LUSH GEOSCIENCES
INCORPORATED
GEOLOGICAL AND ENVIRONMENTAL SERVICES

QUARTERLY MONITORING REPORT
BECK ROOFING
HAYWARD, CALIFORNIA

LUSH GEOSCIENCES, INC.
JOB NO. 423-001

MARCH 8, 1997

F. William Welter
Project Manager

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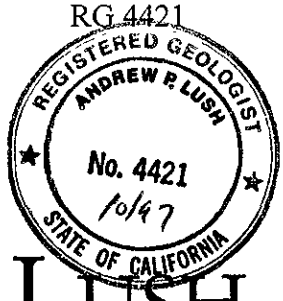
RG 4421



LUSH GEOSCIENCES, INC.

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1.0 INTRODUCTION

This report was prepared to summarize quarterly monitoring work performed in the investigation of contamination associated with one former 1,000-gallon underground gasoline storage tank at the Beck Roofing Facility in Hayward, California (site). The report describes methods and procedures used to evaluate groundwater quality near the former tank. The methods and procedures used during this phase of investigation included:

- Collecting groundwater samples from the four previously installed wells;
- Analyzing the groundwater samples; and,
- Preparing this report.

This report summarizes the field and laboratory operations conducted, the methods and procedures used, the data obtained, and presents conclusions and recommendations.

2.0 SITE BACKGROUND

The site is an operating roofing company. One wooden structure located on the northwest side of the site contains office and warehouse space. The remainder of the site is used for equipment and materials storage. In May of 1990, a 1,000-gallon underground fuel tank, used to store gasoline, was removed. When the tank was removed, evidence of leakage was noted in soil adjacent to the tank.

We have attached a Generalized Site Plan (Figure 2), showing the site configuration.

2.1 Previous Work

Previous work, performed by other consultants, includes excavation of approximately 350 cubic yards of contaminated soil, drilling and sampling 20 soil borings, installation of four groundwater monitoring wells, excavation of an additional 400 cu yd of contaminated soil, and quarterly monitoring of the wells. Previous analyses have shown variable contaminant concentrations in one well (MW3), and slight to non-detectable levels in the remaining wells.

3.0 QUARTERLY GROUNDWATER SAMPLING

3.1 Field Procedures

Groundwater samples were collected from each well on February 5,1997. Sampling activities were conducted as follows:

- Water and product levels were determined using an electronic water sensitive measuring device. Depth to water or product was measured to an accuracy of 0.01 ft. No free product was encountered.

- Prior to sampling, each well was purged with a submersible pump until at least 3 well volumes of water were removed. The purged water was monitored for temperature, pH, and electrical conductivity (Table 1). Purging continued until these parameters stabilized. The well was allowed to recover until at least 80% of the initial water level had been reached.

- After each well stabilized, a sample was collected with an unused, clean, disposable polyethylene bailer. The collected sample was transferred from the bailer to appropriate 40-ml glass sample vials. All sample containers were filled completely with a convex meniscus to eliminate any trapped air or headspace. Each sample container cap was fitted with a Teflon septum.

- After sampling, the samples were labeled, showing the sample number, well number, date, time, samplers name, and preservation. The samples were refrigerated in a cooler containing ice until delivery to the laboratory to perform the specified analyses. Chain-of-custody documentation was maintained from the sampling location to the laboratory. The chain-of custody was signed by the sampler and placed in the container holding the samples.

TABLE 1
PURGED WATER PARAMETERS
GROUNDWATER MONITORING WELLS
BECK ROOFING FACILITY
HAYWARD, CALIFORNIA
Page 1 of 2

Well	Date	Subjective Evidence	T(°F)	pH	K	3WV	Volume Purged
MW1	10/25/94	No Odor	64.7	6.98	1930	27	30
MW2	10/25/94	No Odor	63.8	6.92	2600	27	30
MW3	10/25/94	No Odor	66.5	6.90	2600	27	30
MW4	10/25/94	No Odor	64.5	8.61	2400	27	30
MW1	1/20/95	No Odor	62.9	7.37	570	27	30
MW2	1/20/95	No Odor	62.1	7.20	775	27	30
MW3	1/20/95	No Odor	63.6	7.10	870	27	30
MW4	1/20/95	No Odor	63.3	7.26	728	27	30
MW1	4/11/95	No Odor	65.9	6.66	637	30	35
MW2	4/11/95	No Odor	72.9	6.63	926	30	35
MW3	4/11/95	Odor	70.8	6.62	873	30	35
MW4	4/11/95	No Odor	69.2	6.68	791	30	35
MW1	7/13/95	INACCESSIBLE					
MW2	7/13/95	No Odor	73.6	6.30	819	30	35
MW3	7/13/95	Odor	75.0	6.60	800	30	35
MW4	7/13/95	No Odor	75.0	7.0	739	30	35
MW1	10/10/95	No Odor	68.7	7.2	544	30	30
MW2	10/10/95	No Odor	68.4	7.05	732	30	30
MW3	10/10/95	Odor	68.0	7.79	704	30	30
MW4	10/10/95	No Odor	68.1	7.01	693	30	30

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K = Conductivity in micromhos
T = Temperature in degrees Fahrenheit
pH = Hydrogen ion concentration
3WV = Calculated three well volumes in gallons

TABLE 1
PURGED WATER PARAMETERS
GROUNDWATER MONITORING WELLS
BECK ROOFING FACILITY
HAYWARD, CALIFORNIA
Page 2 of 2

Well	Date	Subjective Evidence	T(°F)	pH	K	3WV	Volume Purged
MW1	1/11/96	No Odor	67.0	6.81	565	30	30
MW2	1/11/96	No Odor	65.8	6.43	734	30	30
MW3	1/11/96	No Odor	63.1	7.59	690	30	30
MW4	1/11/96	No Odor	63.2	7.59	644	30	30
MW1	4/23/96	No Odor	67.3	6.54	1187	30	30
MW2	4/23/96	No Odor	67.9	6.51	1613	30	30
MW3	4/23/96	No Odor	66.5	6.87	980	30	30
MW4	4/23/96	No Odor	66.4	6.52	1416	30	30
MW1	7/30/96	No Odor	68.2	6.74	511	30	30
MW2	7/30/96	No Odor	68.0	6.60	686	30	30
MW3	7/30/96	Sl. Odor	70.8	6.90	664	30	30
MW4	7/30/96	No Odor	69.0	6.62	626	30	30
MW1	11/5/96	No Odor	64.6	6.6	940	30	30
MW2	11/5/96	No Odor	65.7	6.7	1155	30	30
MW3	11/5/96	Sl. Odor	65.5	6.6	1155	30	30
MW4	11/5/96	No Odor	65.1	6.6	1100	30	30
MW1	2/5/97	No Odor	66.5	6.8	920	30	30
MW2	2/5/97	No Odor	67.2	6.75	1090	30	30
MW3	2/5/97	Sl. Odor	66.5	6.8	1050	30	30
MW4	2/5/97	No Odor	66.2	6.85	1015	30	30

K = Conductivity in micromhos
T = Temperature in degrees Fahrenheit
pH = Hydrogen ion concentration
3WV = Calculated three well volumes in gallons

3.2 Groundwater Analyses

Groundwater samples from each accessible well were analyzed for TPHg using Environmental Protection Agency (EPA) Method 8015 (modified for gasoline) with purge and trap EPA Method 5030, and for the associated volatile constituents BTEX using EPA Method 602 with purge and trap EPA Method 5030. At the request of Alameda County Department of Environmental Health methyl-tertiary- butyl-ether (MTBE) was also included in the analyses. MTBE was not detected was **not** detected in samples from any of the wells. Results of the analyses are summarized in Table 2; copies of laboratory reports are attached as Appendix A. All analyses were conducted by Excelchem Environmental Laboratories, of Roseville, California, which is certified by the State of California for the requested analyses.

TABLE 2
RESULTS OF LABORATORY ANALYSES
GROUNDWATER SAMPLES
BECK ROOFING FACILITY
HAYWARD, CALIFORNIA
Page 1 of 2

Well Number and Date	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW1					
8/4/94	<0.05	<0.0003	<0.0003	<0.0003	<0.0005
10/25/94	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
1/20/95	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
4/11/95	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
7/13/95		INACCESSIBLE			
10/10/95	<0.05	<0.0003	<0.0003	<0.0003	**0.0012**
1/11/96	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
4/23/96	**0.53**	<0.0003	**0.00064**	<0.0003	**0.00082**
7/30/96	<0.05	**0.0013**	**0.0021**	**0.00064**	**0.003**
11/5/96	**0.139**	**0.0022**	**0.0073**	**0.0022**	**0.0231**
2/7/97	**0.081**	**0.002**	**0.0039**	**0.0023**	**0.0092**
MW2					
8/4/94	<0.05	<0.0003	<0.0003	<0.0003	<0.0005
10/25/94	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
1/20/95	<0.05	**0.0010**	<0.0003	<0.0003	<0.0003
4/11/95	<0.05	**0.0012**	<0.0003	<0.0003	<0.0003
7/13/95	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
10/10/95	<0.05	**0.00069**	<0.0003	<0.0003	**0.052**
1/11/96	<0.05	<0.0003	<0.0003	<0.0003	**0.00067**
4/23/96	**0.039**	**0.00029**	**0.00068**	<0.0003	**0.00066**
7/30/96	<0.05	**0.0034**	**0.0056**	**0.0017**	**0.0093**
11/5/96	**0.292**	**0.0093**	**0.0293**	**0.0057**	**0.057**
2/7/97	**0.092**	**0.0028**	**0.0050**	**0.0037**	**0.0094**

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TPHg = Total petroleum hydrocarbons
Results given in milligrams per liter (parts per million)
< = Less than laboratory minimum detection limits
MW1 = Monitoring well number

RESULTS OF LABORATORY ANALYSES
GROUNDWATER SAMPLES
BECK ROOFING FACILITY
HAYWARD, CALIFORNIA
Page 2 of 2

Well Number and Date	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW3					
8/4/94	**4.2**	**0.45**	<0.003	**0.18**	**0.16**
10/25/94	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
1/20/95	**4.4**	**0.58**	**0.002**	**0.130**	**0.160**
4/11/95	**1.8**	**0.088**	**0.0014**	**0.033**	**0.027**
7/13/95	**3.4**	**0.5**	<0.0003	**0.130**	**0.094**
10/10/95	**4.2**	**0.360**	**0.0024**	**0.190**	**0.096**
1/11/96	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
4/23/96	**0.079**	**0.0012**	**0.00033**	**0.00045**	**0.00048**
7/30/96	**3.8**	**0.24**	**0.0082**	**0.014**	**0.091**
11/5/96	**3.09**	**0.242**	**0.036**	**0.070**	**0.116**
2/5/97	**0.473**	**0.0363**	**0.001**	**0.0107**	**0.0089**
MW4					
8/4/94	<0.05	<0.003	0.0005	<0.0003	<0.0005
10/25/94	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
1/20/95	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
4/11/95	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
7/13/95	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
10/10/95	<0.05	<0.0003	<0.0003	<0.0003	<0.0003
1/11/96	<0.05	**0.0021**	**0.004**	<0.0003	**0.00079**
4/23/96	**0.043**	**0.00042**	**0.0011**	**0.00039**	**0.00079**
7/23/96	<0.05	**0.00097**	**0.0017**	**0.00067**	**0.003**
11/5/96	**0.090**	**0.0022**	**0.0067**	**0.002**	**0.0112**
2/5/97	**0.072**	**0.0013**	**0.0027**	**0.0018**	**0.0075**

TPHg = Total petroleum hydrocarbons
Results given in milligrams per liter (parts per million)
< = Less than laboratory minimum detection limits
MW1 = Monitoring well number

3.3 Groundwater Gradient

The groundwater gradient was approximated from calculations made using surveyed wellhead elevations and locations in combination with depth to groundwater measurements made on February 5, 1997, (Table 3) (Figure 3). The data indicate that groundwater flow direction was oriented S65°W. The gradient data is very consistent with data generated during the preceding twelve months indicating a southwesterly flow across the site.

TABLE 3
GROUNDWATER ELEVATION DATA
BECK ROOFING FACILITY
HAYWARD, CALIFORNIA
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Well Number	Elevation of Top of Casing (ft. above MSL)	Depth to Water (ft. below top of casing)	Water-level Elevation (ft. above MSL)	Gradient and Direction
8/4/94				
MW1	58.55	29.96	29.29	
MW2	58.65	29.35	29.30	
MW3	58.52	29.27	29.25	
MW4	58.01	28.80	29.21	
10/25/94				
MW1	58.55	30.10	28.45	
MW2	58.65	30.15	28.50	0.0009 ft/ft
MW3	58.52	30.10	28.42	S22°W
MW4	58.01	29.60	28.41	
1/20/95				
MW1	58.55	26.57	31.98	
MW2	58.65	26.65	32.00	0.0002 ft/ft
MW3	58.52	26.54	31.98	S0°W
MW4	58.01	26.03	31.98	
4/11/95				
MW1	58.55	23.87	34.68	
MW2	58.65	23.92	34.73	0.0009 ft/ft
MW3	58.52	23.87	34.65	S24°W
MW4	58.01	23.38	34.63	
5/09/95				
MW2	58.55	24.65	33.90	
MW2	58.65	24.735	33.915	0.00125 ft/ft
MW3	58.52	24.66	33.86	S65°W
MW4	58.01	24.20	33.81	
6/09/95				
MW1	58.55	25.39	33.16	
MW2	58.65	25.47	33.18	0.0008 ft/ft
MW3	58.52	25.40	33.12	S59°W
MW4	58.01	24.92	33.10	

Continued on Next Page

TOC = Top of the well casing (elevation in ft. above mean sea level- AMSL)
Gradient = groundwater gradient in ft per ft
Direction = groundwater flow direction

TABLE 3
GROUNDWATER ELEVATION DATA
BECK ROOFING FACILITY
HAYWARD, CALIFORNIA
Page 2 of 3

Well Number	Elevation of Top of Casing (ft. above MSL)	Depth to Water (ft. below top of casing)	Water-level Elevation (ft. above MSL)	Gradient and Direction
7/13/95				
MW1	58.55	INACCESSIBLE		
MW2	58.65	26.0	32.65	
MW3	58.52	25.95	32.57	
MW4	58.01	25.5	32.51	
8/10/95				
MW1	58.55	26.33	32.16	
MW2	58.65	26.48	32.17	
MW3	58.52	26.43	32.09	
MW4	58.01	25.97	32.04	
9/14/95				
MW1	58.55	26.84	31.71	
MW2	58.65	26.92	31.73	
MW3	58.52	26.87	31.65	
MW4	58.01	26.42	31.30	
10/10/95				
MW1	58.55	27.18	31.37	
MW2	58.65	27.27	31.38	
MW3	58.52	27.22	31.30	
MW4	58.01	26.76	31.25	
11/7/95				
MW1	58.55	27.52	31.03	
MW2	58.65	27.60	31.05	0.001 ft/ft
MW3	58.52	27.55	30.97	S65°W
MW4	58.01	27.08	30.93	
12/6/95				
MW1	58.55	27.80	30.75	
MW2	58.65	27.88	30.77	0.001 ft/ft
MW3	58.52	27.83	30.65	S63°W
MW4	58.01	27.37	30.64	

TOC = Top of the well casing (elevation in ft. above mean sea level- AMSL)
Gradient = groundwater gradient in ft per ft
Direction = groundwater flow direction

TABLE 3
GROUNDWATER ELEVATION DATA
BECK ROOFING FACILITY
HAYWARD, CALIFORNIA
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Well Number	Elevation of Top of Casing (ft. above MSL)	Depth to Water (ft. below top of casing)	Water-level Elevation (ft. above MSL)	Gradient and Direction
1/11/96				
MW1	58.55	26.76	31.79	
MW2	58.65	26.84	31.81	0.001 ft/ft
MW3	58.52	26.77	31.75	S67°W
MW4	58.01	26.30	31.71	
2/7/96				
MW1	58.55	24.24	34.31	
MW2	58.65	24.32	34.33	0.0007 ft/ft
MW3	58.52	24.26	34.26	S57°W
MW4	58.01	23.76	34.25	
4/23/96				
MW1	58.55	23.02	35.53	
MW2	58.65	23.09	35.56	0.0014 ft/ft
MW3	58.52	23.06	35.46	S63°W
MW4	58.01	22.60	35.41	
7/30/96				
MW1	58.55	25.18	33.37	
MW2	58.65	25.25	33.40	0.0015 ft/ft
MW3	58.52	25.23	33.29	S69°W
MW4	58.01	24.79	33.22	
11/5/96				
MW1	58.55	26.69	31.86	
MW2	58.65	26.76	31.89	0.0012
MW3	58.52	26.72	31.80	S66°W
MW4	58.01	26.27	31.74	
2/5/97				
MW1	58.55	21.62	36.93	
MW2	58.65	21.68	36.97	0.0011
MW3	58.52	21.66	36.86	S65°W
MW4	58.01	21.20	36.81	

TOC = Top of the well casing (elevation in ft. above mean sea level- AMSL)
Gradient = groundwater gradient in ft per ft
Direction = groundwater flow direction

3.4 Quality Assurance/Quality Control

All field equipment was cleaned and decontaminated prior to being introduced into the sampling environment. Each sample was collected using a dedicated, disposable bailer. Care was taken to prevent the bailer from becoming contaminated prior to being introduced into the sampling environment.

3.4.1 Laboratory QA/QC

Excelchem is certified by the CalEPA Hazardous Waste Testing Laboratory Certification Program to conduct the analyses requested. The methods used by the laboratory are published, approved analytical methods which have built-in QA/QC practices. Other QA/QC practices are part of CalEPA's certification program. The laboratory provided pertinent QA/QC documents pertaining to the analytical protocol. These QA/QC documents include surrogate recovery data and analytical charts including those of the spikes and matrix spike duplicates. Copies of these documents were incorporated into the laboratory reports of analyses (Appendix A).

4.0 CONCLUSIONS AND DISCUSSION

Gasoline was detected in MW3 at a concentration of 0.473 ppm with proportionate concentrations of all of the volatile constituents. This represents a moderate decrease in the contaminant concentration in that well. Gasoline was detected in wells MW1, MW2, and MW4 at concentrations of 0.081, 0.092, and 0.072 ppm respectively. All of the volatile constituents were also detected in those wells at proportionate concentrations The concentration of petroleum hydrocarbons in wells MW1, MW2, and MW3 during this sampling event is very consistent with historic data and the continued presence of detectable contamination in MW4 may still be indicative the plume is migrating. Methyl-tertiary-butyl-ether (MTBE) was **not** detected in any of the wells.

The groundwater elevation measured during this event is roughly 5 ft higher than was measured during the last regular quarterly monitoring event in November 1996, and is the highest elevation recorded since monitoring began in August 1994.

5.0 RECOMMENDATIONS

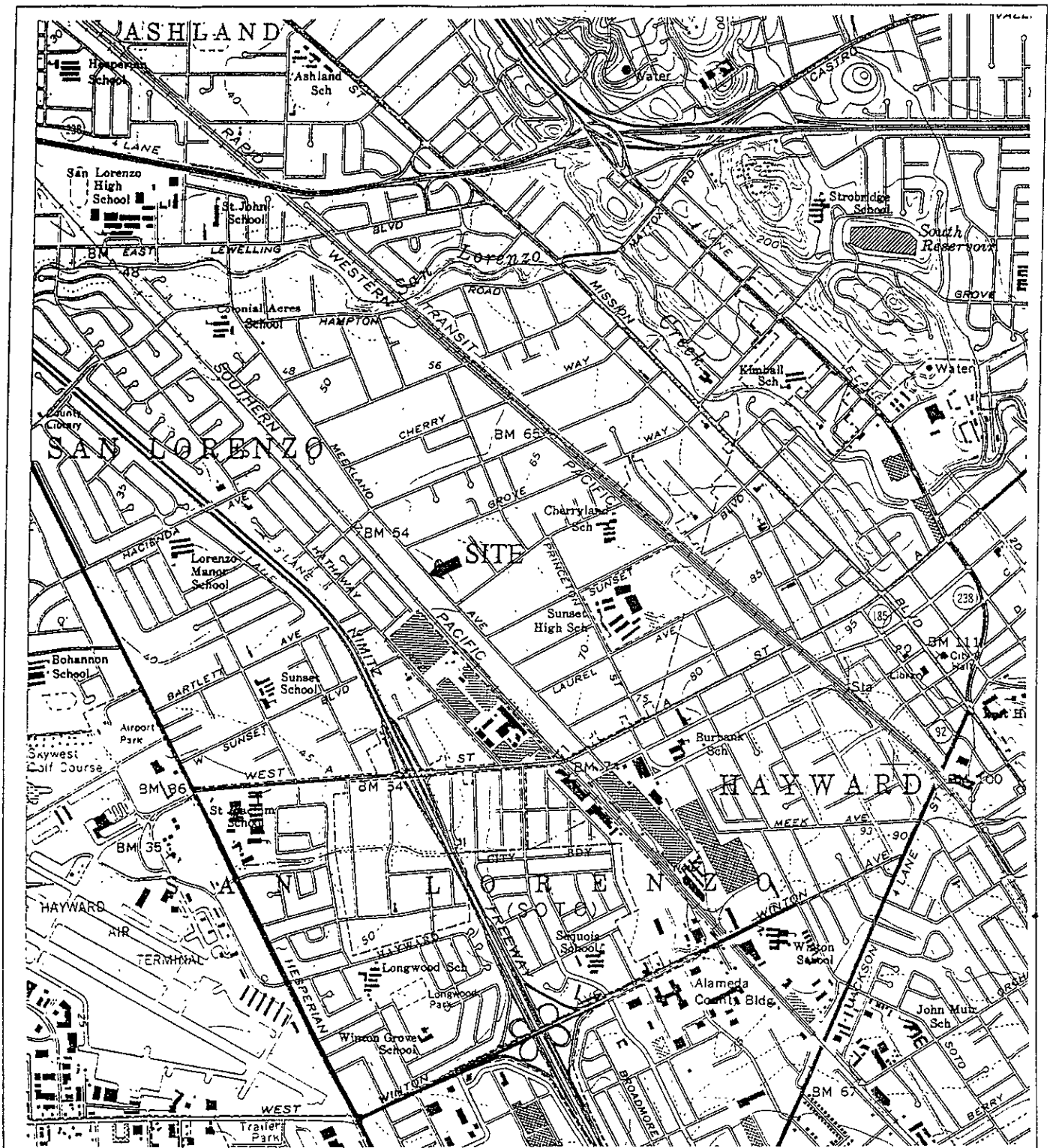
The present data continues to suggest the groundwater contamination plume may be beginning to migrate. It is our understanding that Alameda County Department of

Environmental Health (ACDEH) is considering closure of the site. Consequently, further quarterly monitoring, or additional evaluation should be undertaken as directed by ACDEH.

6.0 LIMITATIONS

The above conclusions are based on our assessment of conditions indicated to exist as of the dates of our field work. Our assessment included review of previous documents and interviews with state or local regulatory persons familiar with the area. This assessment was conducted in accordance with generally accepted standards of environmental geological practice at the time it was performed. The results of this assessment do not preclude the possibility that substances that are currently, or which in the future may be defined as hazardous, may be present on the property because of activities that we could not identify, or in locations which were not sampled.

Our conclusions are based on groundwater sample analyses representative of contaminant concentrations at the locations sampled. These results are considered indicative of site conditions, but such conditions may vary away from the points sampled. Further investigation, including additional subsurface exploration and laboratory testing of soil and groundwater samples can reduce the uncertainties inherent in this type of limited environmental assessment. No soil engineering or geotechnical references are made, nor should they be inferred.



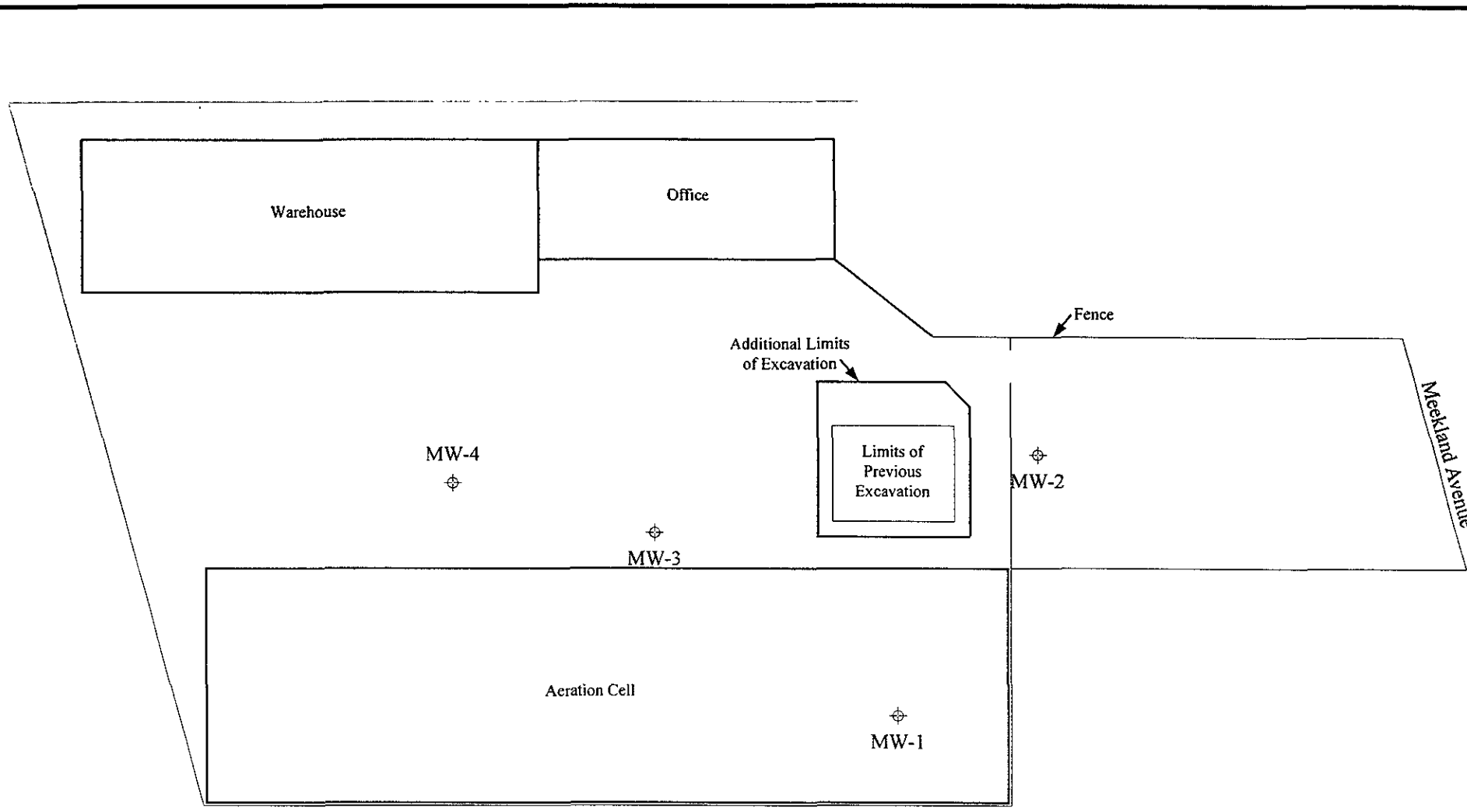
Reference: USGS 7 5'- series topographic map of the Hayward Quadrangle (photorevised 1980)

SITE LOCATION MAP
BECK ROOFING FACILITY
21123 MEEKLAND AVENUE

HAYWARD, CALIFORNIA

LUSH GEOSCIENCES

FIGURE 1

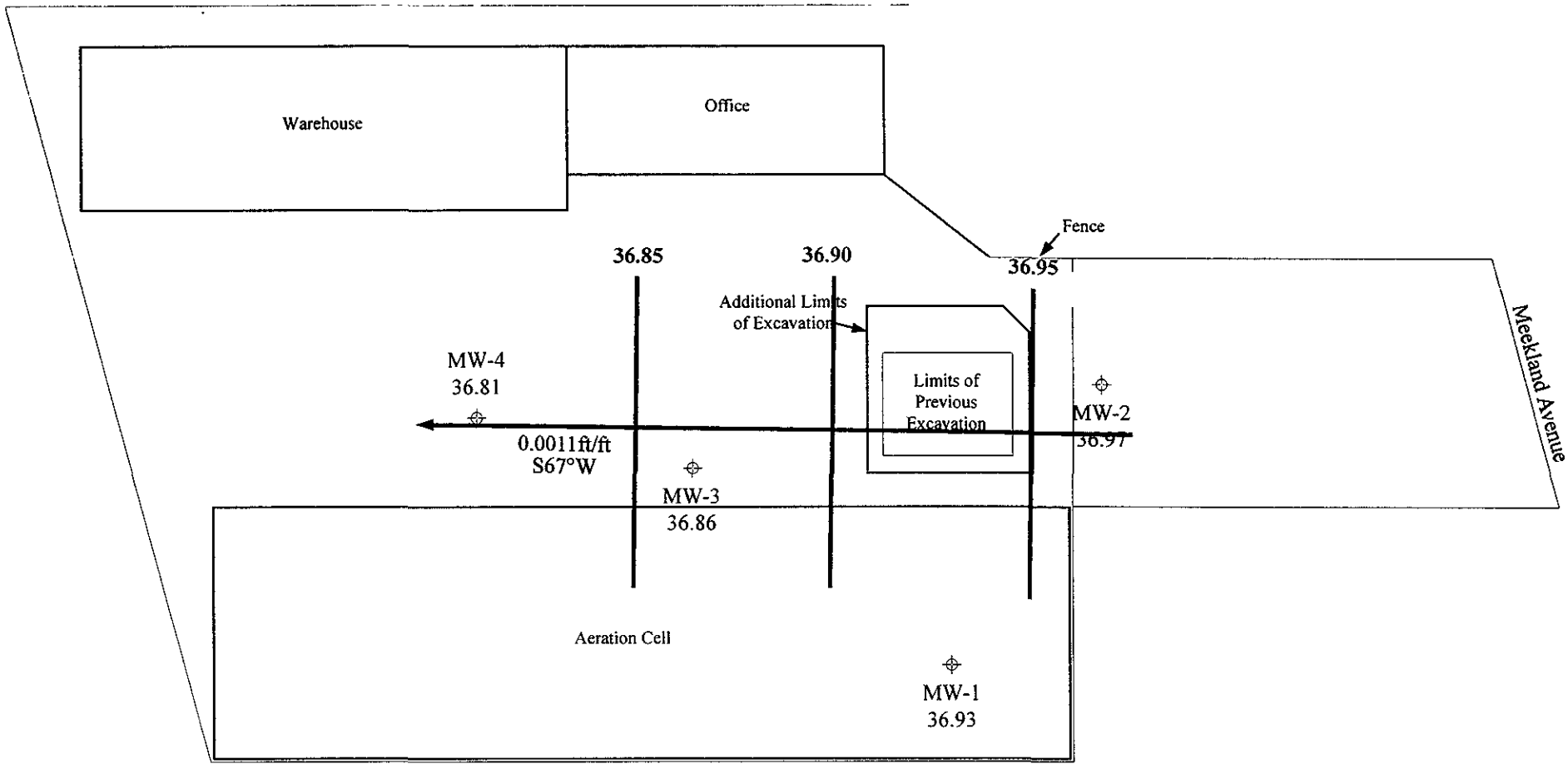


GENERALIZED SITE PLAN

BECK ROOFING FACILTY
21123 MEEKLAND AVENUE
HAYWARD, CALIFORNIA

LUSH GEOSCIENCES, INC.

FIGURE 2



North

Monitoring Well Location

0' 15' 30'

POTENTIOMETRIC SURFACE MAP
FEBRUARY 5, 1997
BECK ROOFING FACILTY
21123 MEEKLAND AVENUE

LUSH GEOSCIENCES, INC.

FIGURE 3

Excelchem
Environmental Labs

500 Giuseppe Court, Suite 9
Roseville, Ca. 95678
(916) 773-3664

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

297038

Project Manager: Bill Welton
Phone #: 737-9294
Company/Address: Lush Geoscience
FAX #: 737-9288
Project Number: 423-001
P.O.#:
Project Name: Beck Roofing
Project Location: Hayward
Sampler Signature: Bill Welton

Sample ID	Sampling DATE	Sampling TIME	Container VOA	Container SLEEVE	Container 1L GLASS	Container 1L PLASTIC	Method Preserved HCl	Method Preserved HNO_3	Method Preserved ICE	Method Preserved NONE	Matrix WATER	Matrix SOIL
MW-1	2-5-97		4								X	
MW-2	"		4								X	
MW-3	"		4								X	
MW-4	"		4								X	

ANALYSIS REQUEST

BTEX (602/8020)	BTEX/TPH as Gasoline (602/8020/8015) MTBE	TPH as Diesel (8015)	TPH as Oil (8015)	Total Oil & Grease (5520 B/E,F)	Total Oil & Grease IR (5520 B/E,F,C)	96 - Hour Fish Bioassay	EPA 601/8010	EPA 602/8020	EPA 615/8150	EPA 608/8080 - Pesticides	EPA 608/8080-PCBs	EPA 624/8240	EPA 625/8270	ORGANIC LEAD	Reactivity, Corrosivity, Ignitibility	W.E.T. (Y)	TOTAL (Y)	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD(7420/7421/239.2)	Cd, Cr, Pb, Zn, Ni
	X									3	0	2	9	7	0			8	2		
	X									3	0	2	9	7	0			8	3		
	X									3	0	2	9	7	0			8	4		
	X									3	0	2	9	7	0			8	5		

TAT

RUSH SERVICE (12 hr) or (24 hr)	EXPEDITED SERVICE (48 hr) or (1 wk)	STANDARD SERVICE (2wk)
		X
		X
		X
		X

Relinquished by:	Date	Time	Received by:
Bill Welton	2-6-97	955	
Relinquished by	Date	Time	Received by:
Relinquished by	Date	Time	Received by Laboratory:
	2/6/97	955	

Remarks:
INCLUDE MTBE - Confirm. with 8240.

Bill To:

EXCELCHEM
ENVIRONMENTAL LABS

500 Giuseppe Court, Suite 9
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784

ANALYSIS REPORT

Attention: Mr. Bill Welter
LUSH GEOSCIENCES
3560 Business Drive, Suite 120
Sacramento, CA 95618

Date Sampled: 02-05-97
Date Received: 02-06-97
MTBE Analyzed: 02-07-97
BTEX Analyzed: 02-07-97
TPHg Analyzed: 02-07-97

Project : 423-001/Beck Roofing

Matrix: Water

	MTBE PPB	Benzene PPB	Toluene PPB	Ethyl-benzene PPB	Total Xylenes PPB	TPHg PPB
Reporting Limit:	5.0	0.5	0.5	0.5	0.5	50
SAMPLE Laboratory Identification:						
MW-1 W0297082	ND	2.0	3.9	2.3	9.2	81
MW-2 W0297083	ND	2.8	5.0	3.7	9.4	92
MW-3 W0297084	ND	36.3	1.0	10.7	8.9	473
MW-4 W0297085	ND	1.3	2.7	1.8	7.5	72

PPB= Parts per billion = ug/L = micrograms per liter
ND = Not detected. Compound(s) may be present at concentrations below the reporting limit

ANALYTICAL PROCEDURES

MTBE (Methyl Tert-Butyl Ether)--MTBE is analyzed by EPA Method 602 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID)
BTEX-- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are analyzed by using EPA Method 602 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID).
TPHg--Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are analyzed by using modified EPA Method 8015, which utilizes a GC equipped with an FID.

Laboratory Representative

02-11-97
Date Reported

EXCELCHEM
ENVIRONMENTAL LABS

500 Giuseppe Court, Suite 9
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784

QA/QC REPORT

Attention: Mr. Bill Welter
LUSH GEOSCIENCES
3560 Business Drive, Suite 120
Sacramento, CA 95618

Date Analyzed: 02-07-97
Matrix: Water

Project : 423-001/Beck Roofing

	Benzene PPM	Toluene PPM	Ethyl-benzene PPM	Total Xylenes PPM
Reporting Limit:	0.005	0.005	0.005	0.005
QA/QC PARAMETER				
Matrix Blank	ND	ND	ND	ND
PERCENT RECOVERIES				
Matrix Spike	102%	104%	105%	105%
Matrix Spike Duplicate	101%	102%	103%	103%

ppm = parts per million = mg/Kg = milligram per kilogram
ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

All surrogate recoveries were within 30% of target values.
Spikes & Spike Duplicates were each spiked with 250 ng BTEX standard.

ANALYTICAL PROCEDURES

BTEX-- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction using EPA Method 5030 followed by analysis using EPA Method 8020 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID) .

Laboratory Representative

02-11-97
Date Reported

LUSH GEOSCIENCES
INCORPORATED
GEOLOGICAL AND ENVIRONMENTAL SERVICES

March 10, 1997
423-001

Ms. Juliet Shin
Alameda County Health Services
1131 Harbor Bay Parkway
Alameda, California 94502

Subject: Transmittal of the Quarterly Monitoring Report
for Beck Roofing Facility
21123 Meekland Avenue, Hayward, California

Dear Ms. Shin:

Enclosed, please find one copy of the Quarterly Monitoring Report for Beck Roofing Facility located at 21123 Meekland Avenue in Hayward, California. If you have any questions regarding this report or any other aspect of this project, please do not hesitate to call.

Sincerely

LUSH GEOSCIENCES, INC.

A. Lush AP

Andrew P. Lush
President

3560 BUSINESS DRIVE, SUITE 120 • SACRAMENTO, CA 95820 • (916) 737-9294 • FAX (916) 737-9298