September 3, 1999

GROUNDWATER MONITORING WELL INSTALLATION AND SAMPLING REPORT

1075 40TH Street
Oakland, California

Project No. 3119

Prepared For

Fidelity Roof Company
1075 40th Street
Oakland, CA 94608

Prepared By

All Environmental, Inc.
901 Moraga Road, Suite C
Lafayette, CA 94549
(800) 801-3224

AEI

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AEI

1.0 INTRODUCTION

All Environmental, Inc. (AEI) has prepared this report on behalf of Mr. Monty Upshow, in response to his request for a soil and groundwater investigation at 1075 40th Street in Oakland, California (Figure 1: Site Location Map). The investigation was initiated by the property owner in accordance with the requirements of the Alameda County Health Care Services Agency. The investigation was conducted to assess the southerly extent and magnitude of impacted groundwater over time.

2.0 SITE DESCRIPTION AND BACKGROUND

The site is located in a mixed residential and commercial area of Oakland at 1075 40th Street. The site currently supports the operation of Fidelity Roof Company, a roofing company.

On December 19, 1995, Tank Protect Engineering removed one (1) 1,000 gallon underground storage tank (UST) and one (1) 500 gallon gasoline UST from the southeast corner of the property. The removal of the tanks produced a single excavation. The excavated soil was stockpiled north of the excavation. Three discrete soil samples were collected from beneath the USTs. Analysis of the samples indicated that soil beneath the 1,000 gallon UST was impacted with minor concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline, TPH as diesel, benzene, toluene, ethylbenzene and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE). A single soil sample collected from beneath the 500 gallon UST indicated 100 mg/kg TPH as gasoline and 96 mg/kg TPH as diesel present.

On September 12, 1996, AEI advanced four soil borings in the vicinity of the former UST excavation (Ref. 1). Soil samples were collected from all of the borings and groundwater samples were collected from two of the borings. Analytical results from the subsurface investigation revealed significant levels of gasoline and diesel present in soil to the south and west of the open excavation, believed to extend beneath the existing pump island. Groundwater analysis indicated maximum concentrations of 5,500 µg/l TPH as gasoline, 340 µg/l benzene, and 2,100 µg/l TPH as diesel. Due to the high concentrations of petroleum hydrocarbons within the groundwater, the ACHCSA required further investigation into the extent and magnitude of the groundwater contaminant plume.

During the Phase II Subsurface Investigation, AEI collected four soil samples from the stockpile. The samples were combined by the laboratory into one composite sample for analysis. Analysis of the samples indicated the presence of concentrations of 3.8 mg/kg TPH as gasoline, 28 mg/kg

TPH as diesel and minor concentrations of BTEX. Approval was obtained from Ms. Hugo of the ACHCSA to reuse the stockpiled soil as backfill material.

On October 25, 1996, AEI extended the excavation laterally 7 feet to the south and 12 feet to west (Ref. 2). Soil was removed to a depth of 9 feet below ground surface (bgs). The contaminated soil was stockpiled on-site and profiled for disposal into a Class III Landfill. The dispenser island and associated piping were also removed. Groundwater was not encountered during the excavation activities. Four confirmation soil samples were collected from the excavation sidewalls. Analyses of the soil samples collected from the excavation sidewalls indicated that up to 150 mg/kg TPH as gasoline, 16 mg/kg benzene, and 300 mg/kg TPH as diesel remains within the western sidewall of the excavation.

The excavated soil was profiled and accepted for disposal at the BFI Vasco Road Sanitary Landfill, in Livermore, California. In November 1996, approximately 235 tons of contaminated soil was loaded and transported to the landfill, under non-hazardous waste manifest, for disposal.

On March 6, 1997, AEI installed three groundwater monitoring wells (Ref. 3). The wells were subsequently sampled in March 1997, June 1997, October 1997 and January 1998. The analytical data from January 1998 indicated 29,000 µg/l TPH as gasoline, 5,600 µg/l benzene and 7,300 µg/l of TPH as diesel present in the groundwater.

At the request of the ACHCSA, six additional soil borings were drilled south and west of the well locations on November 4, 1998 (Ref. 4). The locations of these borings were chosen to assess the lateral extent of impacted groundwater at the site. TPH as diesel was detected in the groundwater to the south of the former excavation at 2,400 µg/L. No significant concentrations of petroleum hydrocarbons were detected in any of the other boring.

Based on the results of these six soil borings, the ACHCSA requested the installation of a fourth groundwater monitoring well at the site, located south of the former tank locations, along Yerba Buena Avenue. The following report describes the activities performed by AEI to install this additional well and sample all four wells at the site.

3.0 PERMITS

A work plan describing the well installation and subsequent sampling was submitted to the ACHCSA on February 22, 1999. This workplan was approved by Scott Seery of the ACHCSA in a letter dated February 25, 1999. Well construction permits were obtained from Alameda County Public Works Agency. An encroachment permit was obtained from the City of Oakland

to install a groundwater monitoring well in the public right-of-way and an excavation permit was also obtained from the City of Oakland. The property owner was notified of the drilling schedule. Prior to drilling, notification of the day of drilling was given to the ACHCSA. Copies of the permit documentation are included in Appendix A.

4.0 GEOLOGY AND HYDROGEOLOGY

According to the logs of soil borings performed by AEI, the near surface sediments consisted of sandy clay to approximately 5 feet below ground surface (bgs). Below this silty and sandy clay was encountered with gravel up to 2 cm to boring termination at 20 feet bgs. **The water-bearing stratum generally consisted of silty and sandy clay with up to 50% coarse gravel.**

Water level measurements were made during the current groundwater monitoring and sampling episode on August 5, 1999. These measurements indicate that static water ranges from between 33.81 and 35.66 feet above Mean Sea Level (MSL). The Humann Company, Inc. (Licensed Land Surveyor No. 5452) surveyed the elevations of the tops of the well casings relative to MSL. Refer to Appendix B for the Groundwater Monitoring Well Field Sampling Forms.

The water level measurements were collected in order to calculate the groundwater gradient and flow direction. Based on these measurements, the groundwater flow has been determined to be to the west/southwest with a gradient of 0.033 feet per foot. The groundwater flow direction is depicted in Figure 3. Water elevations to date are summarized in Table 1.

5.0 SOIL BORINGS

On July 15, 1999, one soil boring, MW-4, was advanced just south of the entrance to the site, in the parking lane of Yerba Buena Avenue. The location of the boring was chosen by the ACHCSA to assess the extent and magnitude of impacted groundwater to the south of the former tank locations. The boring was drilled to 20 feet bgs. Refer to Figures 2 & 3 for the location of the soil boring.

Four soil samples were collected from the boring at approximately 5-feet, 10-feet, 14 feet, and 16 feet bgs. The soil samples were collected with a California modified hammer-driven split spoon sampler. The sampler, containing three, six-inch long by two-inch in diameter brass sample tubes, was advanced ahead of the auger tip by successive hammer blows. Please refer to Appendix B, Soil Boring Log, for details of the soil collection activities.

The borings were logged by an AEI geologist using the Unified Soil Classification System. The logs are presented in Appendix B. Cuttings generated during drilling were placed in 55-gallon drums and stored on site to await off-site disposal or reuse on-site.

Soil samples were placed in a cooler containing ice and transported under proper chain of custody to McCampbell Analytical of Pacheco, California (DHS certification # 1644).

6.0 WELL CONSTRUCTION

The soil boring was converted to a groundwater monitoring well (MW-4). The well was constructed with 15 feet of 0.020" factory-slotted well screen and 5 feet of flush threaded blank Schedule 40 PVC casing that was installed through the hollow augers. The bottom of the well screen was fitted with a flush-threaded bottom cap. No. 2/16 Monterey sand was poured through the auger to form a sand pack from the bottom of the well to 1 foot above the slotted well screen. Approximately 1.5 feet of bentonite pellets were placed above the sand and hydrated with tap water. Once the bentonite had sealed the annulus, the remainder of the boring was filled to about 0.5 feet below grade with neat cement grout. A flush mounted traffic rated well box was installed over the casing, and an expanding, locking inner cap was placed on the casing top. Refer to the boring logs (Appendix B) for a visual description of the well construction.

7.0 WELL DEVELOPMENT AND SAMPLING

The newly installed well was developed on July 29, 1999. The well was developed by pumping water into 55 gallon drums until the water appeared to be reasonably clear with a minimum of 10 well volumes removed. The water was initially turbid, but became clear by the end of the well development. The water level returned to a static level within approximately 1 hour.

Groundwater samples were collected from the three wells onsite and the newly installed well on August 3, 1999. Slight to strong hydrocarbon odor was observed during the sampling on the wells. A hydrocarbon sheen was observed while sampling MW-3. Depth to groundwater was measured at the four wells prior to sampling activities. Prior to the collection of water samples, at least three well volumes of water were bailed from each well. After the groundwater level had returned to within 90% of its original level, a groundwater sample was collected from each well. The Groundwater Well Field Sampling Logs are included in Appendix B.

The groundwater samples were collected using clean disposable bailers. Water was poured from the bailers into 1-liter amber bottles, and 40 ml VOA vials and capped so that there was no head space or visible air bubbles within the sample containers. The samples were labeled and placed on

ice and transported under chain of custody protocol for analysis to McCampbell Analytical Inc. (DOHS Certification Number 1644) of Pacheco, California.

8.0 Analytical Results of Samples

Two soil samples from the soil boring were selected for analysis. The remaining soil samples were placed on hold at the laboratory. Each soil sample chosen was analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline by EPA method 5030/8015, TPH as diesel by EPA method 3510/3550, benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA method 5030/8020.

Neither TPH as gasoline, TPH as diesel, BTEX or MTBE were detected above laboratory reporting limits in either of the soil samples analyzed. Please refer to Table 1 for details of the soil sample analytical results.

On August 5, 1999, one water sample from each well was collected and analyzed for TPH as gasoline, TPH as diesel, BTEX and MTBE.

TPH as gasoline and benzene were detected in MW-3 at 31,000 µg/L and 5,400 µg/L, respectively. With the exception of MTBE detected at 37µg/L, no other petroleum hydrocarbons were detected above laboratory reporting limits in the newly installed well, MW-4. Please refer to Table 3 for detailed results of the groundwater analysis. Laboratory results and chain of custody documentation are included in Appendix C.

9.0 Summary and Recommendations

AEI advanced one soil borings just south of the site that was converted to a groundwater monitoring well. This well was installed to assess the southerly extent of dissolved hydrocarbons in the groundwater over time. This well will be used in conjunction with three other wells on-site to further characterize the extent and magnitude of impacted groundwater.

Although soil samples analyzed from the location of MW-4 did not contain detectable levels of petroleum hydrocarbons, MTBE, a highly mobile constituent of gasoline, was detected in the groundwater in this newly installed well. TPH as gasoline and TPH as diesel continue to be detected at elevated levels in MW-1 and, particularly MW-3.

Although the investigation performed in November 1999 did not indicate migration of dissolved hydrocarbons west of the former tank locations, it is apparent from this episode of sampling that significant concentrations of petroleum hydrocarbons remain in the groundwater. AEI recommends reinstating a quarterly groundwater monitoring program in accordance with the requirements of the ACHCSA to assess the stability of the dissolved hydrocarbon plume. The next episode of groundwater sampling is scheduled for November 1999.

10.0 REFERENCES

1. Phase II Soil and Groundwater Investigation report, October 7, 1996, prepared by AEI.
2. Excavation and Disposal of Contaminated Soil report, January 7, 1997, prepared by AEI.
3. Groundwater Monitoring Well Installation report, dated May 30, 1997, prepared by AEI.
4. Phase II Subsurface Investigation report, December 9, 1998, prepared by AEI.

AEI

11.0 REPORT LIMITATIONS AND SIGNATURES

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

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

Sincerely,

Peter McIntyre
Project Geologist

Joseph P. Derhake, PE
Principal

N

SOURCE:
THOMAS GUIDE
1997
SCALE: 1" = 2,400'

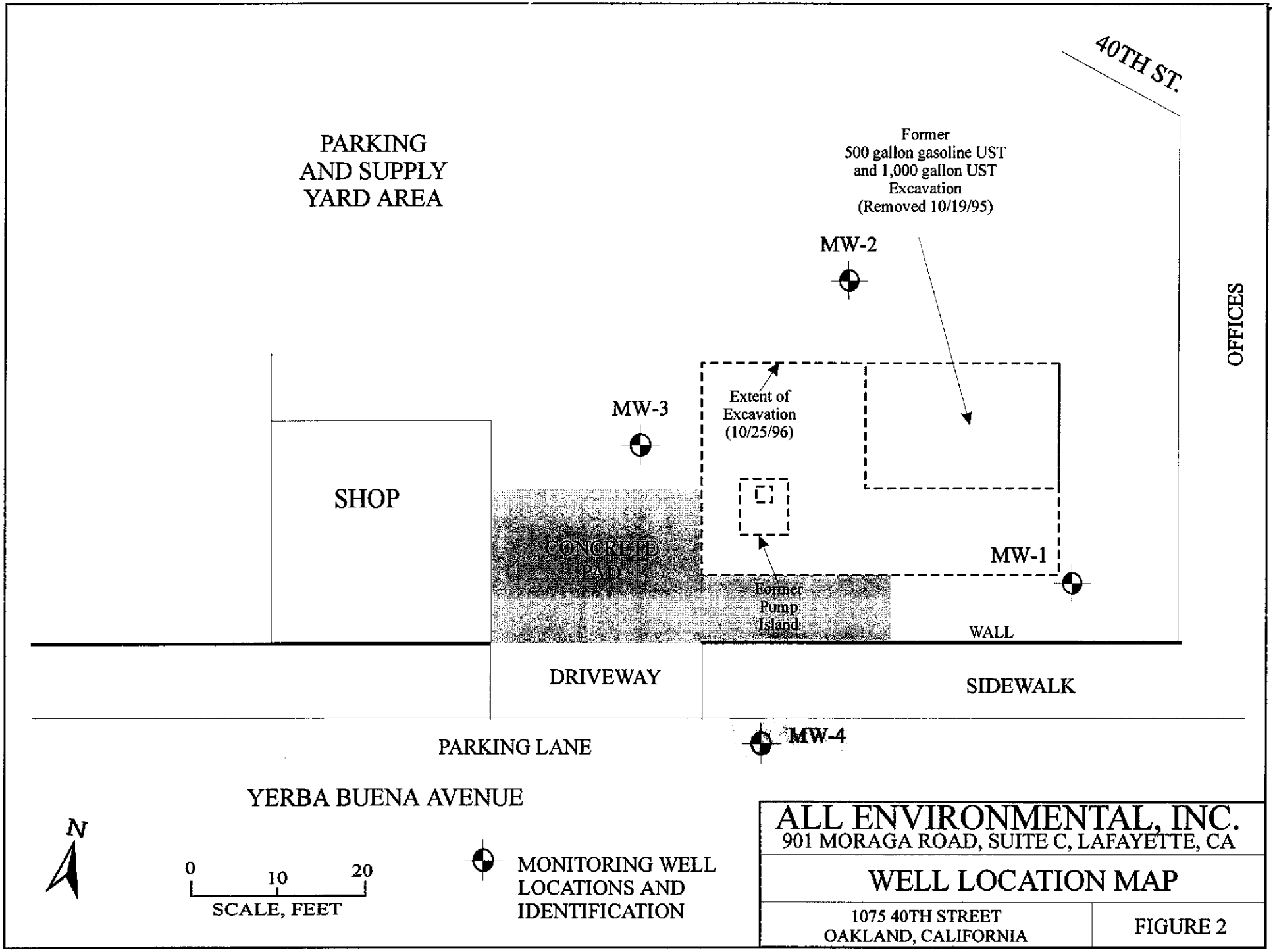
ALL ENVIRONMENTAL, INC.

901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

SITE LOCATION MAP

1075 40th STREET
OAKLAND, CALIFORNIA

FIGURE 1



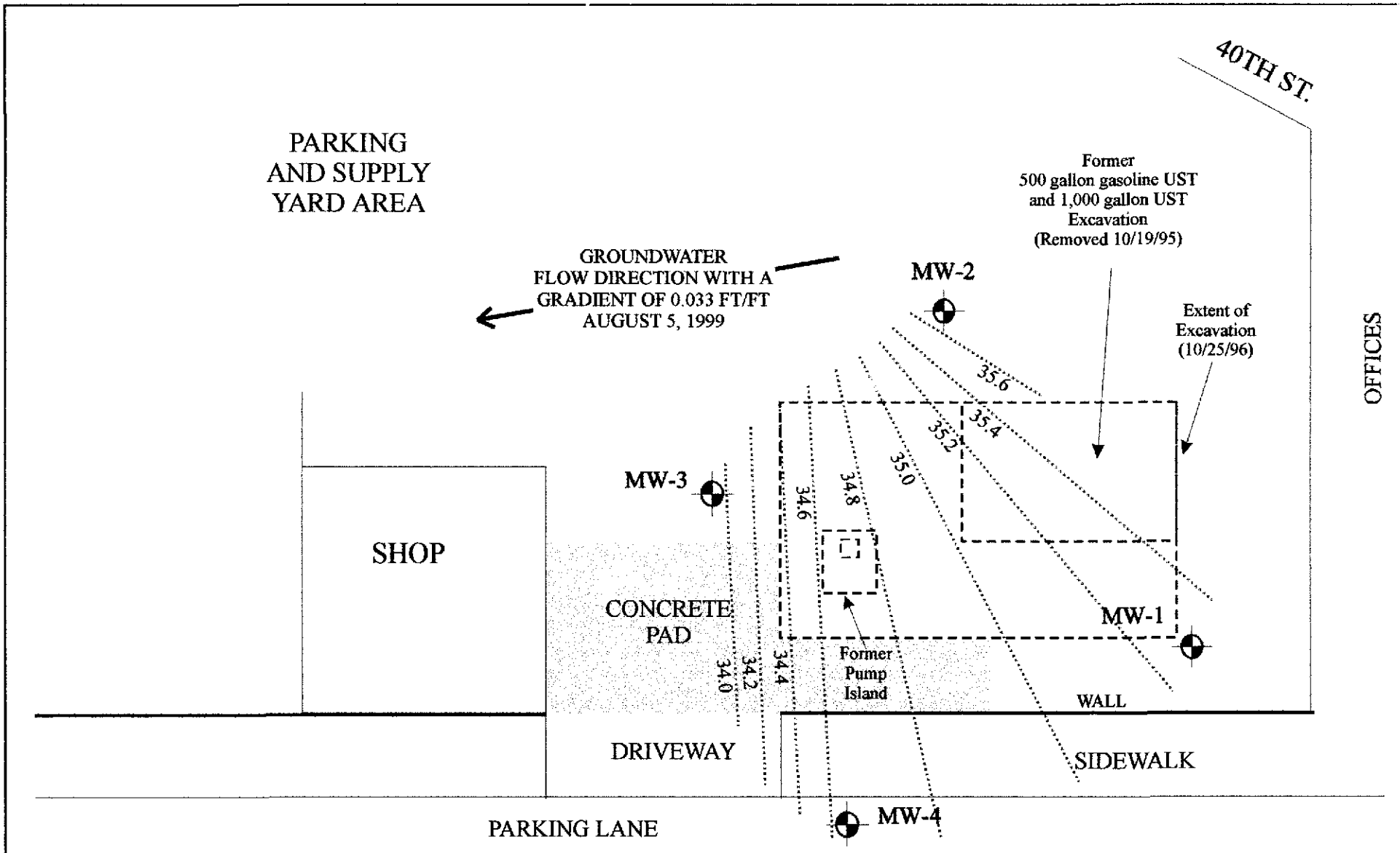
ALL ENVIRONMENTAL, INC.

901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

WELL LOCATION MAP

1075 40TH STREET
OAKLAND, CALIFORNIA

FIGURE 2



ALL ENVIRONMENTAL, INC.

901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

GROUNDWATER GRADIENT MAP

1075 40TH STREET
OAKLAND, CALIFORNIA

FIGURE 3

Table 1

Soil Sample Analytical Results

Sample ID	TPH as gasoline mg/kg	TPH as diesel mg/kg	MTBE mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl-benzene mg/kg	Xylenes mg/kg
MW-4 10'	**<1.0**	**<1.0**	**<0.05**	**<0.005**	**<0.005**	**<0.005**	**<0.005**
MW-4 14'	**<1.0**	**<1.0**	**<0.05**	**<0.005**	**<0.005**	**<0.005**	**<0.005**
M.D.L.	1.0	1.0	0.05	0.005	0.005	0.005	0.005

ND = Not detected above the Method Detection Limit

µg/kg = micrograms per kilogram (ppb)

mg/kg = milligrams per kilogram (ppm)

MDL = Method Detection Limit

Table 2
Groundwater Levels

Well ID	Date	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (ft msl)
MW-1	3/19/97	45.41	8.25	37.16
	6/20/97	45.41	9.10	36.31
	10/8/97	45.41	9.95	35.46
	1/16/98	45.41	7.57	37.84
	8/5/99	**45.49**	**10.16**	**35.33**
MW-2	3/19/97	44.94	8.40	36.54
	6/20/97	44.94	8.85	36.09
	10/8/97	44.94	9.80	35.14
	1/16/98	44.94	5.28	39.66
	8/5/99	**44.98**	**9.32**	**35.66**
MW-3	3/19/97	44.32	7.59	36.73
	10/8/97	44.32	9.98	34.34
	6/20/97	44.32	8.36	35.96
	1/16/98	44.32	9.18	35.14
	8/5/99	**44.37**	**10.56**	**33.81**
MW-4	**8/5/99**	**43.48**	**8.79**	**34.69**

NOTE : All wells re-surveyed after the installation of MW-4

Notes: All well elevations are measured from the top of casing not from the ground surface.
ft msl = feet above mean sea level

Table 3
Groundwater Sample Analytical Data

Well ID	Date	Consultant/ Lab	TPHg (ug/l)	MTBE (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethyl-Benzene (ug/l)	Xylenes (ug/l)	TPHd (ug/l)
MW - 1	3/19/97	AEI/MAI	<50	23	<0.5	<0.5	<0.5	<0.5	<50
	6/23/97	AEI/MAI	1,300	14	150	2.1	12	19	420
	10/8/97	AEI/MAI	56	5.8	2.8	<0.5	<0.5	<0.5	66
	1/16/98	AEI/MAI	1,500	<33	95	0.72	69	8.4	910
	8/5/99	**AEI/MAI**	**160**	**<15**	**1.6**	**<0.5**	**0.56**	**1.1**	**63**
MW - 2	3/19/97	AEI/MAI	<50	65	<0.5	<0.5	<0.5	<0.5	<50
	6/23/97	AEI/MAI	<50	70	3.4	<0.5	<0.5	<0.5	<50
	10/8/97	AEI/MAI	<50	90	<0.5	<0.5	<0.5	<0.5	<50
	1/16/98	AEI/MAI	<50	65	<0.5	<0.5	<0.5	<0.5	<50
	8/5/99	**AEI/MAI**	**<50**	**600**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<50**
MW -3	3/19/97	AEI/MAI	26,000	230	3,000	530	340	2,300	5,000
	6/23/97	AEI/MAI	25,000	270	4,400	120	540	1,500	7,000
	10/8/97	AEI/MAI	17,000	ND<280	4,400	47	280	410	5,100
	1/16/98	AEI/MAI	29,000	ND<360	5,600	740	950	3,500	7,300
	8/5/99	**AEI/MAI**	**31,000**	**ND<200**	**5,400**	**150**	**1100**	**2,300**	**5,100**
MW-4	**8/5/99**	**AEI/MAI**	**<50**	**37**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<50**

Notes:

MTBE	Methyl Tertiary Butyl Ether
TPHg	Total Petroleum Hydrocarbons as gasoline
TPHd	Total Petroleum Hydrocarbons as diesel
AEI	All Environmental, Inc.
MAI	McCampbell Analytical Inc., Pacheco, California
ug/l	Micrograms per liter

APPENDIX A

PERMIT DOCUMENTATION

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PERMIT NUMBER	SITE ADDRESS/LOCATION
X9900540	1075 40th St, Oakland
APPROX. START DATE / APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number) 800-801-3224
CONTRACTOR'S LICENSE # AND CLASS 654919	CITY BUSINESS TAX #

ATTENTION:

1) State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: 525 447

2) **48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.**

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____

WORKER'S COMPENSATION

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # _____ Company Name _____

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Chapter 6, Article 2 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

Signature of Permittee / ☐ Agent for ☒ Contractor ☐ Owner — Date 7/13/99

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED?	HOLIDAY RESTRICTION? (NOV 1 - JAN 1)	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM)
90	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO
ISSUED BY M. Mulin		DATE ISSUED 7/13/99	

YOLBA BUENA AVE.

654919

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1015 40th St. Oakland 94608

California Coordinates Source _____ ft. Accuracy ± ___ ft.
CCN _____ ft. CCE _____ ft.
APN _____

CLIENT
Name Monty Upshaw
Address 1075 40th St Phone 510 547 8330
City Oakland CA Zip 94608

APPLICANT
Name #11 Environmental Inc
Address 921 Murray Rd Suite C Fax 925 283-6121
City Livermore CA Phone 283 6000
Zip 94550

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other Monitoring	☒

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☒
Cable	☐	Other	☐		

DRILLER'S LICENSE NO C57 485165

WELL PROJECTS
Drill Hole Diameter 6 1/2 in. Maximum
Casing Diameter 2 in. Depth 25 ft.
Surface Seal Depth 5 ft. Number 1

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

ESTIMATED STARTING DATE 6/14/99
ESTIMATED COMPLETION DATE 6/17/99

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68

APPLICANT'S SIGNATURE [signature] DATE 6/2/99

FOR OFFICE USE

PERMIT NUMBER 99WR246
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

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

D. GEOTECHNICAL
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings

E. CATHODIC
Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
See attached.

G. SPECIAL CONDITIONS

APPROVED [signature] DATE 6-2-99

APPENDIX B

SOIL BORING LOGS
&
WELL FIELD SAMPLING FORMS

ALL ENVIRONMENTAL, INC.
Environmental Engineering & Construction

September 3, 1999

Scott Seery
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: **Groundwater Well Installation**
Fidelity Roof Company
1075 40th Street
Oakland, CA
Project No. 3119

Dear Mr. Seery:

Enclosed is a copy of the Groundwater Monitoring Well Installation report for the property referenced above. Please contact me at (925) 283-6000 if you have any questions about this case.

Sincerely,
ALL ENVIRONMENTAL, INC.

Peter McIntyre
Project Geologist

Corporate Headquarters:
901 Moraga Road, Suite C
Lafayette, CA 94549-4567
Phone : (925) 283-6000
Fax: (925) 283-6121

(800) 801-3224
www.all-environmental.com

Los Angeles Office:
2200 Pacific Coast Hwy, Suite 217
Hermosa Beach, CA 90254-2701
Phone: (310) 798-4255
Fax: (310) 798-2841

Project No: 3119

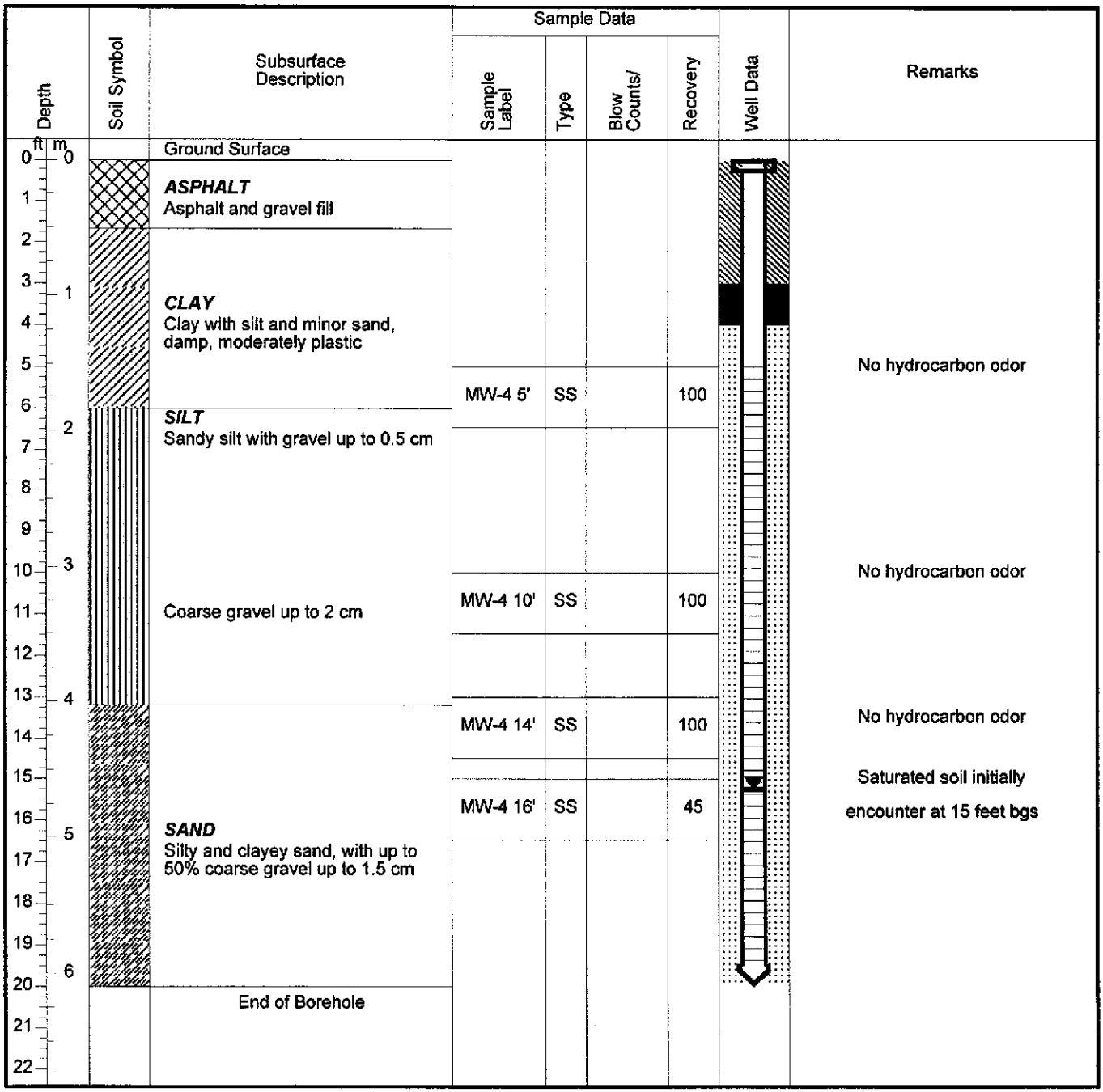
Sheet: 1 of 1

Project Name: FIDELITY

Client: M. UPSHAW

Location: YERBA BUENA AVE.

Log of Borehole: MW-4



Drill Date 7/15/99

Drill Method: HOLLOW AUGER

Total Depth: 20 ft.

Depth to Water: 15 ft.

Reviewed by: JPD

Logged by: PJM

All Environmental, Inc.
901 Moraga Road, Suite C
Lafayette, CA 94549
(800) 801-3224

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM					
Monitoring Well Number: MW-1					
Project Name: Fidelity Roof, Co				Date of Sampling: 8/5/99	
Job Number: 3119				Name of Sampler: PJM	
Project Address: 1075 40th Street, Oakland					
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				45.49	
Depth of Well				21.0	
Depth to Water				10.16	
Water Elevation				35.33	
Three Well Volumes (gallons)*					
2" casing: (TD - DTW)(0.16)(3)				5.2	
4" casing: (TD - DTW)(0.65)(3)					
6" casing: (TD - DTW)(1.44)(3)					
Actual Volume Purged (gallons)				7	
Appearance of Purge Water				Initially turbid – clears	
GROUNDWATER SAMPLES					
Number of Samples/Container Size				(2) 40 ml VOAS, 1-liter amber bottle	
Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments
	3	65.8		588	
	5	64.8		585	
	7	64.9		560	
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)					
Moderate hydrocarbon odor					

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: Fidelity Roof, Co	Date of Sampling: 8/5/99
Job Number: 3119	Name of Sampler: PJM
Project Address: 1075 40th Street, Oakland	

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	44.98
Depth of Well	21.0
Depth to Water	9.32
Water Elevation	35.66
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	5.61
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	7
Appearance of Purge Water	Slightly turbid

GROUNDWATER SAMPLES

Number of Samples/Container Size	(2) 40 ml VOAS, 1-liter amber bottle

Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments
	3	66.3		779	
	5	66.4		715	
	7	66.4		683	

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

No hydrocarbon sheen or odor

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: Fidelity Roof, Co	Date of Sampling: 8/5/99
Job Number: 3119	Name of Sampler: PJM
Project Address: 1075 40th Street, Oakland	

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	44.37
Depth of Well	21.0
Depth to Water	10.56
Water Elevation	33.81
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	5.01
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	7
Appearance of Purge Water	Clear

GROUNDWATER SAMPLES

Number of Samples/Container Size	(2) 40 ml VOAS, 1-liter amber bottle

Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments
	2.5	66.7		1090	
	4	67.0		1089	
	6	66.4		1122	

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

Strong hydrocarbon odor and sheen observed

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-4

Project Name: Fidelity Roof, Co	Date of Sampling: 8/5/99
Job Number: 3119	Name of Sampler: PJM
Project Address: 1075 40th Street, Oakland	

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	43.48
Depth of Well	20.0
Depth to Water	8.79
Water Elevation	34.69
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	5.38
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	6
Appearance of Purge Water	Clear

GROUNDWATER SAMPLES

Number of Samples/Container Size	(2) 40 ml VOAS, 1-liter amber bottle

Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments
	3	66.6		794	
	5	67.2		797	

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

No hydrocarbon odor or sheen

TD - Total Depth of Well
DTW - Depth To Water

APPENDIX C

LABORATORY ANALYTICAL AND CHAIN OF CUSTODY DOCUMENTATION

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

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549	Client Project ID: #3119; Fidelity	Date Sampled: 07/15/99
		Date Received: 07/15/99
	Client Contact: Peter McIntyre	Date Extracted: 07/15/99
	Client P.O:	Date Analyzed: 07/15/99

07/22/99

Dear Peter:

Enclosed are:

1). the results of **2** samples from your **#3119; Fidelity** 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 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

All Environmental, Inc.	Client Project ID: #3119; Fidelity	Date Sampled: 07/15/99
901 Moraga Road, Suite C		Date Received: 07/15/99
Lafayette, CA 94549	Client Contact: Peter McIntyre	Date Extracted: 07/15/99
	Client P.O:	Date Analyzed: 07/15/99

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

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

Lab ID	Client ID	Matrix	TPH(g)+	MTBE	Benzene	Toluene	Ethylben-zene	Xylenes	% Recovery Surrogate
15413	MW-4 @ 10'	S	ND	ND	ND	ND	ND	ND	97
15414	MW-4 @ 14'	S	ND	ND	ND	ND	ND	ND	97
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

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

cluttered chromatogram; sample peak coelutes with surrogate peak

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

DHS Certification No. 1644

Edward Hamilton, Lab Director

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

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549	Client Project ID: #3119; Fidelity	Date Sampled: 07/15/99
		Date Received: 07/15/99
	Client Contact: Peter McIntyre	Date Extracted: 07/15/99
	Client P.O:	Date Analyzed: 07/16-07/18/99

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

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

Lab ID	Client ID	Matrix	TPH(d)+	% Recovery Surrogate
15413	MW-4 @ 10'	S	ND	99
15414	MW-4 @ 14'	S	ND	99
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

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

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

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

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 925-798-1620 Fax: 925-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 07/15/99 Matrix: SOIL

Analyte	Concentration (mg/kg) Sample (#09971)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.000	2.213	2.245	2.03	109	111	1.4
Benzene	0.000	0.204	0.204	0.2	102	102	0.0
Toluene	0.000	0.212	0.214	0.2	106	107	0.9
Ethylbenzene	0.000	0.214	0.216	0.2	107	108	0.9
Xylenes	0.000	0.628	0.634	0.6	105	106	1.0
TPH(diesel)	0	303	299	300	101	100	1.3
TRPH (oil and grease)	0.0	19.5	19.8	20.8	94	95	1.5

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

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

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 925-798-1620 Fax: 925-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 07/16/99-07/17/99 Matrix: SOIL

Analyte	Concentration (mg/kg) Sample (#09538)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.000	2.238	2.141	2.03	110	105	4.4
Benzene	0.000	0.200	0.218	0.2	100	109	8.6
Toluene	0.000	0.208	0.228	0.2	104	114	9.2
Ethylbenzene	0.000	0.214	0.224	0.2	107	112	4.6
Xylenes	0.000	0.620	0.640	0.6	103	107	3.2
TPH(diesel)	0	296	293	300	99	98	0.8
TRPH (oil and grease)	0.0	23.5	23.1	20.8	113	111	1.7

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

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

ALL ENVIRONMENTAL, INC.
Environmental Engineering & Construction
901 Moraga Road, Suite C
Lafayette, CA 94549
(925) 283-6000 Fax: (925) 283-6121

CHAIN OF CUSTODY

15939 ZALE 48

PAGE 1 OF 1

TAT: RUSH / 24 hr / 48 hr / (5 day) / other

AEI PROJECT MANAGER: Peter McIntyre
PROJECT NAME: Fidelity
PROJECT NUMBER: 3119
TOTAL # OF CONTAINERS: 4
RCVD. GOOD CONDITION/COLD: [X] Y [ ] N

SAMPLE ID		DATE	TIME	MATRIX	TPH(g), BTEX, MTBE SOIL: EPA 5030/8015M, 8020 WATER: EPA 5030/8015m, 602	TPH(d) SOIL: EPA 5030/8015M WATER: EPA 5030/8015M	BTEX, MTBE SOIL: EPA 8020 WATER: EPA 602	TOTAL OIL & GREASE SOIL: EPA 413.1 or STD. 5520 D/E&F WATER: STD. 5520 E&F	VOLATILE HALOCARBONS SOIL: EPA 8010 WATER: EPA 601	VOCs SOIL: EPA 8240 WATER: EPA 624	SEMI-VOLATILE ORGANICS SOIL: EPA 8270/3550 WATER: EPA 625/3510	TOTAL LEAD (TTLC) SOIL: 6010 (ICP) WATER: 239.2 (AA)	LUFT 5 METALS SOIL: EPA 7130, 7190, 7191, 7520, 7950 WATER:				HOLD	# OF CONTAINERS
MW-4	5'	7/15	10:30	Soil													X	1
MW-4	10'	7/15	11:40	Soil	X	X												1
MW-4	14'	7/15	11:45	Soil	X	X												1
MW-4	16'	7/15	11:55	Soil													X	1
																		15412 H
																		15413
																		15414
																		15415 H

ICE/● ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATION APPROPRIATE ✓ CONTAINERS ✓

VOAs	O&G	METALS	OTHER

COMMENTS / INSTRUCTIONS

ANALYTICAL LABORATORY: McCampbell Analytical
ADDRESS:
PHONE (925) 798-1620 FAX ( )

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE
Peter McIntyre	Gina A Butler		
PRINTED NAME	PRINTED NAME	PRINTED NAME	PRINTED NAME
AEI	MTA		
COMPANY	COMPANY	COMPANY	COMPANY
DATE 7/15/99 TIME 2:50	DATE 7/15 TIME 2:50	DATE TIME	DATE TIME

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

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549	Client Project ID: #3119; Fidelity	Date Sampled: 08/05/99
		Date Received: 08/05/99
	Client Contact: Peter McIntyre	Date Extracted: 08/05/99
	Client P.O:	Date Analyzed: 08/05/99

08/12/99

Dear Peter:

Enclosed are:

1). the results of **4** samples from your **#3119; Fidelity** 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

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All Environmental, Inc.	Client Project ID: #3119; Fidelity	Date Sampled: 08/05/99
901 Moraga Road, Suite C		Date Received: 08/05/99
Lafayette, CA 94549	Client Contact: Peter McIntyre	Date Extracted: 08/05-08/06/99
	Client P.O:	Date Analyzed: 08/05-08/06/99

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

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

Lab ID	Client ID	Matrix	TPH(g)+	MTBE	Benzene	Toluene	Ethylben-zene	Xylenes	% Recovery Surrogate
16733	MW-1	W	160,c	ND<15	1.6	ND	0.56	1.1	---#
16734	MW-2	W	ND	600	ND	ND	ND	ND	106
16735	MW-3	W	31,000,a	ND<200	5400	150	1100	2300	105
16736	MW-4	W	ND	37	ND	ND	ND	ND	104
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

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

cluttered chromatogram; sample peak coelutes with surrogate peak

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

DHS Certification No. 1644

Edward Hamilton, Lab Director

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

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549	Client Project ID: #3119; Fidelity	Date Sampled: 08/05/99
		Date Received: 08/05/99
	Client Contact: Peter McIntyre	Date Extracted: 08/05-08/12/99
	Client P.O:	Date Analyzed: 08/06-08/12/99

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

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

Lab ID	Client ID	Matrix	TPH(d)+	% Recovery Surrogate
16733	MW-1	W	63,d/b	97
16734	MW-2	W	ND	104
16735	MW-3	W	5100,d	103
16736	MW-4	W	ND	99
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

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

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

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

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 925-798-1620 Fax: 925-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 08/05/99 Matrix: WATER

Analyte	Concentration (ug/L) Sample (#16610)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.0	100.6	102.4	100.0	100.6	102.4	1.8
Benzene	0.0	9.6	9.5	10.0	96.0	95.0	1.0
Toluene	0.0	9.8	9.7	10.0	98.0	97.0	1.0
Ethyl Benzene	0.0	10.0	10.0	10.0	100.0	100.0	0.0
Xylenes	0.0	30.3	30.4	30.0	101.0	101.3	0.3
TPH(diesel)	0.0	7641	7832	7500	102	104	2.5
TRPH (oil & grease)	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

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 925-798-1620 Fax: 925-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 08/06/99-08/07/99 Matrix: WATER

Analyte	Concentration (ug/L) Sample (#16610)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.0	101.6	99.8	100.0	101.6	99.8	1.8
Benzene	0.0	9.3	9.3	10.0	93.0	93.0	0.0
Toluene	0.0	9.5	9.5	10.0	95.0	95.0	0.0
Ethyl Benzene	0.0	9.6	9.7	10.0	96.0	97.0	1.0
Xylenes	0.0	28.7	29.1	30.0	95.7	97.0	1.4
TPH(diesel)	0.0	6889	7182	7500	92	96	4.2
TRPH (oil & grease)	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

16218 Tele Sunol

McCAMPBELL 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: Pete McIntyre Bill To: SAME
Company: AGI Environmental
Tele: (925) 283-6000 Fax: (925) 283-6121
Project #: 3119 Project Name: Fidelity
Project Location: Oakland
Sampler Signature:

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
MW-1		8/3/99		3	VOA	X						X		X
MW-2				3		X						X		X
MW-3				3		X						X		X
MW-4				3		X						X		X

Analysis Request	Other	Comments
BTEX & TPH as Gas (602/8020 + 8015) MTBE		16733
TPH as Diesel (8015)		16734
Total Petroleum Oil & Grease (5520 E&F/B&F)		16735
Total Petroleum Hydrocarbons (418.1)		16736
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		

Relinquished By:	Date:	Time:	Received By:
	8/3/99	5:00	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Remarks:

ICE/T ✓ PRESERVATION ✓
GOOD CONDITION ✓ APPROPRIATE
HEAD SPACE ABSENT ✓ CONTAINERS ✓

VOAS	O&G	METALS	OTHER
✓			