September 17, 1998

QUARTERLY GROUNDWATER MONITORING REPORT

Second Quarter 1998

SEP

1353 East 14th Street
Oakland, California

Project No. 1599

Prepared For

Foss Lampshade Studios, Inc.
1340 East 12th Street
Oakland, CA 94606

Prepared By

All Environmental, Inc.
3364 Mt. Diablo Boulevard
Lafayette, CA 94583
(800) 801-3224

AEI

ALL ENVIRONMENTAL, INC.
Environmental Engineering & Construction

September 17, 1998

Mr. Norman Foss
Foss Lampshade Studios, Inc.
1340 E. 12th Street
Oakland, CA 94606

Re: Quarterly Groundwater Monitoring and Sampling Report
Second Quarter 1998
1353 E. 14th Street
Oakland, CA 94606
Project No. 1599

Dear Mr. Foss:

All Environmental, Inc. (AEI) has prepared this report to document the third monitoring episode of the on-site groundwater monitoring well at the above referenced site (Figure 1: Site Location Map). The investigation was initiated by the property owner in accordance with requirements from the Alameda County Health Care Service Agency (ACHCSA). The purpose of this activity is to monitor groundwater quality in the vicinity of the dry cleaning operation. This report presents the findings of the forth episode of groundwater monitoring and sampling conducted in the second quarter of 1998 on June 15, 1998.

Site Description and Background

The subject property currently supports the operation of Style Center Cleaners, a dry cleaning facility. The property has reportedly contained a dry cleaning facility for the last 50 years. A closed-loop dry cleaning machine was installed approximately 6 years ago by the current tenant. The floor of the building is wooden with a crawl space separating the floor from the ground. A concrete pad foundation supports the current dry cleaning machine. A small driveway runs the length of the dry cleaning building on the south (Figure 2: Site Plan).

On August 26, 1996, Ms. Madhulla Logan of the ACHCSA requested that a soil and groundwater investigation be performed on the property. The investigation was requested to determine if the on-site dry cleaning facility was a source of solvent contamination found in the groundwater at the former General Tire site, located adjacent to the subject property.

Three groundwater monitoring wells were installed at the former General Tire site between March, 1992 and September, 1993 by Jonas & Associates, Inc. The wells (labeled MW-1, MW-2 and MW-3) were installed to investigate petroleum hydrocarbon contamination.

During quarterly monitoring of the wells, solvents were present in groundwater samples collected from MW-2 at concentrations ranging from 14 µg/l to 44 µg/l.

AEI performed a subsurface investigation at the subject property on December 13, 1996 (Ref. 1). The investigation included advancing five soil borings (BH-1 through BH-5). Concentrations of tetrachloroethene (PCE) were detected in all analyzed soil samples at concentrations ranging from 8.7 µg/kg to 150 µg/kg. Trichlorothene (TCE) and chloroform were detected in the soil at maximum concentrations of 0.45 µg/kg and 640 µg/kg, respectively. No other volatile halocarbons were detected above the method detection limit. PCE, TCE and chloroform were present in grab groundwater samples collected from four of the soil borings at maximum concentrations of 1100 µg/l, 3.0 µg/l and 4.8 µg/l, respectively.

On July 3, 1997, AEI installed a single groundwater monitoring well (AE-1) located approximately 10 feet down-gradient from the dry cleaning machine (Figure 2, Ref. 2). Groundwater samples were collected from the well on July 31, 1997. Groundwater samples were also collected from MW-1 and MW-2 located on the adjacent site. MW-3 was not sampled. The four wells were surveyed in order to determine groundwater flow direction and gradient during each monitoring episode. Well AE-1 was monitored on a quarterly basis whereas the off-site wells were monitored on a semi-annual basis. No volatile halocarbons were detected in groundwater samples collected from AE-1, the on-site well during the monitoring episodes on July 31, 1997, November 6, 1997 and March 3, 1998 (Ref. 2, 3, 4). Refer to Table 2 for a summary of the analytical results from the first and subsequent groundwater monitoring episodes.

Summary of Activities

AEI measured the depth to groundwater in all four of the wells and collected water samples from AE-1 on June 15, 1998. The water levels from the top of the well casings were measured prior to sampling using an electric water level indicator.

AE-1 was purged using a battery powered submersible pump and groundwater samples were collected using clean disposable Teflon bailers. Temperature, pH, and turbidity were measured during the purging of the well (refer to Attachment A). At least 3 well volumes were removed from the well. Once the temperature, pH, and turbidity stabilized, water samples were collected.

Water was poured from the bailer into 40 ml VOA vials and capped so that there was no head space or visible air bubbles within the sample containers. Samples were shipped on ice under proper chain of custody protocol to McCampbell Analytical, Inc. of Pacheco, California (State Certification #1644).

Groundwater samples were analyzed for Volatile Halocarbons (EPA method 60/8010).

Field Results

Groundwater elevation for the June 1998 monitoring episode ranged from 12.87 to 16.12 feet above Mean Sea Level (MSL). Groundwater elevations have decreased an average of 0.89 feet since March, 1998. The direction of the groundwater flow at the time of measurement was to the southeast at a gradient of 0.07 feet per foot, which is consistent with previous monitoring episodes.

Groundwater elevation data is summarized in Table 1. The groundwater elevation contours and the groundwater flow direction are shown in Figure 2. Refer to Attachment A for the Groundwater Monitoring Well Field Sampling Forms.

Groundwater Quality

Volatile halocarbons were not detected in groundwater samples collected from AE-1. The non-detect results are consistent with all previous monitoring episodes at this well.

A summary of groundwater quality data is presented in Table 2. Laboratory results and chain of custody documents are included in Attachment B.

Recommendations

AEI recommends the discontinuation of groundwater monitoring of the on-site well and closure of this site based on the following:

- No concentrations of volatile halocarbons have been detected in the on-site well, AE-1, for the last four consecutive monitoring quarters.
- Only minor concentrations of volatile halocarbons were detected in soil samples collected in December 1996.
- The groundwater beneath the site is not used for potable purposes.

References

1. AEI, Phase II Subsurface Investigation Report, January 31, 1997
2. AEI, Groundwater Monitoring Well Installation and Sampling Report, October 6, 1997
3. AEI, Quarterly Groundwater Monitoring Report, Fourth Quarter, 1997, January 9, 1998

4. AEI, Quarterly Groundwater Monitoring Report, First Quarter, 1998, April, 1998

Report Limitations and Signatures

This report presents a summary of work completed by All Environmental, Inc., including observations and descriptions of site conditions. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information, but it cannot be assumed that they are entirely representative of all areas not sampled. All conclusions and recommendations are based on these analyses, observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

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

Sincerely,
All Environmental, Inc.

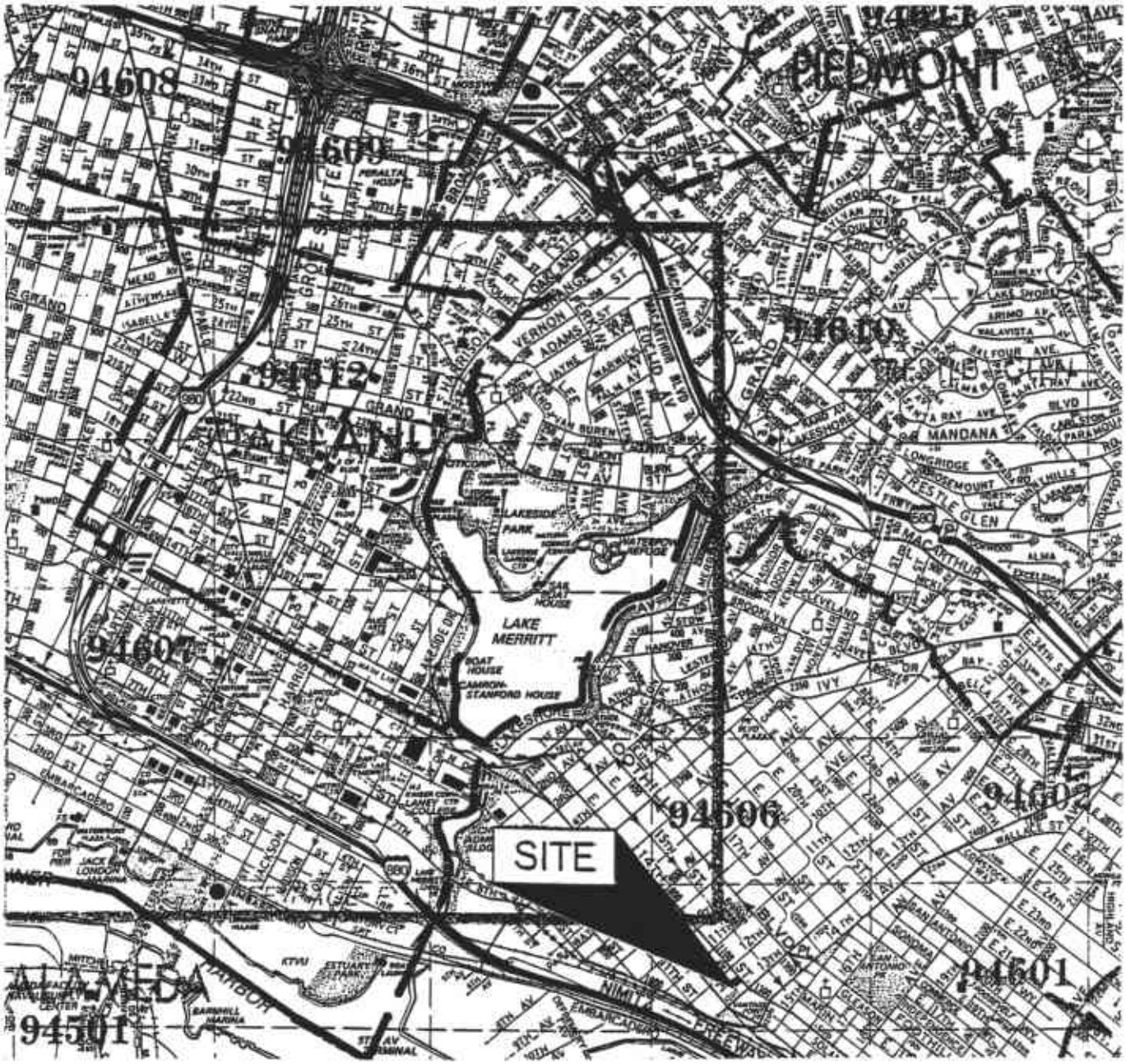
Peter McIntyre
Staff Geologist

Michael Carey
Engineering Geologist
CEG 1351

CERTIFIED ENGINEERING GEOLOGIST
MICHAEL C. CAREY
C.E.G. 1351
Exp 10-29-98
STATE OF CALIFORNIA

Figures
Tables
Attachment A
Attachment B

cc: Ms. Madhulla Logan, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577.



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FROM:
THE THOMAS GUIDE
1997 EDITION

ALL ENVIRONMENTAL, INC.

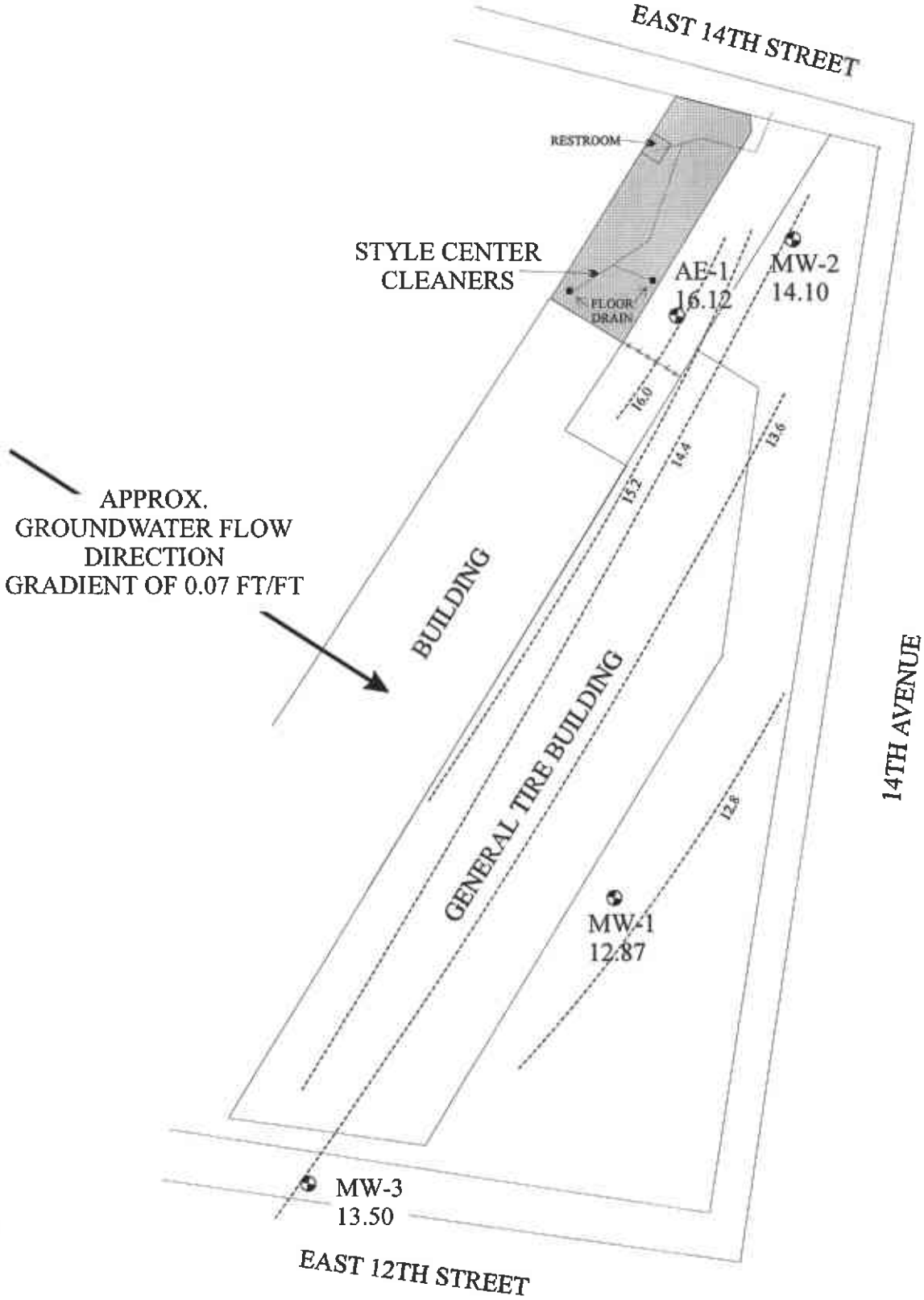
901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

SCALE: 1"=2400' | DATE: 9/11/98

SITE LOCATION MAP

1353 EAST 14TH STREET
OAKLAND, CALIFORNIA

DRAWING NUMBER:
FIGURE 1



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ALL ENVIRONMENTAL, INC.

901 MORAGA ROD, SUITE C, LAFAYETTE, CA

SCALE: 1 IN = 40 FT		DATE: 6/15/98

SITE PLAN

1353 E. 14TH STREET OAKLAND, CALIFORNIA	DRAWING NUMBER: FIGURE 2

TABLE 1

Water Level Measurements

Well Number	Date	Depth to Water (feet)	Well Elevation (toc)	Groundwater Elevation (feet amsl)
AE-1	7/31/97	5.47	20.42	14.95
	11/6/97	5.61	20.42	14.81
	3/3/98	3.77	20.42	16.65
	6/15/98	**4.30**	**20.42**	**16.12**
MW-1	7/31/97	8.01	18.29	10.28
	11/6/97	8.27	18.29	10.02
	3/3/98	3.90	18.29	14.39
	6/15/98	**5.42**	**18.29**	**12.87**
MW-2	7/31/97	6.92	20.18	13.26
	11/6/97	6.10	20.18	14.08
	3/3/98	5.09	20.18	15.09
	6/15/98	**6.08**	**20.18**	**14.10**
MW-3	7/31/97	8.83	19.55	10.72
	11/6/97	9.72	19.55	9.83
	3/3/98	5.51	19.55	14.04
	6/15/98	**5.80**	**19.55**	**13.5**

Top of Casing – toc
Above mean sea level - amsl

TABLE 2

Volatile Halocarbon* Groundwater Sample Analytical Data

Well Number	Date	1,1-DCA (µg/l)	1,1-DCE (µg/l)	cis 1,2-DCE (µg/l)	trans 1,2-DCE (µg/l)	PCE (µg/l)	TCE (µg/l)	Vinyl Chloride (µg/l)
AE-1	7/31/97	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	11/6/97	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	3/3/98	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	6/15/98	**<0.5**	**<0.5**	**<5.0**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-1	7/31/97	**0.63**	<0.5	**0.80**	<0.5	<0.5	<0.5	<0.5
	11/6/97	NS	NS	NS	NS	NS	NS	NS
	3/3/98	**2.0**	<0.5	**2.0**	<0.5	<0.5	**0.95**	<0.5
	6/15/98	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
MW-2	7/31/97	<1.0	**1.4**	**46**	**1.9**	**27**	**100**	**2.3**
	11/6/97	NS	NS	NS	NS	NS	NS	NS
	3/3/98	<0.5	**0.57**	**6.6**	<0.5	**3.7**	**14**	**1.4**
	6/15/98	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
MCLs		5.0	6.0	6.0	10	5.0	5.0	0.5

* All unlisted Volatile Halocarbons (EPA method 601) were not detected above the method detection limit of 0.5 µg/l

µg/l = micrograms per liter (ppb)

NS = Not Sampled

MCLs = Maximum Contamination Level

ATTACHMENT A

GROUNDWATER MONITORING WELL FIELD SAMPLING FORMS

ALL ENVIRONMENTAL INC. – GROUNDWATER MONITORING WELL FIELD SAMPLING FORM	
Monitoring Well Number: AE-1	
Project Name	Foss
Job Number	1599
Project Address	1353 East 14th Street
	Oakland, CA
Date of Sampling	6/15/98
Name of Sampler	Dusty Roy
MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Cement, good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	20.42
Depth of Well (feet)	15.00
Depth to Water (feet)	4.30
Water Elevation (feet)	16.12
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	N/A
Appearance of Purge Water	
GROUNDWATER SAMPLES	
Number of Samples/Container Size	N/A
Groundwater Temp/pH/Conductivity #1:	N/A
Groundwater Temp/pH/Conductivity #2:	N/A
Groundwater Temp/pH/Conductivity #3:	N/A
Groundwater Temp/pH/Conductivity #4:	N/A
Appearance of Groundwater Samples	N/A
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)	

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. -- GROUNDWATER MONITORING WELL FIELD SAMPLING FORM	
Monitoring Well Number: MW-1	
Project Name	Foss
Job Number	1599
Project Address	1353 East 14th Street
	Oakland, CA
Date of Sampling	6/15/98
Name of Sampler	Dusty Roy
MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Cement, good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	18.29
Depth of Well (feet)	15.50
Depth to Water (feet)	5.42
Water Elevation (feet)	12.87
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	N/A
Appearance of Purge Water	
GROUNDWATER SAMPLES	
Number of Samples/Container Size	N/A
Groundwater Temp/pH/Conductivity #1:	N/A
Groundwater Temp/pH/Conductivity #2:	N/A
Groundwater Temp/pH/Conductivity #3:	N/A
Groundwater Temp/pH/Conductivity #4:	N/A
Appearance of Groundwater Samples	N/A
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)	

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. – GROUNDWATER MONITORING WELL FIELD SAMPLING FORM	
Monitoring Well Number: MW-2	
Project Name	Foss
Job Number	1599
Project Address	1353 East 14th Street
	Oakland, CA
Date of Sampling	6/15/98
Name of Sampler	Dusty Roy
MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Cement, good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	20.18
Depth of Well (feet)	15.50
Depth to Water (feet)	6.08
Water Elevation (feet)	14.1
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	N/A
Appearance of Purge Water	
GROUNDWATER SAMPLES	
Number of Samples/Container Size	N/A
Groundwater Temp/pH/Conductivity #1:	N/A
Groundwater Temp/pH/Conductivity #2:	N/A
Groundwater Temp/pH/Conductivity #3:	N/A
Groundwater Temp/pH/Conductivity #4:	N/A
Appearance of Groundwater Samples	N/A
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)	

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. – GROUNDWATER MONITORING WELL FIELD SAMPLING FORM	
Monitoring Well Number: MW-3	
Project Name	Foss
Job Number	1599
Project Address	1353 East 14th Street
	Oakland, CA
Date of Sampling	6/15/98
Name of Sampler	Dusty Roy
MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Cement, good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	19.55
Depth of Well (feet)	15.50
Depth to Water (feet)	5.80
Water Elevation (feet)	13.75
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	N/A
Appearance of Purge Water	
GROUNDWATER SAMPLES	
Number of Samples/Container Size	N/A
Groundwater Temp/pH/Conductivity #1:	N/A
Groundwater Temp/pH/Conductivity #2:	N/A
Groundwater Temp/pH/Conductivity #3:	N/A
Groundwater Temp/pH/Conductivity #4:	N/A
Appearance of Groundwater Samples	N/A
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)	

TD - Total Depth of Well
DTW - Depth To Water

ATTACHMENT B

LABORATORY ANALYSES WITH CHAIN OF CUSTODY DOCUMENTATION

McCAMPBELL ANALYTICAL INC.

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

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549	Client Project ID: Foss	Date Sampled: 06/15/98
		Date Received: 06/17/98
	Client Contact: Jennifer Pucci	Date Extracted: 06/17/98
	Client P.O:	Date Analyzed: 06/17/98

06/24/98

Dear Jennifer :

Enclosed are:

1). the results of **1** samples from your **Foss** project,

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director

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

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549	Client Project ID: Foss	Date Sampled: 06/15/98
		Date Received: 06/17/98
	Client Contact: Jennifer Pucci	Date Extracted: 06/17/98
	Client P.O:	Date Analyzed: 06/17/98

Volatile Halocarbons

EPA method 601 or 8010

Lab ID	90573			
Client ID	AE-1			
Matrix	W			
Compound	Concentration			
Bromodichloromethane	ND			
Bromoform[b]	ND			
Bromomethane	ND			
Carbon Tetrachloride[c]	ND			
Chlorobenzene	ND			
Chloroethane	ND			
2-Chloroethyl Vinyl Ether[d]	ND			
Chloroform [e]	ND			
Chloromethane	ND			
Dibromochloromethane	ND			
1,2-Dichlorobenzene	ND			
1,3-Dichlorobenzene	ND			
1,4-Dichlorobenzene	ND			
Dichlorodifluoromethane	ND			
1,1-Dichloroethane	ND			
1,2-Dichloroethane	ND			
1,1-Dichloroethene	ND			
cis 1,2-Dichloroethene	ND			
trans 1,2-Dichloroethene	ND			
1,2-Dichloropropane	ND			
cis 1,3-Dichloropropene	ND			
trans 1,3-Dichloropropene	ND			
Methylene Chloride[f]	ND<1			
1,1,2,2-Tetrachloroethane	ND			
Tetrachloroethene	ND			
1,1,1-Trichloroethane	ND			
1,1,2-Trichloroethane	ND			
Trichloroethene	ND			
Trichlorofluoromethane	ND			
Vinyl Chloride[g]	ND			
% Recovery Surrogate	101			
Comments				

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

Reporting limit unless otherwise stated: water/TCLP/SPLP extracts, ND<0.5ug/L; soils and sludges, ND<5ug/kg; wipes, ND<0.2ug/wipe

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

(b) tribromomethane; (c) tetrachloromethane; (d) (2-chloroethoxy) ethene; (e) trichloromethane; (f) dichloromethane; (g) chloroethene; (h) a lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR EPA 8010/8020/EDB

Date: 06/17/98 Matrix: WATER

Analyte	Concentration (ug/L)				% Recovery		
	Sample (#90034)	MS	MSD	Amount Spiked	MS	MSD	RPD
1,1-DCE	0.0	10.6	10.7	10.0	106	107	0.9
Trichloroethene	0.0	9.1	9.2	10.0	91	92	1.1
EDB	0.0	9.0	9.1	10.0	90	91	1.1
Chlorobenzene	0.0	9.6	9.6	10.0	96	96	0.0
Benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobz (PID)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

114866 Wale2165.doc

McCAMBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

Report To: JENNIFER RICCI Bill To: AEI

Company: All Environmental
901 Moraga Road, Suite C
Lafayette, CA 94549-4564

Tele: (925) 283-6000 Fax: (925) 283-6121

Project #: Project Name: FOSS

Project Location: OAKLAND

Sampler Signature: Dusty Rey

SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other
AE-1		6/5/98		2		X								

Analysis Request

BTEX & TPH as Gas (602/8020 + 8015) MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI
				X										

Other: 90573

Comments:

Relinquished By:	Date:	Time:	Received By:
Dusty Rey	6/7/98	9:20AM	Wendi Ricca
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Remarks:

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATION APPROPRIATE	VOAS	O&G	METALS	OTHER
CONTAINERS ✓	✓			