2116-35-MW2	10/30/91	ND	0.006/ND/ND/ND	4.20
2116-5-B1	10/31/91	ND	ND/0.017/ND/ND	ND
2116-10-B1	10/31/91	ND	ND/0.011/ND/ND	ND
2116-15-B1	10/31/91	ND	ND/.012/ND/ND	ND
2116-20-B1	10/31/91	5.7	0.250/0.600/0.10/0.57	5.82
2116-25-B1	10/31/91	8.8	0.14/0.60/0.126/0.76	4.20
2116-5-B2	10/31/91	ND	ND/0.018/ND/ND	ND
2116-10-B2	10/31/91	ND	ND/0.013/ND/0.006	4.00
2116-15-B2	10/31/91	ND	ND/0.006/ND/ND	ND
2116-20-B2	10/31/91	ND	0.046/0.011/0.014/0.040	ND
2116-25-B2	10/31/91	35	0.44/1.2/0.32/1.80	ND
2116-30-B2	10/31/91	36	0.27/0.87/0.37/2.1	ND
2116-5-MW3	10/31/91	1	ND/0.018/ND/ND	ND
2116-10-MW3	10/31/91	ND	ND/ND/ND/ND	3.60
2116-15-MW3	10/31/91	ND	ND/0.028/ND/ND	3.60
2116-20-MW3	10/31/91	2.9	0.021/0.017/0.006/0.025	5.80
2116-25-MW3	10/31/91	6.2	0.048/0.022/0.012/0.056	ND
2116-30-MW3	10/31/91	9.8	0.25/0.015/0.048/0.26	3.90
2116-35-MW3	10/31/91	ND	ND/0.014/ND/ND	3.75

Notes: TPH-G Total Petroleum Hydrocarbons as Gasoline  
 BTEX Benzene, Toluene, Ethylbenzene, Xylenes  
 TOG Total Oil and Grease  
 ND Non Detectable  
 NT Not Tested  
 ppm parts per million

Groundwater Sample Analytical Results

The following table presents the results of the initial sampling of the three groundwater results.

Sample ID	Date Sampled	TPH-G (ppm)	BTEX (ppm)	LEAD (ppm)
2116-MW1	11/4/91	ND	ND/ND/ND/ND	ND
2116-MW2	11/4/91	ND	ND/ND/ND/ND	ND
2116-MW3	11/4/91	ND	ND/ND/ND/ND	ND

Notes: ND = Non Detectable  
ppm = parts per million

**CONCLUSIONS**

1. The underground gasoline storage tank which was the primary source of the soil contamination has been removed. All of the contaminated backfill which had surrounded the underground tank and which could act as a secondary source has also been removed.
2. Much of the heavily contaminated native soil has been removed. The contamination in the native soil could continue to leach and spread, posing a potential negative impact on the groundwater. The contaminated soil immediately around the tank excavation has been excavated to 17 feet below the ground surface which is the practical limits of normal equipment. Some areas of heavily contaminated soil remain along the perimeter of the existing excavation.
3. The overexcavation carried out to date at Beck Roofing has removed much of the contaminated soil adjacent to the removed tank. The confirmation samples and the soil boring samples indicate that there was a significant spread of TPH-G and BTEX through the soil at the site. The levels of TPH-G and BTEX attenuate rapidly as distance from the tank increases. No detectable levels of contaminants were encountered at or above 15 feet except immediately adjacent to the tank excavation.
4. The results of all soil sampling have been reviewed and the estimated limits of the spread of TPH-G have been plotted for the 15 foot, 20 foot, 25 foot, and 30 foot levels. The limits are shown on Figures 13 through 16 of Appendix A. Using this data it appears that some TPH-G and BTEX has spread at low levels via stringers of granular soil to areas about 100 feet away. In general the spread appears to have been in a westerly and northerly direction. The spread has not been continuous and appears to have been confined to the soil between 15 and 30 feet below ground surface.
5. Although there has been some lateral and vertical spread of TPH-G and BTEX, there has not been any effect on the groundwater as evidenced by the non-detectable levels of the groundwater analyses.



6. Further soil removal should be carried out to remove any soil with concentrations exceeding 1000 part per million TPH-G. When this soil is removed, the remaining contaminated soil should not pose a significant threat to groundwater.

#### RECOMMENDATIONS

1. Additional soil should be removed from the perimeter of the existing excavation. All soil should be removed which has TPH-G levels of 1000 parts per million or more. The depth of excavation should be to at least 17 feet below ground surface.

2. The three Groundwater Monitoring Wells were monitored and sampled on a monthly basis in November and December, 1991 and then should be monitored in January 1992 and then on a Quarterly basis for at least one year. Groundwater samples should be analyzed for TPH-G, BTEX, and Total Lead. the groundwater gradient should be calculated and plotted for each monitoring episode.

#### REPORT SUBMITTALS

A copy of this report will be submitted to:  
Ms. Pam Evans,  
Alameda County Department of Environmental Health,  
80 Swan Way,  
Oakland, CA 94621.

and

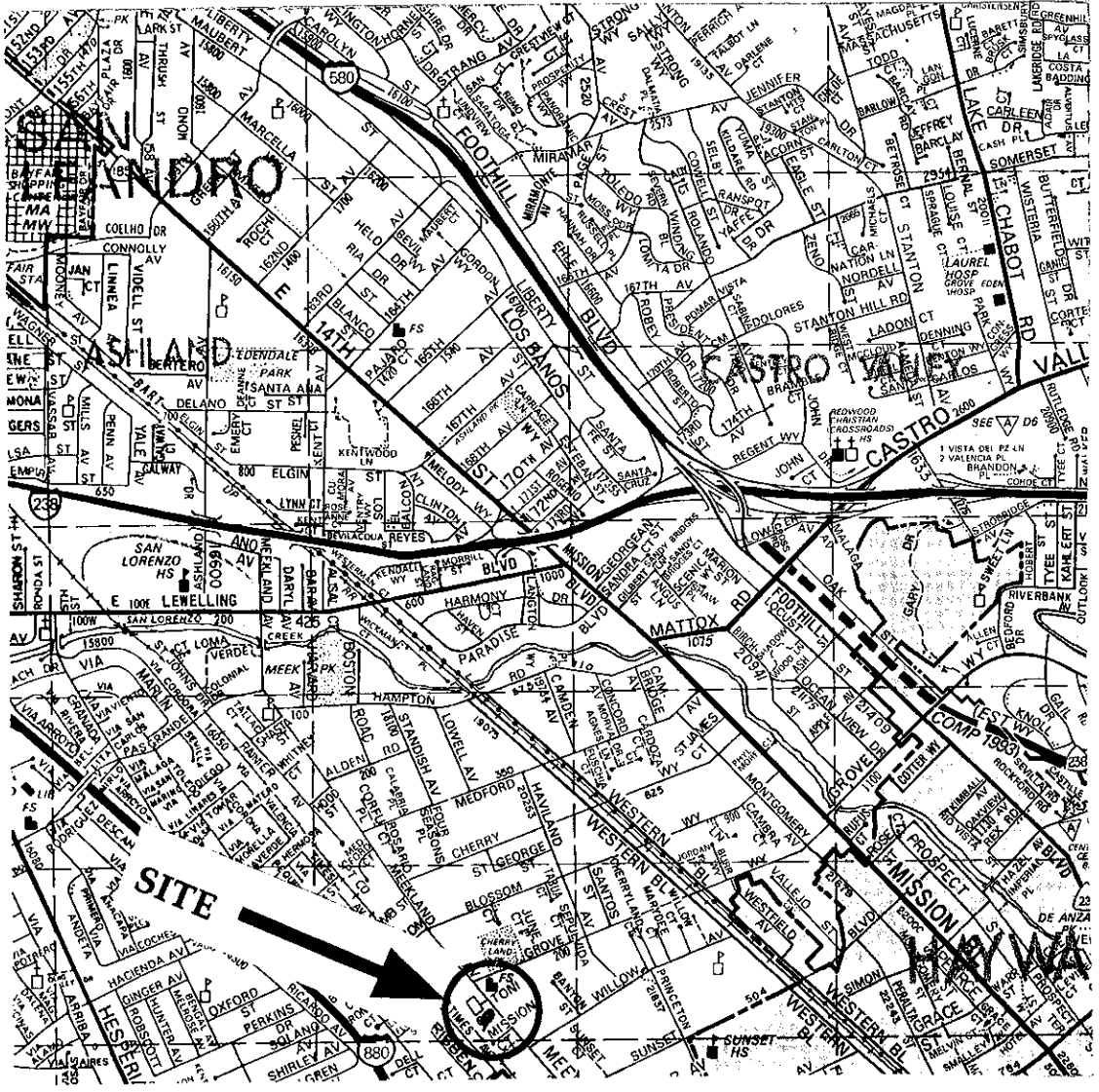
Mr. Richard Hiett  
Regional Water Quality Control board  
2101 Webster Street, 4th floor  
Oakland, CA 94612

APPENDIX A

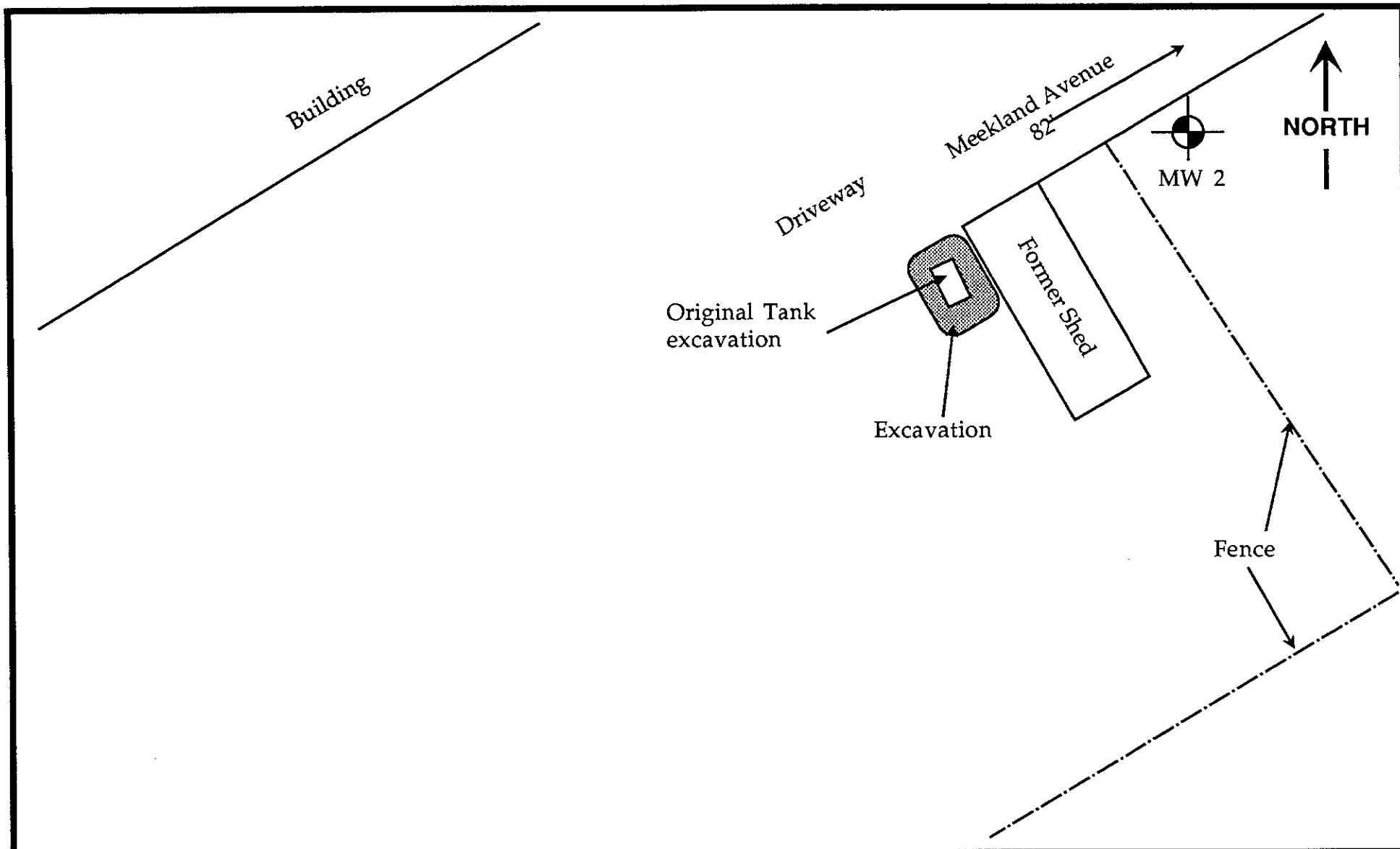
Figures 1 through 16

BECK ROOFING  
21123 MEEKLAND AVENUE  
HAYWARD, CALIFORNIA

L&W Project 2116  
January 7, 1992

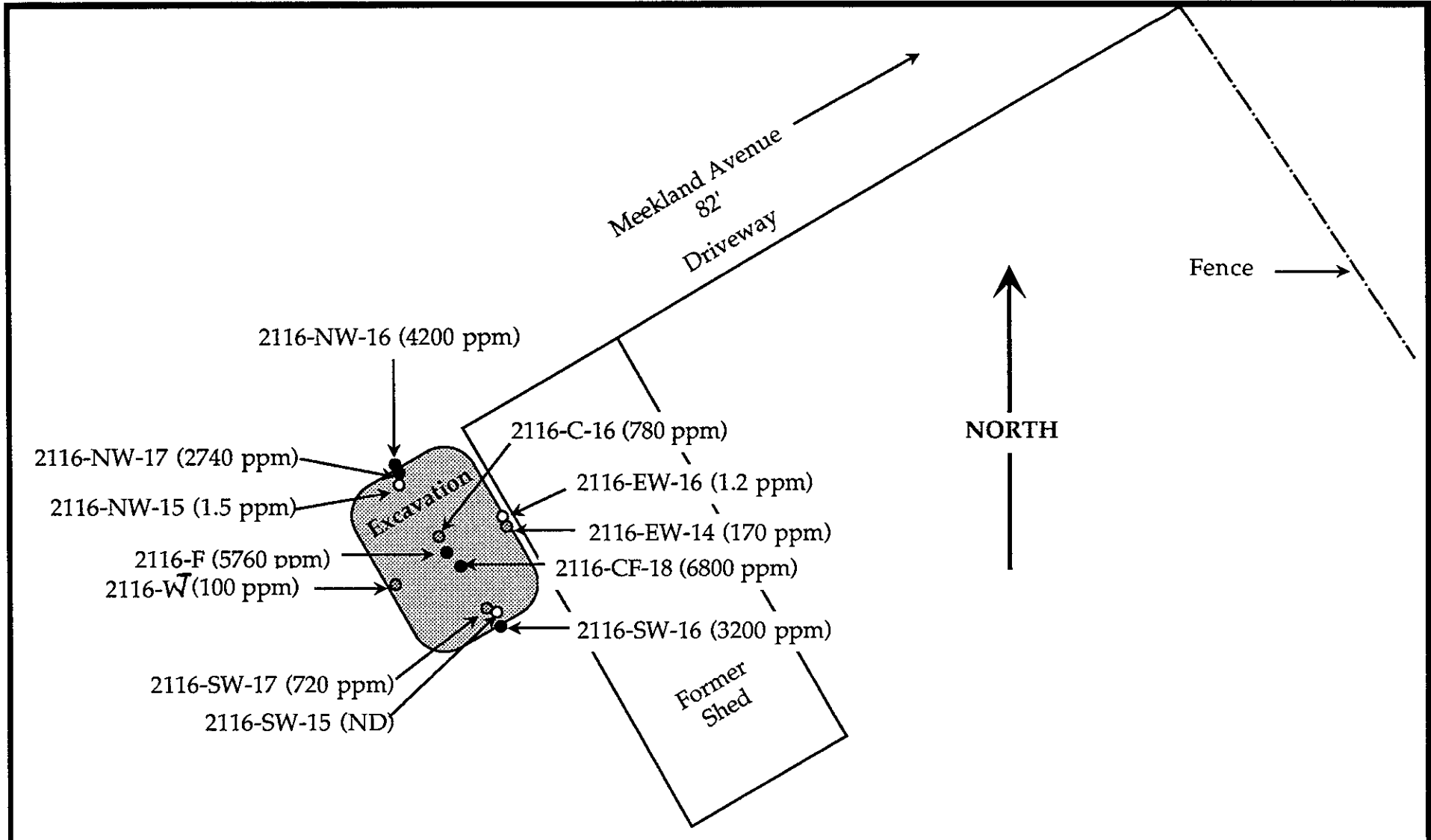


<b>L &amp; W Environmental Services, Inc.</b> 2111 Jennings Street San Francisco, California		<b>Vicinity Map</b> Beck Roofing 21123 Meekland Avenue Hayward, California	
Project Number: 2116	Drawn by: MJK	Date: November, 1991	Figure Number: 1



Scale 1"=20"

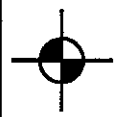
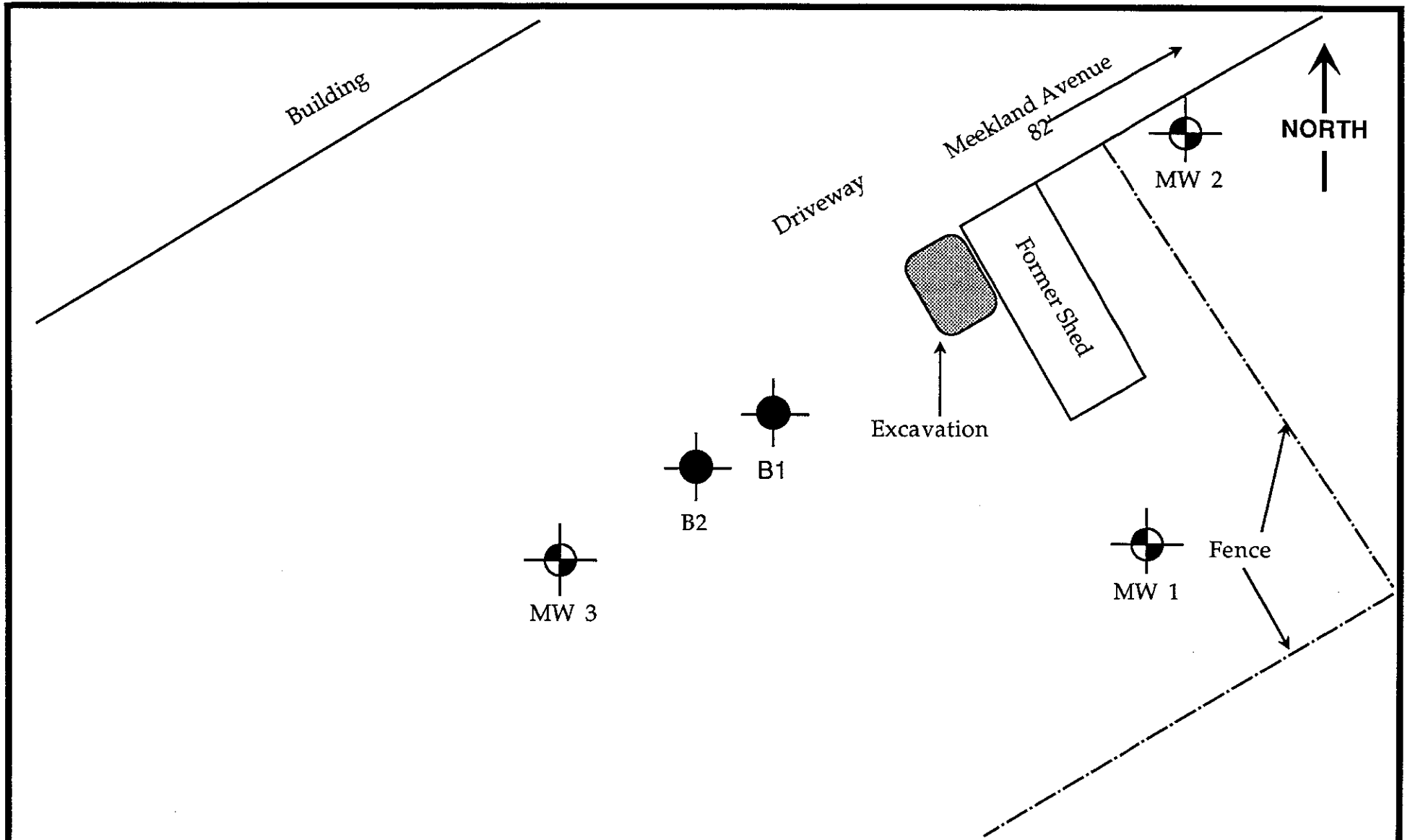
<p><b>L &amp; W Environmental Services, Inc.</b></p> <p>2111 Jennings Street San Francisco, California</p>		<p><b>Site Plan</b></p> <p>Beck Roofing Hayward, California</p>	
<p>Project Number: 2116</p>	<p>Drawn by: MJK</p>	<p>Date: December, 1991</p>	<p>Figure Number: 2</p>



Scale 1"=10"

- 0 to 99 ppm TPH as Gasoline
- ◐ 100 to 999 ppm TPH as Gasoline
- Greater than 999 ppm TPH as Gasoline



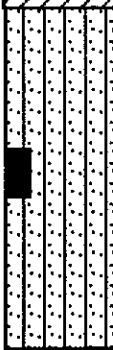
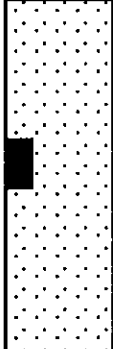

<b>L &amp; W Environmental Services, Inc.</b>  2111 Jennings Street San Francisco, California		<b>Sample Location Plan</b>  Beck Roofing Hayward, California	
Project Number: 2116	Drawn by MJK	Date: December, 1991	Figure Number 3



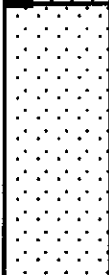
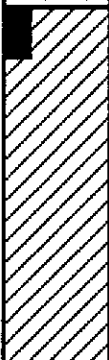



Approximate boring location

Scale 1"=20"

<b>L &amp; W Environmental Services, Inc.</b> 2111 Jennings Street San Francisco, California		<b>Boring Location Plan</b> Beck Roofing Hayward, California	
Project Number: 2116	Drawn by: MJK	Date: December, 1991	Figure Number: 4

Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
					0	Brown sandy silty clay, moist, no odor, medium plasticity.
2116-5-MW1	20	CL	911		5	Brown sandy silty clay, very stiff, moist, no odor, low plasticity.
2116-10-MW1	15	SM	917		10	Brown silty sand, fine-grained, medium dense, moist, no odor.
2116-15-MW1	12	SP	925		15	Brown sand with subangular gravel, fine-grained, medium dense, moist, no odor.
2116-20-MW1	5	CL	935			Brown silty clay, medium stiff, moist, no odor, low plasticity.
L & W Environmental Services, Inc. 2111 Jennings Street San Francisco, California				Log of Boring Number: MW 1 Sheet 1 of 3 Beck Roofing 21123 Meekland Avenue Hayward, California		
Project Number: 2116				Date: November, 1991		Figure Number: 5

Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
2116-25-MW1	13	CL	944		25	Same, with medium plasticity.
2116-30-MW1	9	CL/ SP	959	 	30	Same, but stiff.  Brown sand, fine-grained, medium loose, moist, no odor.
2116-35-MW1	9	SP/ CL	1008		35	Brown silty clay, stiff, moist to wet near top of sample, no odor, medium plasticity.
2116-40-MW1	11	CL	1025		40	Same.

L & W Environmental Services, Inc.

2111 Jennings Street  
San Francisco, California

Log of Boring Number: MW 1

Sheet 2 of 3


Beck Roofing  
21123 Meekland Avenue  
Hayward, California

Project Number: 2116

Date: November, 1991


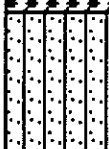
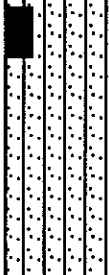
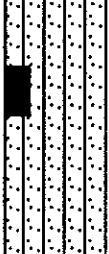
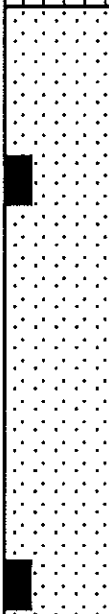
Figure Number: 5



Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
2116-45-MW1	13	CL/SP	1035		45	Same. Brown sand, fine-grained, medium dense, wet, no odor.

Boring terminated at 45.5 feet.  
 Groundwater encountered at 30.5 feet.  
 Boring drilled 10/30/91 with CME 75 rig.  
 Boring grouted from 45.5 to 39 feet and converted into Monitoring Well 1 on 10/30/91

<b>L &amp; W Environmental Services, Inc.</b> 2111 Jennings Street San Francisco, California		<b>Log of Boring Number: MW 1</b> <b>Sheet 3 of 3</b> Beck Roofing 21123 Meekland Avenue Hayward, California	
Project Number: 2116		December, 1991	Figure Number: 5

Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
		GC			0	3" asphalt cover.
2116-5-MW2	18	SM	145		5	Brown gravel-sand-clay mixture, moist, no odor.
2116-10-MW2	10	SM	150		10	Brown silty sand, fine-grained, loose to medium dense, moist, no odor.
2116-15-MW2	12	SP	200		15	Brown sand, fine-grained, medium dense, moist, no odor.
2116-20-MW2	6	SP			20	Same, but loose.

L & W Environmental Services, Inc.




2111 Jennings Street  
San Francisco, California

Log of Boring Number: MW 2  
Sheet 1 of 2  
Beck Roofing  
21123 Meekland Avenue  
Hayward, California

Project Number: 2116

Date: December, 1991

Figure Number: 6

Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
2116-25-MW2	19	CL	235		25	Brown sandy silty clay, very stiff, moist, no odor, medium plasticity.
2116-30-MW2	18	CL	245		30	Same.
2116-35-MW2	12	SM	255		35	Brown sand, fine-grained, medium stiff, wet, no odor.

Boring terminated at 38 feet.  
 Groundwater encountered at 33 feet.  
 Boring drilled 10/30/91 with CME 75 rig.  
 Boring converted into Monitoring Well 2 on 10/30/91

**L & W Environmental Services, Inc.**

2111 Jennings Street  
 San Francisco, California

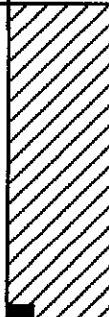


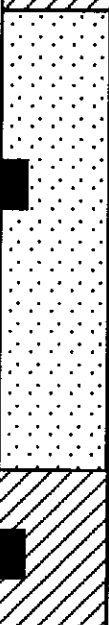
**Log of Boring Number: MW 2**

Sheet 2 of 2  
 Beck Roofing  
 21123 Meekland Avenue  
 Hayward, California

Project Number: 2116

Date: December, 1991

Figure Number: 6

Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
2116-5-B1	12	CL	910		0	Brown sandy silty clay, moist, no odor, medium plasticity.
					5	Brown sandy silty clay, stiff, moist, no odor, low plasticity.
2116-10-B1	10	CL	915			Brown clayey sand, fine-grained, moist, no odor, grades downward to a silty clay.
					10	Brown sandy silty clay, stiff, moist, no odor, low plasticity.
2116-15-B1	12	SP	927			Brown sand, fine-grained, medium dense, moist, no odor.
					15	
2116-20-B1	8	CL	940		20	Brown sandy silty clay, medium stiff, moist, odor.

**L & W Environmental Services, Inc.**

2111 Jennings Street  
San Francisco, California

**Log of Boring Number: B1**  
Sheet 1 of 2  
Beck Roofing  
21123 Meekland Avenue  
Hayward, California

Project Number: 2116

Date: December, 1991

Figure Number: 7

Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
2116-25-B1	10	CL	950		25	Brown sandy silty clay, stiff, moist, strong odor, medium plasticity.

Boring terminated at 25.5 feet.  
Groundwater not encountered.  
Boring drilled 10/31/91 with CME 75 rig.

**L & W Environmental Services, Inc.**

2111 Jennings Street  
San Francisco, California

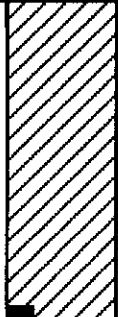
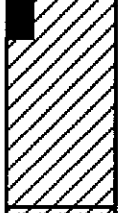
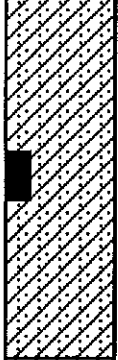
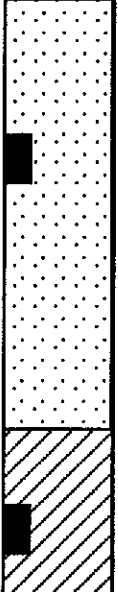
**Log of Boring Number: B1**

Sheet 2 of 2  
Beck Roofing  
21123 Meekland Avenue  
Hayward, California

Project Number: 2116

Date: December, 1991

Figure Number: 7

Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
2116-5-B2	16	CL	1050		0	
2116-10-B2	10	SM	1112		5	Brown silty sandy clay, very stiff, moist, no odor, medium plasticity.
2116-15-B2	9	SP	1120		10	Brown silty sand, fine-grained, loose to medium dense, moist, no odor.
2116-20-B2	7	CL	1130		15	Brown sand, fine-grained, loose, moist, no odor.
					20	Brown silty clay, medium stiff, moist, no odor, medium plasticity.

**L & W Environmental Services, Inc.**

2111 Jennings Street  
San Francisco, California

**Log of Boring Number: B2**

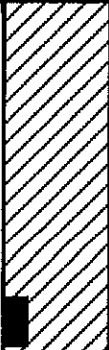
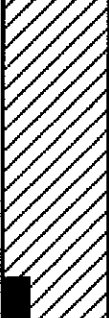
**Sheet 1 of 2**

Beck Roofing  
21123 Meekland Avenue  
Hayward, California

Project Number: 2116

Date: December, 1991

Figure Number: 8

Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
2116-25-B2	9	CL	1136		25	Brown sandy silty clay, stiff, moist, strong odor, medium plasticity.
2116-30-B2	8	CL	1145		30	Same.

Boring terminated at 30.5 feet.  
Groundwater not encountered.  
Boring drilled 10/31/91 with CME 75 rig.

**L & W Environmental Services, Inc.**

2111 Jennings Street  
San Francisco, California

**Log of Boring Number: B2**



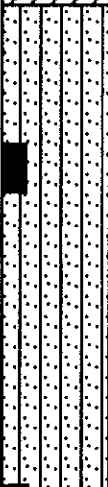



Sheet 2 of 2

Beck Roofing  
21123 Meekland Avenue  
Hayward, California


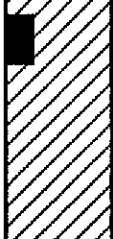
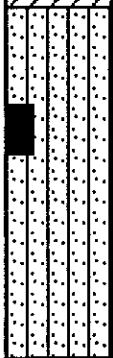
Project Number: 2116

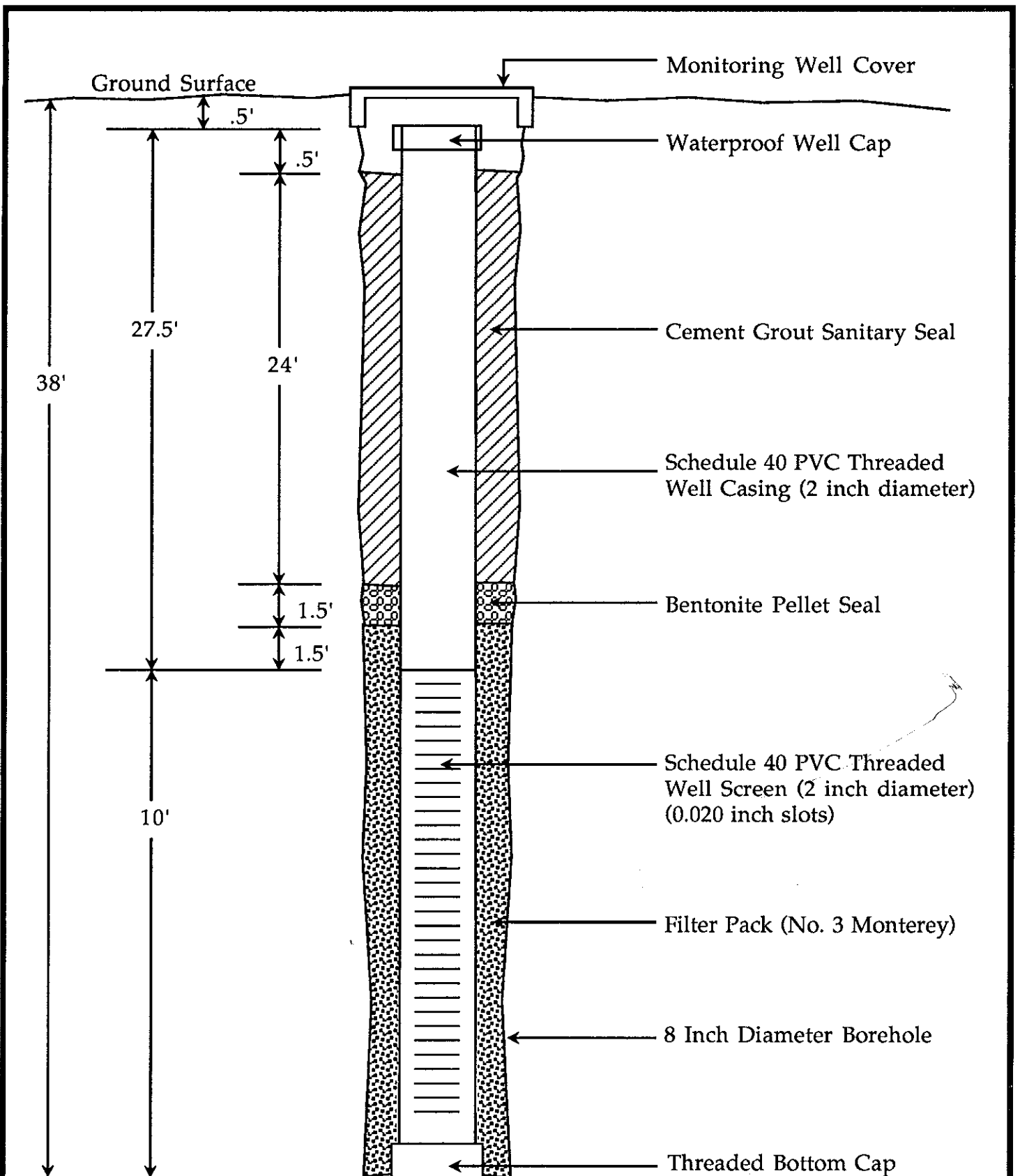
Date: December, 1991

Figure Number: 8

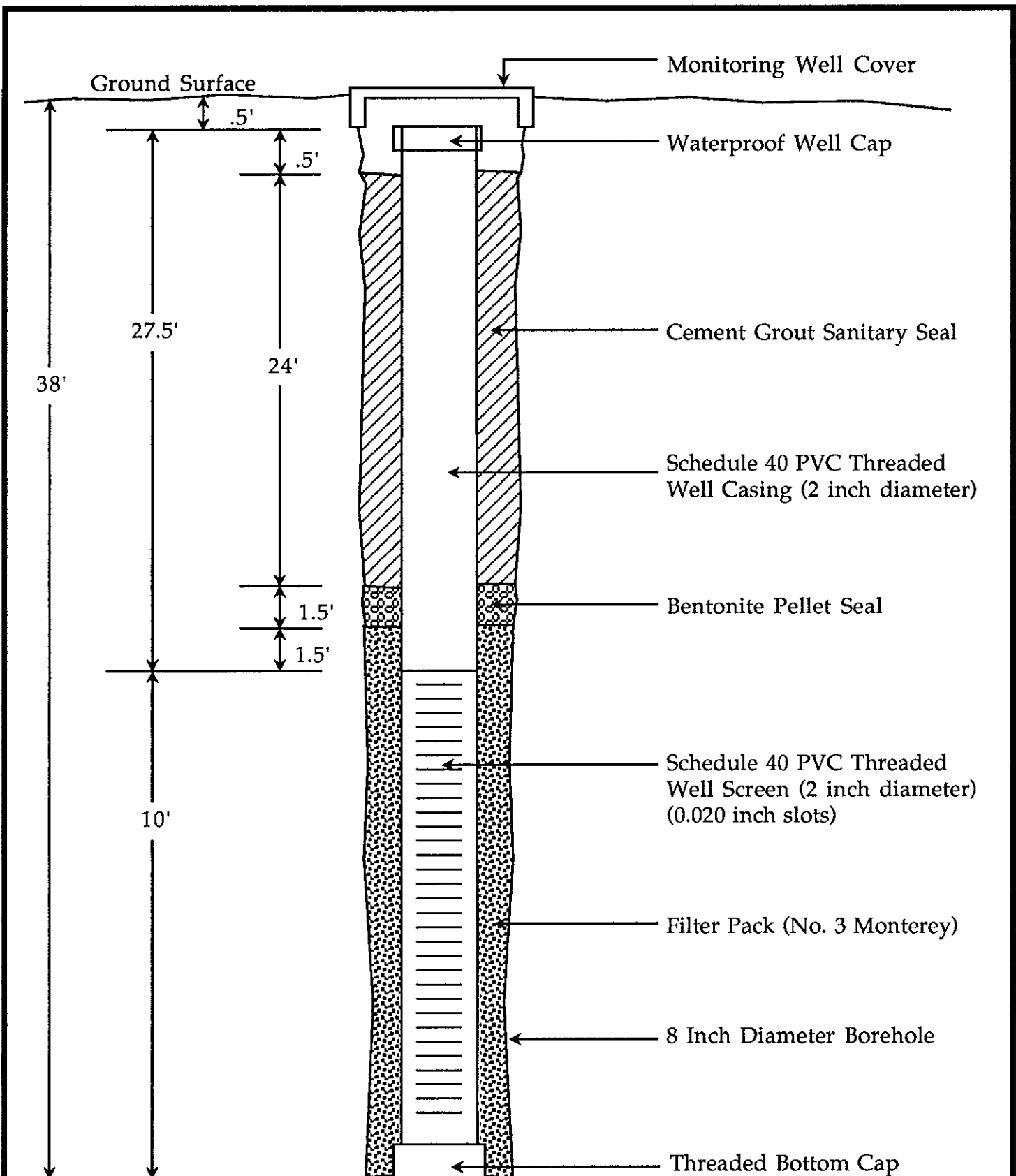
Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
					0	Brown silty clay with sand and gravel, moist, no odor.
2116-5-MW3	9	CL	115		5	Brown silty clay, stiff, moist, no odor medium plasticity.
2116-10-MW3	12	SM	125		10	Brown silty sand, fine-grained, medium dense, moist, no odor.
2116-15-MW3	12	SM	135		15	Same.
						Brown silty clay, stiff, moist, slight odor, medium plasticity.
2116-20-MW3	5	CL			20	Brown silty clay, medium stiff, moist, odor, medium plasticity.
L & W Environmental Services, Inc. 2111 Jennings Street San Francisco, California				Log of Boring Number: MW 3 Sheet 1 of 2 Beck Roofing 21123 Meekland Avenue Hayward, California		
Project Number: 2116				Date: December, 1991		Figure Number: 9



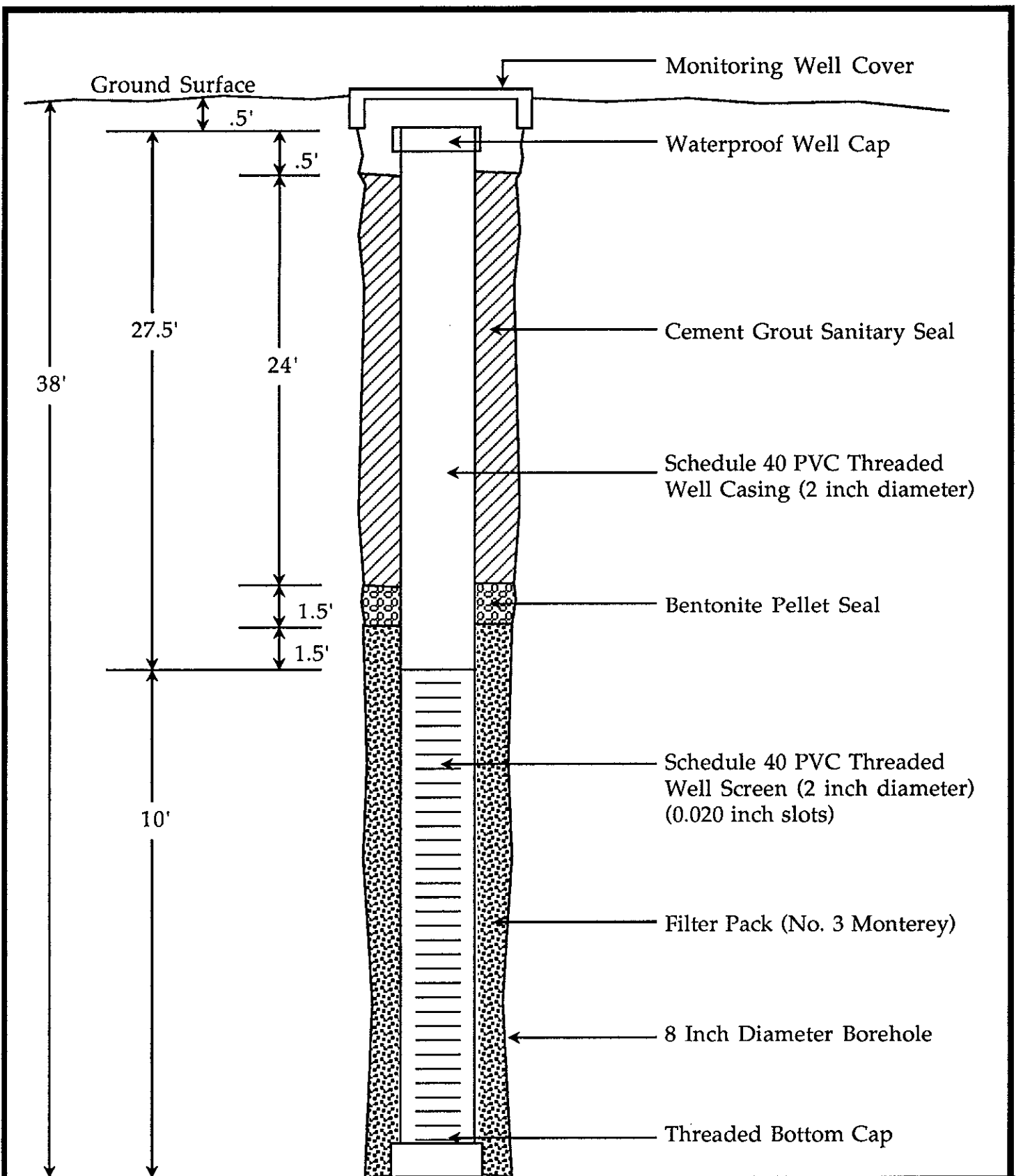
Sample Number	Blows per Foot	Soil Type	Time	Log	Depth in Feet	DESCRIPTION
2116-25-MW3	14	CL	207		25	Same.
2116-30-MW3	13	CL	225		30	Same.
2116-35-MW3	13	SM	230		35	Brown silty sand, fine-grained, medium dense, wet.
<p>Boring terminated at 38 feet.  Groundwater encountered at 33 feet.  Boring drilled 10/31/91 with CME 75 rig.  Boring converted into Monitoring Well 3 on 10/31/91</p>						
<p><b>L &amp; W Environmental Services, Inc.</b>   2111 Jennings Street  San Francisco, California</p>				<p><b>Log of Boring Number: MW 3</b>  Sheet 2 of 2  Beck Roofing  21123 Meekland Avenue  Hayward, California</p>		
<p>Project Number: 2116</p>				<p>Date: December, 1991</p>	<p>Figure Number: 9</p>	



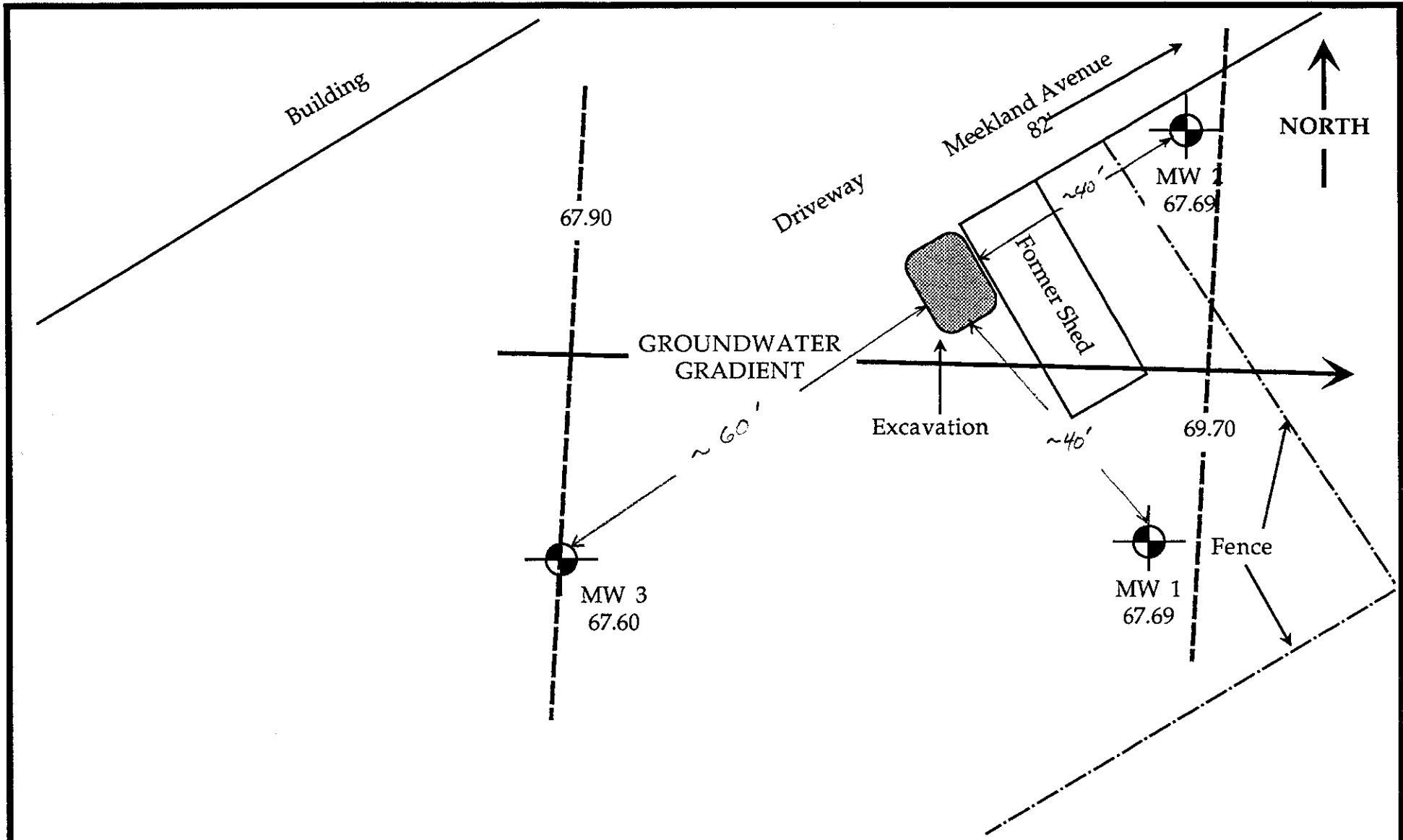
<p><b>L &amp; W Environmental Services, Inc.</b>          2111 Jennings Street          San Francisco, California</p>	<p><b>Beck Roofing</b>          21123 Meekland Avenue          Hayward, California</p>	<p><b>Monitoring Well MW-1          Installation Detail</b></p>
<p>Project Number: 2116</p>	<p>Date: December, 1991</p>	<p>Figure Number: 10</p>



<p><b>L &amp; W Environmental Services, Inc.</b>          2111 Jennings Street          San Francisco, California</p>	<p><b>Beck Roofing</b>          21123 Meekland Avenue          Hayward, California</p>	<p><b>Monitoring Well MW-2          Installation Detail</b></p>
<p>Project Number: 2116</p>	<p>Date: December, 1991</p>	<p>Figure Number: 11</p>



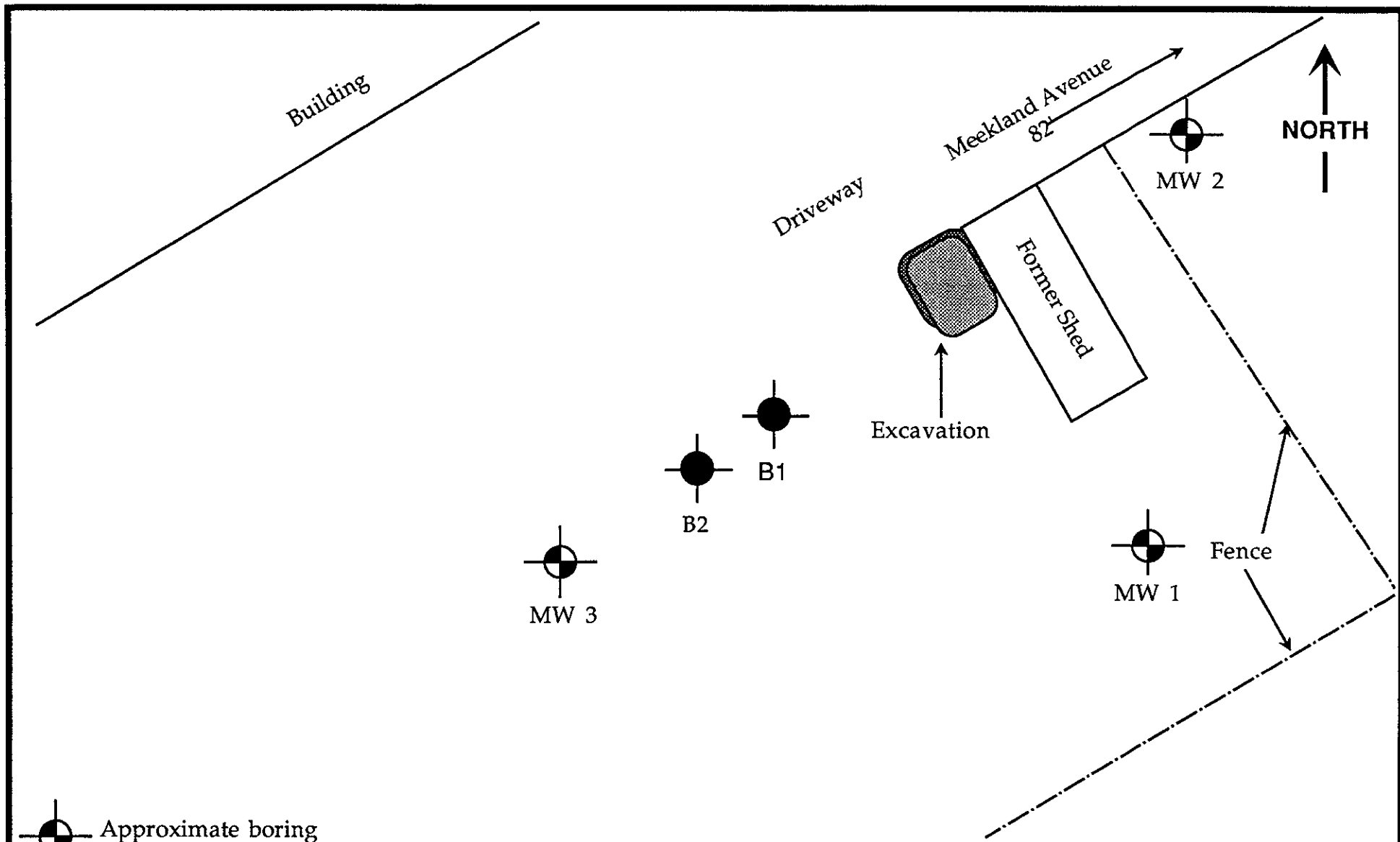
<p><b>L &amp; W Environmental Services, Inc.</b></p> <p>2111 Jennings Street San Francisco, California</p>	<p><b>Beck Roofing</b></p> <p>21123 Meekland Avenue Hayward, California</p>	<p><b>Monitoring Well MW-3 Installation Detail</b></p>
<p>Project Number: 2116</p>	<p>Date: December, 1991</p>	<p>Figure Number: 12</p>




Approximate well location


Scale 1"=20"

<b>L &amp; W Environmental Services, Inc.</b> 2111 Jennings Street San Francisco, California		<b>GROUNDWATER GRADIENT</b> Beck Roofing Hayward, California	
Project Number: 2116	Drawn by: MJK	Date: December, 1991	Figure Number: 13



 Approximate boring location

Scale 1"=20"

 TPH is greater than ND, but less than 100 ppm.

 TPH is ND.

**L & W Environmental Services, Inc.**

2111 Jennings Street  
San Francisco, California

**TPH-G Limits at 15' Depth**

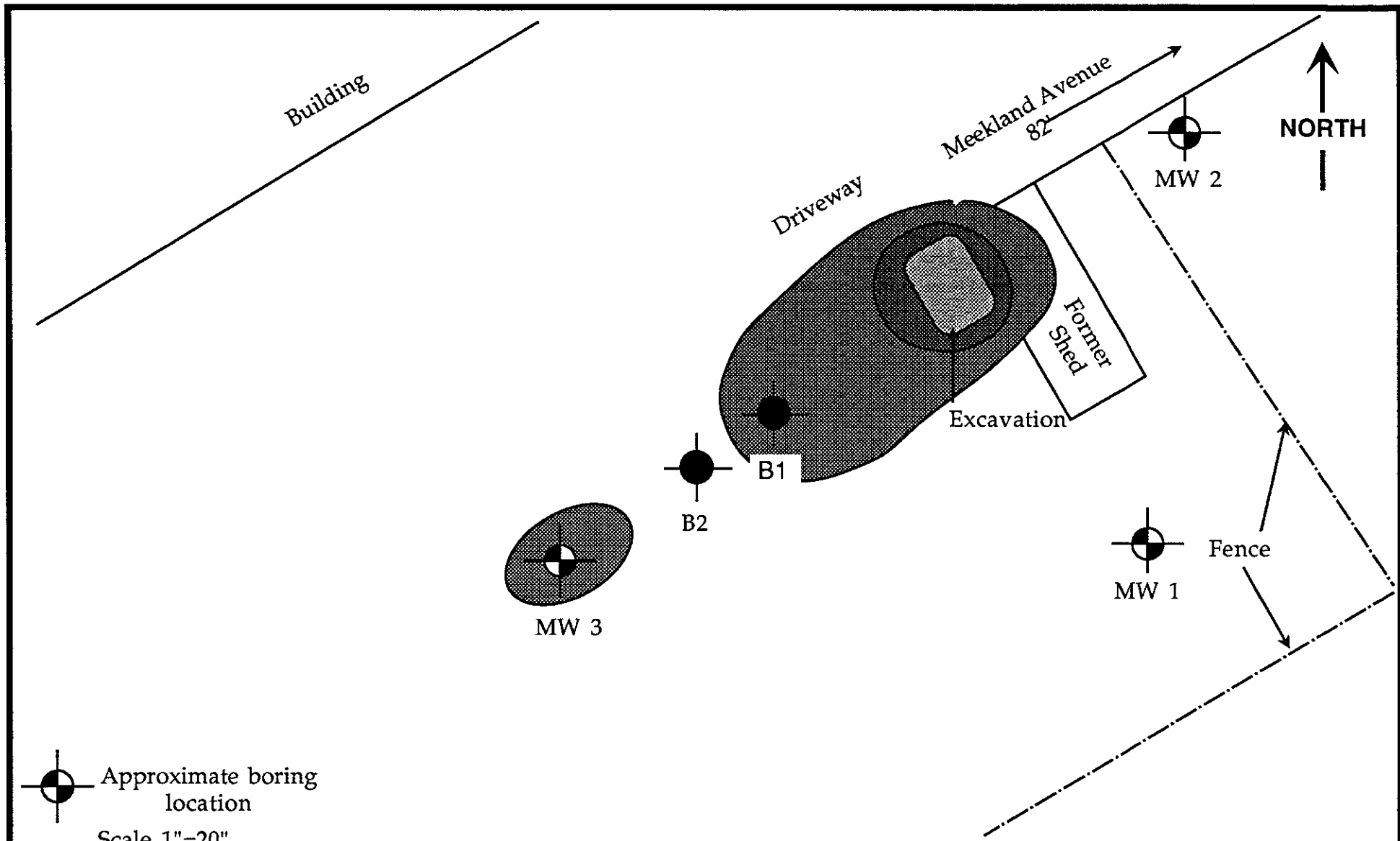
Beck Roofing  
Hayward, California


Project Number: 2116

Drawn by: MJK


Date: December, 1991


Figure Number: 14



 Approximate boring location

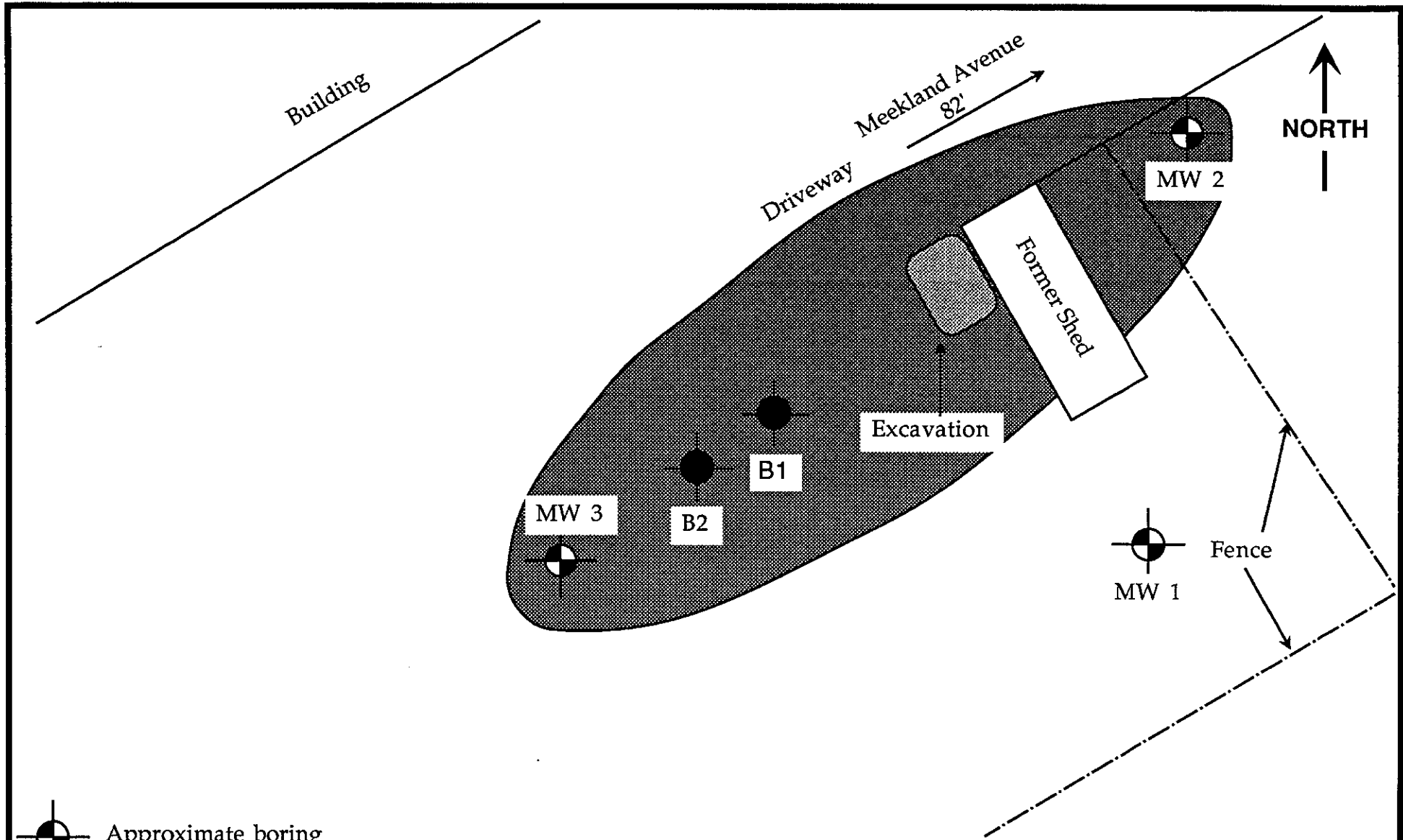
Scale 1"=20"


 TPH is greater than 100 ppm.

 TPH is greater than ND, but less than 100 ppm.


 TPH is ND.

<b>L &amp; W Environmental Services, Inc.</b> 2111 Jennings Street San Francisco, California		<b>TPH-G Limits at 20' Depth</b> Beck Roofing Hayward, California	
Project Number: 2116	Drawn by: MJK	Date: December, 1991	Figure Number: 15




 Approximate boring location

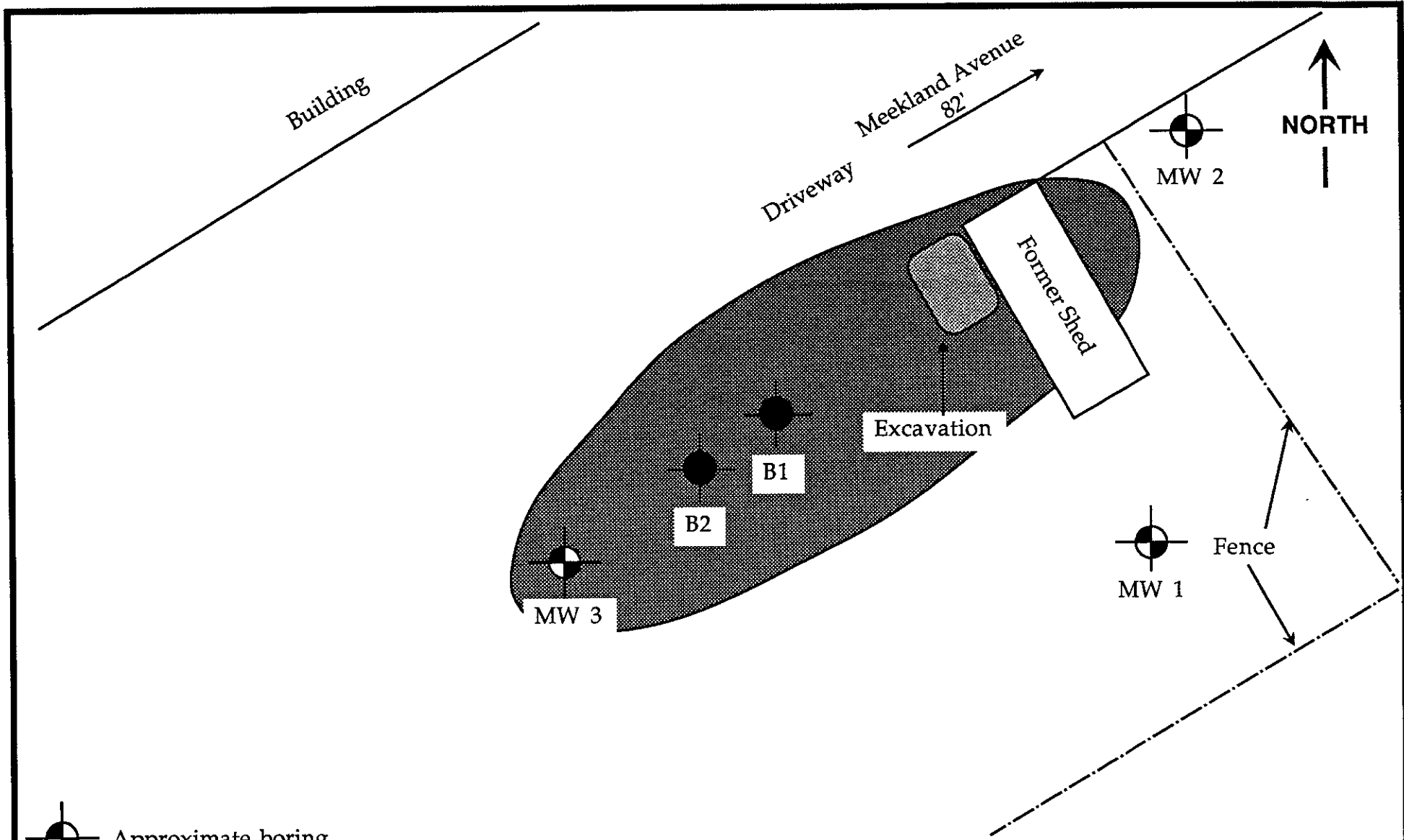
Scale 1"=20"



 TPH is greater than ND, but less than 100 ppm.



 TPH is ND.

<b>L &amp; W Environmental Services, Inc.</b> 2111 Jennings Street San Francisco, California		<b>TPH-G Limits at 25' Depth</b> Beck Roofing Hayward, California	
Project Number: 2116	Drawn by: MJK	Date: December, 1991	Figure Number: 16






 Approximate boring location  
 Scale 1"=20"


 TPH is greater than ND, but less than 100 ppm.


 TPH is ND.

<b>L &amp; W Environmental Services, Inc.</b> 2111 Jennings Street San Francisco, California		<b>TPH-G Limits at 30' Depth</b> Beck Roofing Hayward, California	
Project Number: 2116	Drawn by: MJK	Date: December, 1991	Figure Number: 17

APPENDIX B

Summary of Analytical Results  
Laboratory Certificates  
and  
Chain of Custody Forms

BECK ROOFING  
21123 MEEKLAND AVENUE  
HAYWARD, CALIFORNIA

L&W Project 2116  
January 7, 1992

# CHAIN OF CUSTODY

SAMPLERS: (Signature) *[Signature]*  
 PROJECT NAME: (Print) Beck Roofing JOB NUMBER: 2116  
 DESCRIPTION: GRAB SAMPLES FROM Pile of Excavated Soil  
 ADDRESS: 21123 Meekland Hayward CALIF.

ANALYSIS REQUESTED		TOTAL PETROLEUM HYDROCARBONS	BTEX	VOC - EPA 8240	TOTAL OIL AND GREASE	TETRAETHYL LEAD EPA - 8270	METALS	REMARKS
2116-G1	10-30-91 1300	X	X		X			1x2" TUBE
2116-G2	10-30-91 1300	X	X		X			1x2" TUBE
2116-G3	10-30-91 1300	X	X		X			1x2" TUBE
2116-G4	10-30-91 1300	X	X		X			1x2" TUBE
2116-NW-17	10-30-91 14:15	X	X		X			1x2" TUBE
2116-F	10-30-91 14:20	X	X		X			1x2" TUBE
2116-SW-15	10-30-91 14:25	X	X		X			1x2" TUBE
2116-SW-17	10-30-91 14:30	X	X		X			1x2" TUBE
2116-NW-15	10-30-91 14:35	X	X		X			1x2" TUBE

RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE 10/30/91	RECEIVED BY: (Signature) L & W Storage	DATE 10/30/91
	TIME 1700		TIME 1700
RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE 11-4-91	RECEIVED BY: (Signature) <i>[Signature]</i>	DATE 11-4-91
	TIME 8:00		TIME 8:00
RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	DATE
	TIME		TIME
RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	DATE
	TIME		TIME
RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	DATE
	TIME		TIME

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91

Reported: 11/26/91

Job #: 72981

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
21123 Meekland  
Hayward, CA

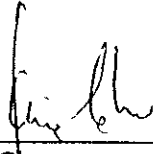
Matrix: Soil

Total Petroleum Hydrocarbon Analysis  
EPA Method 5030  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Gasoline</u>	<u>MDL</u>
72981-1	2116-G1	680	100
72981-2	2116-G2	1,330	100
72981-3	2116-G3	940	100
72981-4	2116-G4	2,700	100
72981-5	2116-MW-17	2,740	100
72981-6	2116-F-17	5,760	100
72981-7	2116-SW-15	ND<1.0	1.0
72981-8	2116-SW-17	720	100
72981-9	2116-NW-15	1.5	1.0

QA/QC: Spike Recovery for Gasoline: 68%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806      PHONE (510) 222-3002      FAX (510) 222-1251

**CERTIFICATE OF ANALYSIS**

STATE LICENSE NO. E 750

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Received: 11/04/91  
Reported: 11/26/91  
Job #: 72981

Project: Beck Roofing  
21123 Meekland  
Hayward, CA  
Matrix: Soil

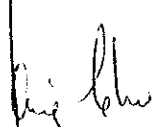
Aromatic Volatile Hydrocarbon Analysis  
EPA Method 8020  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Benzene</u>	<u>MDL</u>	<u>Toluene</u>	<u>MDL</u>
72981-1	2116-G1	ND<0.3	0.3	4.7	0.3
72981-2	2116-G2	6.3	0.3	140	0.3
72981-3	2116-G3	0.53	0.3	16	0.3
72981-4	2116-G4	37	0.3	310	0.3
72981-5	2116-MW-17	16	0.3	240	0.3
72981-6	2116-F-17	30	0.3	450	0.3

<u>Lab ID</u>	<u>Client ID</u>	<u>Ethyl- benzene</u>	<u>MDL</u>	<u>Xylenes</u>	<u>MDL</u>
72981-1	2116-G1	4.5	0.3	110	0.6
72981-2	2116-G2	50	0.3	280	0.6
72981-3	2116-G3	12	0.3	150	0.6
72981-4	2116-G4	100	0.3	520	0.6
72981-5	2116-MW-17	120	0.3	650	0.6
72981-6	2116-F-17	230	0.3	1,270	0.6

QA/QC: Spike Recovery for Benzene: 81%  
Spike Recovery for Toluene: 95%  
Spike Recovery for Xylene: 102%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

Page 1 of 2

JC/td

OUTSTANDING QUALITY AND SERVICE  
CALIFORNIA STATE CERTIFIED LABORATORY

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806      PHONE (510) 222-3002      FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Attn: George Wilson  
L & W Environmental

Received: 11/04/91  
Reported: 11/26/91  
Job #: 72981

Project: Beck Roofing  
21123 Meekland  
Hayward, CA  
Matrix: Soil

Aromatic Volatile Hydrocarbon Analysis  
EPA Method 8020  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Benzene</u>	<u>MDL</u>	<u>Toluene</u>	<u>MDL</u>
72981-7	2116-SW-15	0.011	0.005	0.071	0.005
72981-8	2116-SW-17	0.40	0.3	13	0.3
72981-9	2116-NW-15	0.008	0.3	0.05	0.3

<u>Lab ID</u>	<u>Client ID</u>	<u>Ethyl- benzene</u>	<u>MDL</u>	<u>Xylenes</u>	<u>MDL</u>
72981-7	2116-SW-15	0.015	0.005	0.087	0.005
72981-8	2116-SW-17	8.4	0.3	90	0.6
72981-9	2116-NW-15	0.016	0.3	0.21	0.6

QA/QC: Spike Recovery for Benzene: 81%  
Spike Recovery for Toluene: 95%  
Spike Recovery for Xylene: 102%

MDL: Method Detection Limit. Compound below this level would not be detected.

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91

Reported: 11/26/91

Job #: 72981

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
21123 Meekland  
Hayward, CA

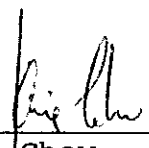
Matrix: Soil

Analysis Method 6010  
Preparation Method 3050  
mg/Kg

<u>Lab ID #</u>	<u>Client ID</u>	<u>Total Lead</u>	<u>MDL</u>
72981-1	2116-G1	8.22	3.00
72981-2	2116-G2	ND<3.00	3.00
72981-3	2116-G3	ND<3.00	3.00
72981-4	2116-G4	7.50	3.00
72981-5	2116-NW-17	ND<3.00	3.00
72981-6	2116-F-17	7.25	3.00
72981-7	2116-SW-15	8.30	3.00
72981-8	2116-SW-17	9.35	3.00
72981-9	2116-NW-15	ND<3.00	3.00

QA/QC: Spike Recovery: 101%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td





Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806      PHONE (510) 222-3002      FAX (510) 222-1251

**CERTIFICATE OF ANALYSIS**

STATE LICENSE NO. E 750

Received: 11/07/91  
Reported: 12/11/91  
Job #: 72999

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
21123 Meekland  
Hayward

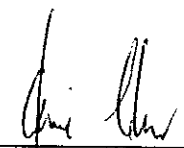
Matrix: Soil

Total Petroleum Hydrocarbon Analysis  
EPA Method 5030  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Gasoline</u>	<u>MDL</u>
72999-1	2116-EW-14	170	6
72999-2	2116-C-16	780	60

QA/QC: Spike Recovery for Gasoline: 95%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td

OUTSTANDING QUALITY AND SERVICE  
CALIFORNIA STATE CERTIFIED LABORATORY

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/07/91

Reported: 12/11/91

Job #: 72999

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
21123 Meekland  
Hayward

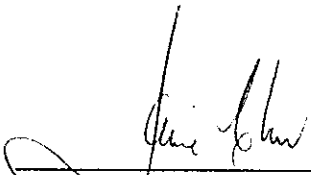
Matrix: Soil

Aromatic Volatile Hydrocarbon Analysis  
EPA Method 8020  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Benzene</u>	<u>MDL</u>	<u>Toluene</u>	<u>MDL</u>
72999-1	2116-EW-14	ND<0.03	0.03	2.7	0.03
72999-2	2116-C-16	0.83	0.03	15	0.03

<u>Lab ID</u>	<u>Client ID</u>	<u>Ethyl- benzene</u>	<u>MDL</u>	<u>Xylenes</u>	<u>MDL</u>
72999-1	2116-EW-14	1.5	0.03	10	0.06
72999-2	2116-C-16	6.3	0.03	48	0.06

MDL: Method Detection Limit. Compound below this level would not be detected.

  
Jaime Chow  
Laboratory Director

JC/td

OUTSTANDING QUALITY AND SERVICE  
CALIFORNIA STATE CERTIFIED LABORATORY

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/07/91

Reported: 12/11/91

Job #: 72999

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 93029

Project: Beck Roofing  
21123 Meekland  
Hayward

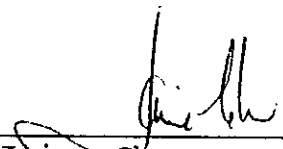
Matrix: Soil

Total Oil & Grease  
EPA Method 9071  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Oil &amp; Grease</u>	<u>MDL</u>
72999-1	2116-EW-14	ND<50	50
72999-2	2116-C-16	ND<50	50

QA/QC: 72999-1: Spike Recovery: 87%  
72999-2: Spike Recovery: 85%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806      PHONE (510) 222-3002      FAX (510) 222-1251

**CERTIFICATE OF ANALYSIS**

STATE LICENSE NO. E 750

Received: 11/07/91  
Reported: 12/11/91  
Job #: 73000

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

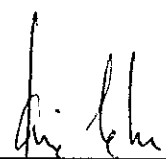
Project: Beck Roofing  
21123 Meekland  
Hayward  
Matrix: Soil

Total Petroleum Hydrocarbon Analysis  
EPA Method 5030  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Gasoline</u>	<u>MDL</u>
73000-1	2116-WW-16	1.0	1.0
73000-2	2116-CF-18	6,800	60
73000-3	2116-NW-16	4,200	60
73000-4	2116-SW-16	3,200	60
73000-5	2116-EW-16	1.2	1.0

QA/QC: Spike Recovery for Gasoline: 95%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/07/91  
Reported: 12/11/91  
Job #: 73000

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
21123 Meekland  
Hayward

Matrix: Soil

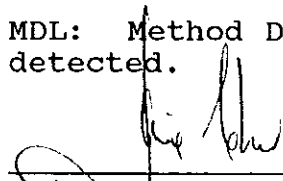
Aromatic Volatile Hydrocarbon Analysis  
EPA Method 8020  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Benzene</u>	<u>MDL</u>	<u>Toluene</u>	<u>MDL</u>
73000-1	2116-WW-16	ND<0.005	0.005	0.009	0.005
73000-2	2116-CF-18	40	0.3	440	0.3
73000-3	2116-NW-16	6.3	0.3	240	0.3
73000-4	2116-SW-16	1.8	0.3	100	0.3
72000-5	2116-EW-16	ND<0.005	0.005	0.040	0.005

<u>Lab ID</u>	<u>Client ID</u>	<u>Ethyl- benzene</u>	<u>MDL</u>	<u>Xylenes</u>	<u>MDL</u>
73000-1	2116-WW-16	ND<0.005	0.005	0.029	0.005
73000-2	2116-CF-18	140	0.3	770	0.6
73000-3	2116-NW-16	100	0.3	550	0.6
73000-4	2116-SW-16	60	0.3	350	0.6
73000-5	2116-EW-16	0.008	0.005	0.048	0.005

QA/QC: Spike Recovery for Benzene: 67%  
Spike Recovery for Toluene: 83%  
Spike Recovery for Xylene: 92%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
Jaime Chow  
Laboratory Director

JC/vb

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FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/07/91

Reported: 12/11/91

Job #: 73000

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
21123 Meekland  
Hayward

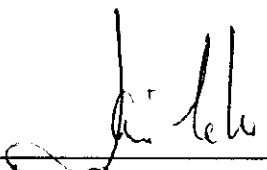
Matrix: Soil

Lead - Flame AA Method 7420  
Preparation Method 3050  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Total Lead</u>	<u>MDL</u>
73000-1	2116-WW-16	4.0	3.75
73000-2	2116-CF-18	12.2	3.75
73000-3	2116-NW-16	11.0	3.75
73000-4	2116-SW-16	8.4	3.75
73000-5	2116-EW-16	ND<3.75	3.75

QA/QC: Spike Recovery: 102.6%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td

# CHAIN OF CUSTODY

72902

**SAMPLERS:** (Signature) *Michael J. Allen*

**PROJECT NAME:** (Print) *Beck Roofing*      **JOB NUMBER:** *2116*

**DESCRIPTION:** *Soil samples from advancement of MWI*

**ADDRESS:** *231123 Meekland Ave, Hayward, CA.*

**ANALYSIS REQUESTED**

<b>TOTAL PETROLEUM HYDROCARBONS</b>	<b>BTEX</b>	<b>VOC - EPA 8240</b>	<b>TOTAL OIL AND GREASE</b>	<b>TETRAETHYL LEAD</b>	<b>EPA - 8270</b>	<b>METALS</b>
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CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	SAMPLE LOCATION	TOTAL PETROLEUM HYDROCARBONS	BTEX	VOC - EPA 8240	TOTAL OIL AND GREASE	TETRAETHYL LEAD	EPA - 8270	METALS	REMARKS
2116-5-MWI	10-30-91	9:11	X		MWI at 5' depth	X	X		X				
2116-10-MWI		9:17	X		MWI at 10'	X	X		X				
2116-15-MWI		9:25	X		MWI at 15'	X	X		X				
2116-20-MWI		9:35	X		MWI at 20'	X	X		X				
2116-25-MWI		9:44	X		MWI at 25'	X	X		X				
2116-30-MWI		9:59	X		MWI at 30'	X	X		X				
2116-35-MWI		10:08	X		MWI at 35'	X	X		X				
2116-40-MWI		10:25	X		MWI at 40'	X	X		X				
2116-45-MWI		10:35	X		MWI at 45'	X	X		X				

<b>RELINQUISHED BY:</b> (Signature) <i>Michael J. Allen</i>	DATE <i>10/30/91</i>	<b>RECEIVED BY:</b> (Signature) <i>L&amp;W Storage</i>	DATE <i>10/30/91</i>
	TIME <i>1700</i>		TIME <i>1700</i>
<b>RELINQUISHED BY:</b> (Signature) <i>John Carver</i>	DATE <i>11-4-91</i>	<b>RECEIVED BY:</b> (Signature) <i>John Carver</i>	DATE <i>11-4-91</i>
	TIME <i>8:00</i>		TIME <i>8:00</i>
<b>RELINQUISHED BY:</b> (Signature) <i>Michael J. Allen</i>	DATE <i>11-4-91</i>	<b>RECEIVED BY:</b> (Signature) <i>Michael J. Allen</i>	DATE <i>11-4-91</i>
	TIME <i>9:30</i>		TIME <i>9:30</i>
<b>RELINQUISHED BY:</b> (Signature)	DATE	<b>RECEIVED BY:</b> (Signature)	DATE
	TIME		TIME
<b>RELINQUISHED BY:</b> (Signature)	DATE	<b>RECEIVED BY:</b> (Signature)	DATE
	TIME		TIME



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Attn: George Wilson  
L & W Environmental  
2111 Jenning Street  
San Francisco, CA 94124

Received: 11/04/91  
Reported: 12/02/91  
Job #: 72982

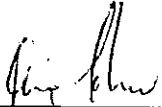
Project: Beck Roofing  
231123 Meekland Avenue  
Hayward  
Matrix: Soil

Total Petroleum Hydrocarbon Analysis  
EPA Method 5030  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Gasoline</u>	<u>MDL</u>
72982-1	2116-5-MWI	ND<1.0	1.0
72982-2	2116-10-MWI	ND<1.0	1.0
72982-3	2116-15-MWI	ND<1.0	1.0
72982-4	2116-20-MWI	ND<1.0	1.0
72982-5	2116-25-MWI	ND<1.0	1.0
72982-6	2116-30-MWI	ND<1.0	1.0
72982-7	2116-35-MWI	ND<1.0	1.0
72982-8	2116-40-MWI	ND<1.0	1.0
72982-9	2116-45-MWI	ND<1.0	1.0

QA/QC: Spike Recovery for Gasoline: 92%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/vb

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806      PHONE (510) 222-3002      FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91  
Reported: 12/02/91  
Job #: 72982

Attn: George Wilson  
L & W Environmental  
2111 Jenning Street  
San Francisco, CA 94124

Project: Beck Roofing  
231123 Meekland Avenue  
Hayward

Matrix: Soil

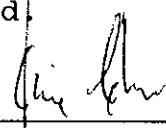
Aromatic Volatile Hydrocarbon Analysis  
EPA Method 8020  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Benzene</u>	<u>MDL</u>	<u>Toluene</u>	<u>MDL</u>
72982-1	2116-5-MWI	ND<0.005	0.005	0.016	0.005
72982-2	2116-10-MWI	ND<0.005	0.005	0.010	0.005
72982-3	2116-15-MWI	ND<0.005	0.005	0.013	0.005
72982-4	2116-20-MWI	ND<0.005	0.005	0.010	0.005
72982-5	2116-25-MWI	ND<0.005	0.005	0.024	0.005
72982-6	2116-30-MWI	ND<0.005	0.005	0.011	0.005

<u>Lab ID</u>	<u>Client ID</u>	<u>Ethyl- benzene</u>	<u>MDL</u>	<u>Xylenes</u>	<u>MDL</u>
72982-1	2116-5-MWI	ND<0.005	0.005	0.014	0.005
72982-2	2116-10-MWI	ND<0.005	0.005	0.007	0.005
72982-3	2116-15-MWI	ND<0.005	0.005	0.007	0.005
72982-4	2116-20-MWI	ND<0.005	0.005	0.006	0.005
72982-5	2116-25-MWI	ND<0.005	0.005	0.007	0.005
72982-6	2116-30-MWI	ND<0.005	0.005	0.006	0.005

QA/QC: Spike Recovery for Benzene: 81%  
Spike Recovery for Toluene: 95%  
Spike Recovery for Xylene: 102%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806      PHONE (510) 222-3002      FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91  
Reported: 12/02/91  
Job #: 72982

Attn: George Wilson  
L & W Environmental

Project: Beck Roofing  
231123 Meekland Avenue  
Hayward

Matrix: Soil

Aromatic Volatile Hydrocarbon Analysis  
EPA Method 8020  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Benzene</u>	<u>MDL</u>	<u>Toluene</u>	<u>MDL</u>
72982-7	2116-35-MWI	ND<0.005	0.005	0.010	0.005
72982-8	2116-40-MWI	ND<0.005	0.005	0.016	0.005
72982-9	2116-45-MWI	ND<0.005	0.005	0.015	0.005

<u>Lab ID</u>	<u>Client ID</u>	<u>Ethyl- benzene</u>	<u>MDL</u>	<u>Xylenes</u>	<u>MDL</u>
72982-7	2116-35-MWI	ND<0.005	0.005	0.006	0.005
72982-8	2116-40-MWI	ND<0.005	0.005	0.006	0.005
72982-9	2116-45-MWI	ND<0.005	0.005	0.006	0.005

QA/QC: Spike Recovery for Benzene: 81%  
Spike Recovery for Toluene: 95%  
Spike Recovery for Xylene: 102%

MDL: Method Detection Limit. Compound below this level would not be detected.

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806      PHONE (510) 222-3002      FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91  
Reported: 12/02/91  
Job #: 72982

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
231123 Meekland Avenue  
Hayward

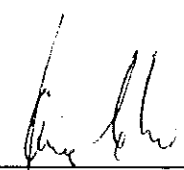
Matrix: Soil

Analysis Method EPA 6010  
Preparation Method 3050  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Total Lead</u>	<u>MDL</u>
72982-1	2116-5-MWI	ND<3.00	3.00
72982-2	2116-10-MWI	ND<3.00	3.00
72982-3	2116-15-MWI	ND<3.00	3.00
72982-4	2116-20-MWI	ND<3.00	3.00
72982-5	2116-25-MWI	ND<3.00	3.00
72982-6	2116-30-MWI	5.00	3.00
72982-7	2116-35-MWI	5.50	3.00
72982-8	2116-40-MWI	ND<3.00	3.00
72982-9	2116-45-MWI	4.3	3.00

QA/QC: Spike Recovery: 87%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/vb

# CHAIN OF CUSTODY

7.201891

SAMPLERS: (Signature) *Michael Miller*  
 PROJECT NAME: (Print) *Beck Roofing* JOB NUMBER: *2116*  
 DESCRIPTION: *Soil samples from advancement of MW 2*  
 ADDRESS: *231123 Meekland Ave, Hayward, CA*

ANALYSIS REQUESTED	TOTAL PETROLEUM HYDROCARBONS		VOC - EPA 8240	TOTAL OIL AND GREASE	TETRAETHYL LEAD	EPA - 8270	METALS	REMARKS
	BTEX	50501						
	X	X		X				
	X	X		X				
	X	X		X				
	X	X		X				
	X	X		X				
	X	X		X				
	X	X		X				

CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	SAMPLE LOCATION
2116-5-MW2	<i>10/30/91</i>	1:45	X		MW2 at 5' depth
2116-10-MW2	<i>10/30/91</i>	1:50	X		MW2 at 10'
2116-15-MW2	<i>10/30/91</i>	2:00	X		MW2 at 15'
2116-20-MW2	<i>10/30/91</i>	2:17	X		MW2 at 20'
2116-25-MW2	<i>10/30/91</i>	2:35	X		MW2 at 25'
2116-30-MW2	<i>10/30/91</i>	2:45	X		MW2 at 30'
2116-35-MW2	<i>10/30/91</i>	2:55	X		MW2 at 35'

RELINQUISHED BY: (Signature) <i>Michael Miller</i>	DATE <i>10/30/91</i>	RECEIVED BY: (Signature) <i>L&amp;W Storage</i>	DATE <i>10/30/91</i>
	TIME <i>1700</i>		TIME <i>1700</i>
RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE <i>11-4-91</i>	RECEIVED BY: (Signature) <i>[Signature]</i>	DATE <i>11-4-91</i>
	TIME <i>800</i>		TIME <i>8:00</i>
RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE <i>11-4-91</i>	RECEIVED BY: (Signature) <i>[Signature]</i>	DATE <i>11-4-91</i>
	TIME <i>9:30</i>		TIME <i>9:30</i>
RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	DATE
	TIME		TIME
RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	DATE
	TIME		TIME

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91

Reported: 12/04/91

Job #: 72984

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
231123 Meekland Avenue  
Hayward, CA


Matrix: Soil

Total Petroleum Hydrocarbon Analysis  
EPA Method 5030  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Gasoline</u>	<u>MDL</u>
72984-1	2116-5-MW2	ND<1.0	1.0
72984-2	2116-10-MW2	ND<1.0	1.0
72984-3	2116-15-MW2	ND<1.0	1.0
72984-4	2116-20-MW2	ND<1.0	1.0
72984-5	2116-25-MW2	1.4	1.0
72984-6	2116-30-MW2	ND<1.0	1.0
72984-7	2116-35-MW2	ND<1.0	1.0

QA/QC: Spike Recovery for Gasoline: 106%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
Jaime Chow  
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

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Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Received: 11/04/91  
Reported: 12/04/91  
Job #: 72984

Project: Beck Roofing  
231123 Meekland Avenue  
Hayward, CA  
Matrix: Soil

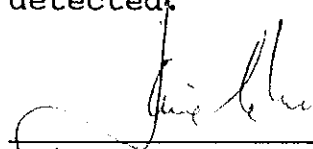
Aromatic Volatile Hydrocarbon Analysis  
EPA Method 8020  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Benzene</u>	<u>MDL</u>	<u>Toluene</u>	<u>MDL</u>
72984-1	2116-5-MW2	ND<0.005	0.005	ND<0.005	0.005
72984-2	2116-10-MW2	ND<0.005	0.005	ND<0.005	0.005
72984-3	2116-15-MW2	ND<0.005	0.005	ND<0.005	0.005
72984-4	2116-20-MW2	ND<0.005	0.005	ND<0.005	0.005
72984-5	2116-25-MW2	0.10	0.005	0.085	0.005
72984-6	2116-30-MW2	0.044	0.005	0.008	0.005
72984-7	2116-35-MW2	0.006	0.005	ND<0.005	0.005

<u>Lab ID</u>	<u>Client ID</u>	<u>Ethyl- benzene</u>	<u>MDL</u>	<u>Xylenes</u>	<u>MDL</u>
72984-1	2116-5-MW2	ND<0.005	0.005	ND<0.005	0.005
72984-2	2116-10-MW2	ND<0.005	0.005	ND<0.005	0.005
72984-3	2116-15-MW2	ND<0.005	0.005	ND<0.005	0.005
72984-4	2116-20-MW2	ND<0.005	0.005	ND<0.005	0.005
72984-5	2116-25-MW2	0.014	0.005	0.090	0.005
72984-6	2116-30-MW2	ND<0.005	0.005	ND<0.005	0.005
72984-7	2116-35-MW2	ND<0.005	0.005	ND<0.005	0.005

QA/QC: Spike Recovery for Benzene: 81%  
Spike Recovery for Toluene: 101%  
Spike Recovery for Xylene: 104%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
Jaime Chow  
Laboratory Director

JC/td

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CALIFORNIA STATE CERTIFIED LABORATORY

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

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FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91

Reported: 12/04/91

Job #: 72984

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
231123 Meekland Avenue  
Hayward, CA

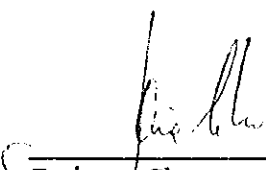
Matrix: Soil

Analysis Method EPA 6010  
Preparation Method 3050  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Total Lead</u>	<u>MDL</u>
72984-1	2116-5-MW2	ND<3.00	3.00
72984-2	2116-10-MW2	ND<3.00	3.00
72984-3	2116-15-MW2	ND<3.00	3.00
72984-4	2116-20-MW2	5.90	3.00
72984-5	2116-25-MW2	ND<3.00	3.00
72984-6	2116-30-MW2	ND<3.00	3.00
72984-7	2116-35-MW2	4.20	3.00

QA/QC: Spike Recovery: 90%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td



# CHAIN OF CUSTODY

79980

SAMPLERS: (Signature) *[Signature]*  
 PROJECT NAME: (Print) *Beck Roofing* JOB NUMBER: *2116B*  
 DESCRIPTION: *Soil samples from B1 and B2*  
 ADDRESS: *21123 Meekland Ave, Hayward, CA.*

ANALYSIS REQUESTED		TOTAL PETROLEUM HYDROCARBONS	BTEX	VOC - EPA 8240	TOTAL OIL AND GREASE	TETRAETHYL LEAD	EPA - 8270	METALS	REMARKS
2116-5-B1		X	X			X			
2116-10-B1		X	X			X			
2116-15-B1		X	X			X			
2116-20-B1		X	X			X			
2116-25-B1		X	X			X			
2116-5-B2		X	X			X			
2116-10-B2		X	X			X			
2116-15-B2		X	X			X			
2116-20-B2		X	X			X			
2116-25-B2		X	X			X			
2116-30-B2		X	X			X			

RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE <i>11-1-91</i>	RECEIVED BY: (Signature) <i>[Signature]</i>	DATE <i>11/1/91</i>
	TIME <i>7:00</i>		TIME <i>7:00</i>
RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE <i>11/4/91</i>	RECEIVED BY: (Signature) <i>[Signature]</i>	DATE <i>11-4-91</i>
	TIME <i>7:45am</i>		TIME <i>8:00</i>
RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE <i>11-4-91</i>	RECEIVED BY: (Signature) <i>[Signature]</i>	DATE <i>11-4-91</i>
	TIME <i>9:30</i>		TIME <i>9:30</i>
RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	DATE
	TIME		TIME
RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	DATE
	TIME		TIME

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806      PHONE (510) 222-3002      FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91  
Reported: 11/25/91  
Job #: 72980

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

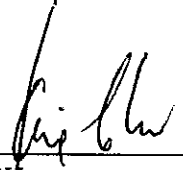
Project: Beck Roofing  
21123 Meekland Avenue  
Hayward, CA  
Matrix: Soil

Total Petroleum Hydrocarbon Analysis  
EPA Method 5030  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Gasoline</u>	<u>MDL</u>
72980-1	2116-5-B1	ND<1.0	1.0
72980-2	2116-10-B1	ND<1.0	1.0
72980-3	2116-15-B1	ND<1.0	1.0
72980-4	2116-20-B1	5.7	1.0
72980-5	2116-25-B1	8.8	1.0
72980-6	2116-5-B2	ND<1.0	1.0
72980-7	2116-10-B2	ND<1.0	1.0
72980-8	2116-15-B2	ND<1.0	1.0
72980-9	2116-20-B2	ND<1.0	1.0
72980-10	2116-25-B2	35	1.0
72980-11	2116-30-B2	36	1.0

QA/QC: Spike Recovery for Gasoline: 102%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

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**CERTIFICATE OF ANALYSIS**

STATE LICENSE NO. E 750

Received: 11/04/91  
Reported: 11/19/91  
Job #: 72980

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
21123 Meekland Avenue  
Hayward, CA

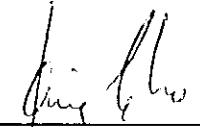
Matrix: Soil

Total Petroleum Hydrocarbon Analysis  
DHS Extraction Method (LUFT)  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Diesel</u>	<u>MDL</u>
72980-1	2116-5-B1	ND<1.0	1.0
72980-2	2116-10-B1	ND<1.0	1.0
72980-3	2116-15-B1	ND<1.0	1.0
72980-4	2116-20-B1	ND<1.0	1.0
72980-5	2116-25-B1	ND<1.0	1.0
72980-6	2116-5-B2	ND<1.0	1.0
72980-7	2116-10-B2	ND<1.0	1.0
72980-8	2116-15-B2	ND<1.0	1.0
72980-9	2116-20-B2	ND<1.0	1.0
72980-10	2116-25-B2	ND<1.0	1.0
72980-11	2116-30-B2	ND<1.0	1.0

QA/QC: Spike Recovery for Diesel: 73%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91  
Reported: 11/25/91  
Job #: 72980

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
21123 Meekland Avenue  
Hayward, CA  
Matrix: Soil

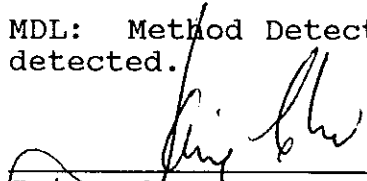
Aromatic Volatile Hydrocarbon Analysis  
EPA Method 8020  
mg/Kg

Lab ID	Client ID	Benzene	MDL	Toluene	MDL
72980-1	2116-5-B1	ND<0.005	0.005	0.017	0.005
72980-2	2116-10-B1	ND<0.005	0.005	0.011	0.005
72980-3	2116-15-B1	ND<0.005	0.005	0.012	0.005
72980-4	2116-20-B1	0.250	0.005	0.600	0.005
72980-5	2116-25-B1	0.14	0.005	0.60	0.005
72980-6	2116-5-B2	ND<0.005	0.005	0.018	0.005

Lab ID	Client ID	Ethyl- benzene	MDL	Xylenes	MDL
72980-1	2116-5-B1	ND<0.005	0.005	ND<0.005	0.005
72980-2	2116-10-B1	ND<0.005	0.005	ND<0.005	0.005
72980-3	2116-15-B1	ND<0.005	0.005	ND<0.005	0.005
72980-4	2116-20-B1	0.10	0.005	0.57	0.005
72980-5	2116-25-B1	0.126	0.005	0.76	0.005
72980-6	2116-5-B2	ND<0.005	0.005	ND<0.005	0.005

QA/QC: Spike Recovery for Benzene: 81%  
Spike Recovery for Toluene: 95%  
Spike Recovery for Xylene: 102%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
Jaime Chow  
Laboratory Director

Precision Analytical Laboratory, Inc.

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91  
Reported: 11/25/91  
Job #: 72980

Attn: George Wilson  
L & W Environmental

Project: Beck Roofing  
21123 Meekland Avenue  
Hayward, CA  
Matrix: Soil

Aromatic Volatile Hydrocarbon Analysis  
EPA Method 8020  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Benzene</u>	<u>MDL</u>	<u>Toluene</u>	<u>MDL</u>
72980-7	2116-10-B2	ND<0.005	0.005	0.013	0.005
72980-8	2116-15-B2	ND<0.005	0.005	0.006	0.005
72980-9	2116-20-B2	0.046	0.005	0.011	0.005
72980-10	2116-25-B2	0.44	0.005	1.2	0.005
72980-11	2116-30-B2	0.27	0.005	0.87	0.005

<u>Lab ID</u>	<u>Client ID</u>	<u>Ethyl- benzene</u>	<u>MDL</u>	<u>Xylenes</u>	<u>MDL</u>
72980-7	2116-10-B2	ND<0.005	0.005	0.006	0.005
72980-8	2116-15-B2	ND<0.005	0.005	ND<0.005	0.005
72980-9	2116-20-B2	0.014	0.005	0.040	0.005
72980-10	2116-25-B2	0.32	0.005	1.80	0.005
72980-11	2116-30-B2	0.37	0.005	2.1	0.005

QA/QC: Spike Recovery for Benzene: 81%  
Spike Recovery for Toluene: 95%  
Spike Recovery for Xylene: 102%

MDL: Method Detection Limit. Compound below this level would not be detected.

Precision Analytical Laboratory, Inc.

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91  
Reported: 11/19/91  
Job #: 72980

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

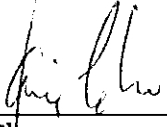
Project: Beck Roofing  
21123 Meekland Avenue  
Hayward, CA  
Matrix: Soil

Analysis Method 6010  
Preparation Method 3050  
mg/Kg

<u>Lab ID #</u>	<u>Client ID</u>	<u>Total Lead</u>	<u>MDL</u>
72980-1	2116-5-B1	ND<3.00	3.00
72980-2	2116-10-B1	ND<3.00	3.00
72980-3	2116-15-B1	ND<3.00	3.00
72980-4	2116-20-B1	5.82	3.00
72980-5	2116-25-B1	4.20	3.00
72980-6	2116-5-B2	ND<3.00	3.00
72980-7	2116-10-B2	4.00	3.00
72980-8	2116-15-B2	ND<3.00	3.00
72980-9	2116-20-B2	ND<3.00	3.00
72980-10	2116-25-B2	ND<3.00	3.00
72980-11	2116-30-B2	ND<3.00	3.00

QA/QC: Spike Recovery: 91%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td

# CHAIN OF CUSTODY

72985

<b>SAMPLERS:</b> (Signature) <i>[Signature]</i>						<b>ANALYSIS REQUESTED</b> TOTAL PETROLEUM HYDROCARBONS (Gasoline) BTX & E VOC - EPA 8240 TOTAL OIL & GREASE TETRAETHYL LEAD REMARKS									
<b>PROJECT NAME:</b> <i>Beck Roofing</i>				<b>JOB NUMBER:</b> <i>2116B</i>											
<b>DESCRIPTION:</b> <i>Soil samples from MW 3</i>															
<b>ADDRESS:</b> <i>21123 Meekland Ave, Hayward, CA.</i>															
CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	X	X	X	X	X	X	X	X		
<i>2116-5-MW3</i>	<i>10/31/91</i>	<i>1:15</i>	<i>X</i>		<i>MW 3 at 5' depth</i>	<i>X</i>	<i>X</i>			<i>X</i>					
<i>2116-10-MW3</i>		<i>1:25</i>	<i>X</i>		<i>MW 3 at 10'</i>	<i>X</i>	<i>X</i>			<i>X</i>					
<i>2116-15-MW3</i>		<i>1:35</i>	<i>X</i>		<i>MW 3 at 15'</i>	<i>X</i>	<i>X</i>			<i>X</i>					
<i>2116-20-MW3</i>		<i>1:50</i>	<i>X</i>		<i>MW 3 at 20'</i>	<i>X</i>	<i>X</i>			<i>X</i>					
<i>2116-25-MW3</i>		<i>2:07</i>	<i>X</i>		<i>MW 3 at 25'</i>	<i>X</i>	<i>X</i>			<i>X</i>					
<i>2116-30-MW3</i>		<i>2:25</i>	<i>X</i>		<i>MW 3 at 30'</i>	<i>X</i>	<i>X</i>			<i>X</i>					
<i>2116-35-MW3</i>	<i>2:30</i>	<i>X</i>		<i>MW 3 at 35'</i>	<i>X</i>	<i>X</i>			<i>X</i>						
<b>RELINQUISHED BY: (Signature)</b> <i>[Signature]</i>						<b>DATE</b> <i>10/31/91</i>		<b>RECEIVED BY: (Signature)</b> <i>Lorraine Mantovani</i>						<b>DATE</b> <i>10/31/91</i>	
<b>RELINQUISHED BY: (Signature)</b> <i>Lorraine Mantovani</i>						<b>TIME</b> <i>5:00</i>		<b>RECEIVED BY: (Signature)</b> <i>[Signature]</i>						<b>TIME</b> <i>5:00</i>	
<b>RELINQUISHED BY: (Signature)</b> <i>[Signature]</i>						<b>DATE</b> <i>11/4/91</i>		<b>RECEIVED BY: (Signature)</b> <i>[Signature]</i>						<b>DATE</b> <i>11-4-91</i>	
<b>RELINQUISHED BY: (Signature)</b> <i>[Signature]</i>						<b>TIME</b> <i>7:45am</i>		<b>RECEIVED BY: (Signature)</b> <i>[Signature]</i>						<b>TIME</b> <i>8:00</i>	
<b>RELINQUISHED BY: (Signature)</b> <i>[Signature]</i>						<b>DATE</b> <i>11-4-91</i>		<b>RECEIVED BY: (Signature)</b> <i>[Signature]</i>						<b>DATE</b> <i>11-4-91</i>	
<b>RELINQUISHED BY: (Signature)</b> <i>[Signature]</i>						<b>TIME</b> <i>9:30</i>		<b>RECEIVED BY: (Signature)</b> <i>[Signature]</i>						<b>TIME</b> <i>9:30</i>	
<b>RELINQUISHED BY: (Signature)</b> <i>[Signature]</i>						<b>DATE</b> _____		<b>RECEIVED FOR LABORATORY BY: (Signature)</b> _____						<b>DATE</b> _____	
<b>RELINQUISHED BY: (Signature)</b> _____						<b>TIME</b> _____		<b>RECEIVED FOR LABORATORY BY: (Signature)</b> _____						<b>TIME</b> _____	

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/04/91

Reported: 12/04/91

Job #: 72985

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
231123 Meekland Avenue  
Hayward, CA


Matrix: Soil

Total Petroleum Hydrocarbon Analysis  
EPA Method 5030  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Gasoline</u>	<u>MDL</u>
72985-1	2116-5-MW3	1.0	1.0
72985-2	2116-10-MW3	ND<1.0	1.0
72985-3	2116-15-MW3	ND<1.0	1.0
72985-4	2116-20-MW3	2.9	1.0
72985-5	2116-25-MW3	6.2	1.0
72985-6	2116-30-MW3	9.8	1.0
72985-7	2116-35-MW3	ND<1.0	1.0

QA/QC: Spike Recovery for Gasoline: 96%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td



Precision Analytical Laboratory, Inc.

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Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Received: 11/04/91  
Reported: 12/04/91  
Job #: 72985

Project: Beck Roofing  
231123 Meekland Avenue  
Hayward, CA  
Matrix: Soil

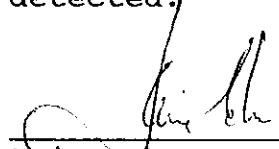
Aromatic Volatile Hydrocarbon Analysis  
EPA Method 8020  
mg/Kg

Lab ID	Client ID	Benzene	MDL	Toluene	MDL
72985-1	2116-5-MW3	ND<0.005	0.005	0.018	0.005
72985-2	2116-10-MW3	ND<0.005	0.005	ND<0.005	0.005
72985-3	2116-15-MW3	ND<0.005	0.005	0.028	0.005
72985-4	2116-20-MW3	0.021	0.005	0.017	0.005
72985-5	2116-25-MW3	0.048	0.005	0.022	0.005
72985-6	2116-30-MW3	0.25	0.005	0.015	0.005
72985-7	2116-35-MW3	ND<0.005	0.005	0.014	0.005

Lab ID	Client ID	Ethyl- benzene	MDL	Xylenes	MDL
72985-1	2116-5-MW3	ND<0.005	0.005	ND<0.005	0.005
72985-2	2116-10-MW3	ND<0.005	0.005	ND<0.005	0.005
72985-3	2116-15-MW3	ND<0.005	0.005	ND<0.005	0.005
72985-4	2116-20-MW3	0.006	0.005	0.025	0.005
72985-5	2116-25-MW3	0.012	0.005	0.056	0.005
72985-6	2116-30-MW3	0.048	0.005	0.26	0.005
72985-7	2116-35-MW3	ND<0.005	0.005	ND<0.005	0.005

QA/QC: Spike Recovery for Benzene: 81%  
Spike Recovery for Toluene: 101%  
Spike Recovery for Xylene: 104%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
Jaime Chow  
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806      PHONE (510) 222-3002      FAX (510) 222-1251

**CERTIFICATE OF ANALYSIS**

STATE LICENSE NO. E 750

Received: 11/04/91  
Reported: 12/04/91  
Job #: 72985

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
231123 Meekland Avenue  
Hayward, CA

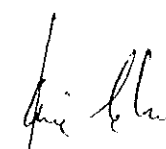
Matrix: Soil

Analysis Method EPA 6010  
Preparation Method 3050  
mg/Kg

<u>Lab ID</u>	<u>Client ID</u>	<u>Total Lead</u>	<u>MDL</u>
72985-1	2116-5-MW3	ND<3.00	3.00
72985-2	2116-10-MW3	3.60	3.00
72985-3	2116-15-MW3	3.60	3.00
72985-4	2116-20-MW3	5.80	3.00
72985-5	2116-25-MW3	ND<3.00	3.00
72985-6	2116-30-MW3	3.90	3.00
72985-7	2116-35-MW3	3.75	3.00

QA/QC: Spike Recovery: 84%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/05/91

Reported: 11/26/91

Job #: 72991

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

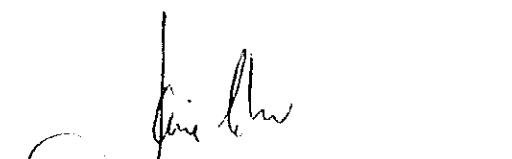
Project: Beck Roofing  
21123 Meekland  
Matrix: Water

Total Petroleum Hydrocarbon Analysis  
EPA Method 5030  
 $\mu\text{g/L}$

<u>Lab ID</u>	<u>Client ID</u>	<u>Gasoline</u>	<u>MDL</u>
72991-1	2116-MW1	ND<50	50
72991-2	2116-MW2	ND<50	50
72991-3	2116-MW3	ND<50	50

QA/QC: Spike Recovery for Gasoline: 84%

MDL: Method Detection Limit. Compound below this level would not be detected.



Jaime Chow  
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/05/91

Reported: 11/26/91

Job #: 72991

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
21123 Meekland  
Matrix: Water

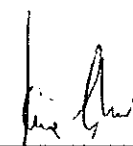
Aromatic Volatile Hydrocarbon Analysis  
EPA Method 602  
 $\mu\text{g/L}$

<u>Lab ID</u>	<u>Client ID</u>	<u>Benzene</u>	<u>MDL</u>	<u>Toluene</u>	<u>MDL</u>
72991-1	2116-MW1	ND<0.3	0.3	ND<0.3	0.3
72991-2	2116-MW2	ND<0.3	0.3	ND<0.3	0.3
72991-3	2116-MW3	ND<0.3	0.3	ND<0.3	0.3

<u>Lab ID</u>	<u>Client ID</u>	<u>Ethyl- benzene</u>	<u>MDL</u>	<u>Xylenes</u>	<u>MDL</u>
72991-1	2116-MW1	ND<0.3	0.3	ND<0.6	0.6
72991-2	2116-MW2	ND<0.3	0.3	ND<0.6	0.6
72991-3	2116-MW3	ND<0.3	0.3	ND<0.6	0.6

QA/QC: Spike Recovery for Benzene: 112%  
Spike Recovery for Toluene: 116%  
Spike Recovery for Xylene: 112%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. E 750

Received: 11/05/91

Reported: 11/26/91

Job #: 72991

Attn: George Wilson  
L & W Environmental  
2111 Jennings Street  
San Francisco, CA 94124

Project: Beck Roofing  
21123 Meekland

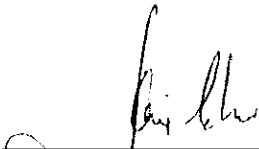
Matrix: Water

Analysis Method EPA 6010  
Preparation Method 3010  
mg/L

<u>Lab ID</u>	<u>Client ID</u>	<u>Total Lead</u>	<u>MDL</u>
72991-1	2116-MW1	ND<0.06	0.06
72991-2	2116-MW2	ND<0.06	0.06
72991-3	2116-MW3	ND<0.06	0.06

QA/QC: Spike Recovery: 90%

MDL: Method Detection Limit. Compound below this level would not be detected.

  
\_\_\_\_\_  
Jaime Chow  
Laboratory Director

JC/td

APPENDIX C

Water Well Drillers Reports

BECK ROOFING  
21123 MEEKLAND AVENUE  
HAYWARD, CALIFORNIA

L&W Project 2116  
January 7, 1992

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**



**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

**CONFIDENTIAL**

**STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)**

**REMOVED**

APPENDIX D

Field Logs

BECK ROOFING  
21123 MEEKLAND AVENUE  
HAYWARD, CALIFORNIA

L&W Project 2116  
January 7, 1992

LOCATION OF BORING

21123  
Meekland Ave  
Hayward, CA.

DATUM

BORING ELEVATION

SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT SAMPLER	DEPTH IN FEET	LOG
					0	
					1	CL
					2	
					3	
					4	
SS	2116-5-MWI	9:11	5	8 1/2	5	CL
					6	
					7	
					8	
					9	
SS	2116-10-MWI	9:17	10	5 6/9	10	SM
					11	
					12	
					13	
					14	SP
					15	SP
SS	2116-15-MWI	9:25	15	4 5/7	15	SP
					16	
					17	
					18	
					19	CL
SS	2116-20-MWI	9:35	20	2 2/3	20	CL

NOTES Sand: 38-26 ft Bentonite: 26-24 ft  
Screen: 38-28 ft Cement: 24-0 ft.  
Final depth = 38 ft

WELL LOG

Dark brown sandy silty clay, moist, no odor, ~~medium~~ medium plasticity.

~~Dark brown sandy silty clay~~  
Dark brown sandy silty clay, very stiff, moist, no odor, low plasticity.

~~Brown silty sand~~  
Brown silty sand, medium dense, moist, no odor.

Brown sand, fine-grained, medium dense, moist, no odor.

Same with subangular gravel

Brown silty clay, ~~stiff~~ medium stiff, moist, no odor, low plasticity.

JOB NO. 2116	PROJECT NAME Beck Roofing	LOCATION Hayward
DRILLING EQUIPMENT		BORING NO. MW1
SAMPLING METHOD:		SHEET 1 OF
WATER LEVEL	30.5	DRILLING
TIME		START TIME 8:30
DATE		DATE 10/30
		PI
		TI
		CI

DRILLING CONTRACTOR  
LOGGED BY



See p. 1.

JOB NO. 2116	PROJECT NAME Beck Roofing	LOCATION Hayward
DRILLING EQUIPMENT		BORING NO. Mw1
SAMPLING METHOD:		SHEET 2 OF
WATER LEVEL		DRILLING
TIME		START TIME
DATE		DATE

See p. 1 for map

DRILLING CONTRACTOR  
LOGGED BY

DATUM				BORING ELEVATION				DEPTH IN FEET	LOG	NOTES
SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT. SAMPLER						
						0				
						1				
						2				
						3				
						4				
SS	2116-25-Mw1	9:44	25	2 1/5		25	CL	Same w/ medium plasticity		
						6				
						7				
						8				
						9				
SS	2116-30-Mw1	9:59	30	2 1/3		30	SP	Same Brown Band (as before) at 30.5' ~ 1/4" in thick. Water at 30.5' wet.		
						1				
						2				
						3				
						4				
SS	2116-35-Mw1	10:08	35	2 1/4		35	CL	Brown silty clay, stiff moist to wet near top of sample, no bdr, medium plasticity.		
						6				
						7				
						8				
						9				
SS	2116-40-Mw1	10:25	40	2 1/5		40		Same		

DATE 10/30/19

WELL LOG

LOCATION OF BORING

JOB NO.

2116

PROJECT NAME

Beck Roofing

LOCATION

Hayward

DRILLING EQUIPMENT

BORING NO.

MW1

SHEET

3 OF 3

SAMPLING METHOD:

DRILLING

START TIME

FR TI

WATER LEVEL

TIME

DATE

DATE

DI

See p. 1 for Map

DATUM

BORING ELEVATION

DRILLING CONTRACTOR

LOGGED BY

SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT. SAMPLER	DEPTH IN FEET	LOG
					0	
					1	
					2	CL
					3	
					4	
SS	2116-45-MW1	10:35	45	2/6H	45	
					6	SP
					7	
					8	
					9	
					0	
					1	
					2	
					3	
					4	
					5	
					6	
					7	
					8	
					9	
					0	

NOTES

WELL LOG

Same

Brown sand fine-grained, medium dense, wet, no odor,

# L & W ENVIRONMENTAL SERVICES, INC.

LOCATION OF BORING		JOB NO.	PROJECT NAME	LOCATION
		2116	Bed Roofing	MW2
DRILLING EQUIPMENT				BORING NO.
				MW2
SAMPLING METHOD:				SHEET
				1 of 2
				DRILLING
				START TIME
				DATE
WATER LEVEL				DATE
				10/30/11

21123 Meekland Ave  
Hayward, CA.

DATUM BORING ELEVATION

SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT. SAMPLER	DEPTH IN FEET	LOG	NOTES
					0		
					1	GC	
					2		Brown <del>gravel</del> gravel-sand-clay mixture, moist, no odor.
					3		
					4	SM	
SS	2116-5-MW2	1:45	5	8/10	5		Brown <del>gravel</del> silty sand, <del>no</del> fine-grained, medium dense, moist, no odor.
					6		
					7		
					8		
					9		
SS	2116-10-MW2	1:50	10	3/5/5	10	SM	Brown silty sand, <sup>fine-grained</sup> med. dense, moist, no odor.
					11		
					12		
					13		
					14		
SS	2116-15-MW2	2:00	15	3/3/9	15	SP	Brown sand fine-grained, medium dense, moist, no odor.
					16		
					17		
					18		
					19		
SS	2116-15-MW2	2:17	20	1/2/4	20		

DRILLING CONTRACTOR Bayland  
 LOGGED BY ME

WELL LOG

LOCATION OF BORING

JOB NO. 2116	PROJECT NAME Beck Roofing	LOCATION
DRILLING EQUIPMENT		BORING NO. MWZ
SAMPLING METHOD:		SHEET 2 OF 2
WATER LEVEL		DRILLING
TIME		START TIME
DATE		DATE

DATUM BORING ELEVATION

SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT. SAMPLER	DEPTH IN FEET	LOG
					0	SP
					1	
					2	
					3	
					4	
SS	2116-25-MWZ	2:35	5/7/12		25	CL
					6	
					7	
					8	
					9	
SS	2116-30-MWZ	7:45	2/7/11		30	
					1	
					2	
					3	
					4	
SS	2116-35-MWZ	2:55	2/6/16		35	SM
					6	
					7	
					8	
					9	
					0	

NOTES

WELL LOG

Brown sandy silty clay, very stiff, moist, no odor, med low plasticity.

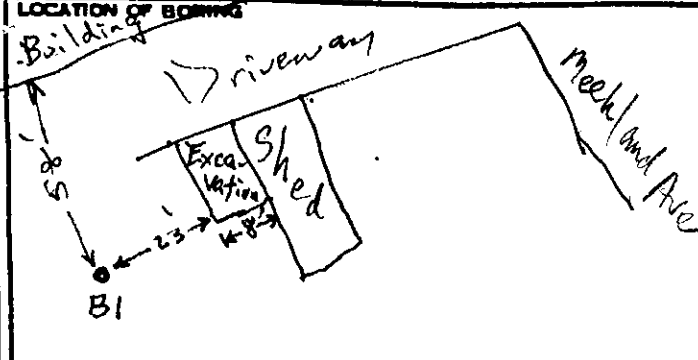
Same

~~Brown silty sand~~  
Brown silty sand, med stiff, wet, no odor.

TOTAL DEPTH OF BOREHOLE = 38 feet.

DRILLING CONTRACTOR  
LOGGED BY





JOB NO. 2116	PROJECT NAME Beck Roofing	LOCATION Hayward
DRILLING EQUIPMENT		BORING NO. B1
SAMPLING METHOD:		SHEET 1 of 2
WATER LEVEL		DRILLING
TIME		START TIME
DATE		DATE 10/31

DRILLING CONTRACTOR *Rayland MK*  
 LOGGED BY *MK*

DATUM		BORING ELEVATION		P / ID		DEPTH IN FEET	LOG	NOTES
SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT. SAMPLER	P / ID			
						0		
						1		
						2		Dark brown sandy silty clay, moist no odor, med. plasticity.
						3		
						4		
SS	2116-5-B1	9:10	5	6/6	2 PPM	5	CL	Brown sandy silty clay, stiff, moist, no odor, low plasticity. PID 2 PPM
						6		
						7		
						8	SC	Brown clayey sand, <sup>fine grained</sup> moist, no odor, grades downward to a silty clay.
						9		
SS	2116-10-B1	9:15	10	4/6	0 PPM	10	CL	Brown sandy silty clay, stiff, moist, no odor, low plasticity.
						11		
						12		
						13		
SS	2116-15-B1	9:21	15	4/5	0.5 PPM	15		Brown sand, fine grained, <sup>medium dense, moist</sup> PID .5
						16		
						17		
						18		
						19		
SS	2116-20-B1	9:40		2/5	105 PPM	20	CL	Brown sandy silty clay, medium stiff, moist PID 105 PPM, low-medium plasticity

LOCATION OF BORING

JOB NO. 2116	PROJECT NAME Beck Roofing	LOCATION Hayward
DRILLING EQUIPMENT		BORING NO. MB1
SAMPLING METHOD:		SHEET 2 of 2
WATER LEVEL		DRILLING
TIME		START TIME
DATE		DATE

DATUM BORING ELEVATION

SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT. SAMPLER	LOG	DEPTH IN FEET
						0
						1
						2
						3
						4
SS	2116-25-81	9:58	25	3/5 500 PPM	P/D	25
						6
						7
						8
						9
						0
						1
						2
						3
						4
						5
						6
						7
						8
						9
						0

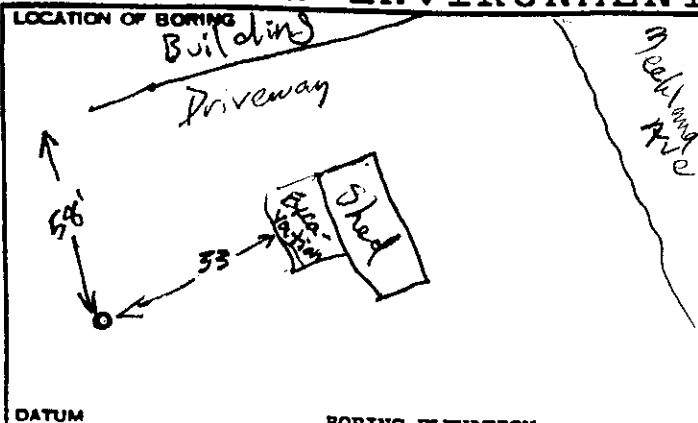
NOTES

WELL LOG

Heavier <sup>sandy</sup> silty clay, stiff, moist, odor, medium plasticity.

DRILLING CONTRACTOR  
LOGGED BY

# L & W ENVIRONMENTAL SERVICES, INC.



JOB NO. <b>2116</b>	PROJECT NAME <b>Beck Roofing</b>	LOCATION <b>Hayward</b>
DRILLING EQUIPMENT		BORING NO. <b>B2</b>
SAMPLING METHOD:		SHEET <b>1 of 2</b>
WATER LEVEL		DRILLING START TIME
TIME		DATE
DATE		

DRILLING CONTRACTOR  
LOGGED BY

DATUM		BORING ELEVATION				DEPTH IN FEET		LOG	NOTES
SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT. SAMPLER	P/D				
						0			
						1			
						2			Brown silty sandy clay, moist, no odor, med. plasticity.
						3		CL	
						4			
SS	2116-5-B2	10:50	5	4/8	0	5			
						6			
						7			
						8			
						9			Dark brown silty sand
SS	2116-10-B2	11:12	10	3/4	0	10		SM	
						11			
						12			
						13			
						14			
SS	2116-15-B2	11:20	15	2/3	0	15		SP	Brown sand
						16			
						17			
						18			
						19			
SS	2116-20-B2	11:30	20	2/2	0	20		CL	Brown silty clay

WELL LOG

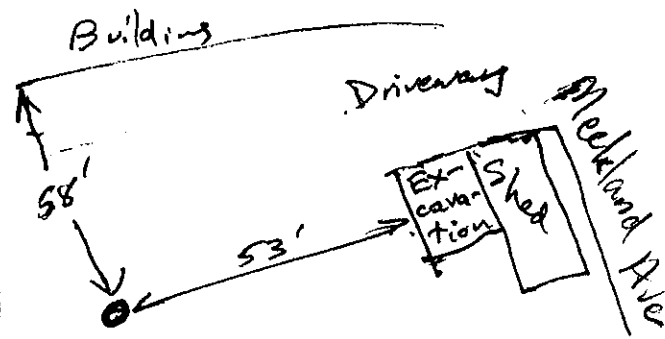
# L & W ENVIRONMENTAL SERVICES, INC.

LOCATION OF BORING		JOB NO.	PROJECT NAME	LOCATION
DRILLING EQUIPMENT			BORING NO. <b>B2</b>	
SAMPLING METHOD:			SHEET <b>2 of 2</b>	
WATER LEVEL			DRILLING	
TIME			START TIME	
DATE			DATE	

DRILLING CONTRACTOR  
LOGGED BY

DATUM		BORING ELEVATION				DEPTH IN FEET	LOG	NOTES
SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT. SAMPLER				
						0		
						1		
						2		
						3		
						4		
SS	2116-25-B2	11:36	25	2 3/6	100 ppm	25		Same
						6		
						7		
						8		
						9		
SS	2116-30-B2	11:45	30	2 3/5	700 ppm	30		Same
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		

WELL LOG



2116B Beck Roofing

DRILLING EQUIPMENT

BORING NO. MW3

SHEET 1 OF 2

SAMPLING METHOD:

DRILLING

WATER LEVEL

TIME

DATE

START TIME

DATE

DATUM BORING ELEVATION

DRILLING CONTRACTOR  
LOGGED BY

SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT. SAMPLER	RID	DEPTH IN FEET	LOG	NOTES
						0		
						1		
						2		Dark brown silty clay w/ sand & gravel
						3		
						4	Cl	
SS	2116-5-MW3	1:15	5 2/3	1		5		Brown silty clay, stiff, moist, medium plasticity.
						6		
						7		
						8		
						9		
SS	2116-10-MW3	1:25	10 4/5	0.5		10		Brown silty sand fine grained medium dense, moist.
						11	SM	
						12		
						13		
						14	SP	<del>Brown sand, fine grained</del> Same
SS	2116-15-MW3	1:35	15 3/5	1.5		15		
						16	Cl	Brown silty clay, stiff, moist, medium plasticity.
						17		
						18		
						19		
SS	2116-20-MW3	1:50	20 2/3	4.5		20		Brown silty clay, medium stiff, moist, medium plasticity.

10/31/91

WELL LOG

LOCATION OF BORING		JOB NO.	PROJECT NAME	LOCATION
DRILLING EQUIPMENT				BORING NO. MW3
SAMPLING METHOD:				SHEET 2 OF 2
WATER LEVEL				DRILLING
TIME				START TIME
DATE				DATE

10/31/74

DRILLING CONTRACTOR  
LOGGED BY

DATUM		BORING ELEVATION		SAMPLER TYPE	CROSS REFERENCE NUMBER	TIME	SAMPLE DEPTH	BLOWS/FT. SAMPLER	DEPTH IN FEET	LOG	NOTES	WELL LOG	
									0	↑			
									1				
									2				
									3				
									4				
SS	216-25-MW3	2:07	25	3/6/7	10	25			5	CL	Same		
									6				
									7				
									8				
									9				
SS	216-30-MW3	2:35	30	4/6/7	110	30			10	▽	Also Same		
									11				
									12				
									13				
									14				
SS	216-35-MW3	2:30	35	4/4/7	9	35			15	SM	Brown silty sand, fine-grained, medium dense, wet.		
									16				
									17				
									18				
									19				
									20				
									21				
									22				
									23				
									24				
									25				
									26				
									27				
									28				
									29				
									30				

Finished as MW3  
Total depth = 38 feet