QUARTERLY GROUNDWATER MONITORING REPORT

625 Hegenberger Road Oakland, California

3/20196

Prepared For

Diversified Investment and Management Corp. 400 Oyster Point Blvd. Suite 415 South San Francisco, CA 94080

Prepared By

All Environmental, Inc. 2641 Crow Canyon Road, Suite 5 San Ramon, CA 94583

March 20, 1996

March 20, 1996

Mr. Barney Chan, Hazardous Materials Specialist Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway, Rm 250 Alameda, CA 94502-6577

RE: Quarterly Groundwater Monitoring Report First Quarter of 1996 625 Hegenberger Road Oakland, California

Dear Mr. Chan:

This report is submitted by All Environmental, Inc. (AEI) on the behalf of Diversified Investment and Management Corp., for the former fuel service station location at 625 Hegenberger Road, Oakland, California.

Summary of Activities

AEI measured the depth to ground water and collected water samples from six groundwater monitoring wells on January 8, 1996. The monitoring wells sampled included the five wells installed by Subsurface Consultant in 1989 and 1990, and the one well installed by Levine-Fricke in January of 1995. Well locations are shown in Figure 1. The sampling procedure for each monitoring well involved measuring water levels, purging the wells, and collecting a water sample.

The depth from the top of the well casing and the total well depth were measured prior to sampling with an electric water level indicator. The wells were purged and a groundwater sample was collected from each well using a disposable clean Teflon bailer. Temperature, pH, and turbidity were measured during the purging of the well. AEI removed 3 to 4 well volumes per well, and provided that the temperature, pH, and turbidity stabilized, a water sample was collected.

Water samples were poured slowly into laboratory-provided glass sampling containers, capped, and shipped on ice under proper chain of custody to McCampbell Analytical Inc. The samples were analyzed for Benzene, Toluene, Ethylbenzene, and Total Xylene (BTEX) by EPA Method 602, for Total Petroleum Hydrocarbons as gasoline (TPHg) by EPA Method 5030/8015, and for Total Petroleum Hydrocarbons as diesel and oil (TPHd and TPHo) by EPA Methods 3510/8015.

Corporate Headquarters:

March 20, 1996 Job No. 1286

Mr. Barney Chan, Hazardous Materials Specialist Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway, Rm. 250 Alameda, CA 94502-6577

96 HAR 22 AM IC: C FI

Subject:Soil Remediation Workplan &
Quarterly Groundwater Monitoring Report
625 Hegenberger Road, Oakland, California

Dear Mr. Chan:

We are enclosing one copy each of the above referenced reports for your review. If you have any questions or comments regarding the findings presented in these reports, please call me at (510) 820-3224.

Sincerely, ALL ENVIRONMENTAL, INC.

Bryan Campbell Project Geologist

Field Results

Groundwater elevation data are summarized in Table 1 and shown in Figure 1. The groundwater elevation contours and the groundwater flow directions are shown in Figure 1. A summary of field parameters measured during sampling is presented in Table 2.

No free product was encountered during monitoring activities. Groundwater levels for January 8, 1996 range from 2.07 to 2.87 feet below mean sea level (msl). These groundwater elevations were approximately 0.1 to 0.4 feet lower than the September 1994 levels (1.99 to 2.40 feet below msl).

The general direction of the groundwater flow at the time of measurement was west. The groundwater hydraulic gradient was approximately 0.004 ft/ft.

Groundwater Quality

Detectable concentrations of BTEX were found in the sample taken from well MW-12 for the first time in two years. Also, the results from a verification (labled VER) sample taken from well MW-8, were consistant with the results of the sample taken during the normal round of well monitoring. A summary of groundwater quality data, including available historic data, is presented in Table 3. Laboratory analysis data are presented in Appendix A.

Recommendations

AEI recommends continuing quarterly monitoring. TPHo concentrations were not detected and have either been low or not detected during the last two years. AEI recommends discontinuing monitoring for this compounds.

Please do not hesitate to call either of the undersigned, if you have any questions.

Sincerely

J. P. Deharke Project Manager

Michael Michael Carey Engineering Geologist, CE Enclosures



Table 1Groundwater Elevations625 Hegenberger Road, Oakland, California

		Well	Depth	Groundwater
		Elevation	to Water	Elevation
Well ID	Date	(ft msl)	(ft)	(ft msl)
MW-8	12/22/93	4.88	6.72	-1.84
MW-10	12/22/93	4.21	6.00	-1.79
MW-11	12/22/93	5.04	6,84	-1.80
MW-12	12/22/93	4.58	6.07	-1.49
MW-16	12/22/93	NA	7.48	NA
MW-8	6/30/94	4.88	6.55	-1.67
MW-10	6/30/94	4.21	5.79	-1,58
MW-11	6/30/94	5.04	6.73	-1.69
MW-12	6/30/94	4.58	6.06	-1.48
MW-16	6/30/94	NA	7.28	NA
MW-8	9/27/94	4.88	7.20	-2.32
MW-10	9/27/94	4.21	6.39	-2.18
MW-11	9/27/94	5.04	7,41	-2.37
MW-12	9/27/94	4.58	6.57	-1.99
MW-16	9/27/94	5.53	7.93	-2.40
MW-8	1/4/95	4.88	6.21	-1.67
MW-10	1/4/95	4.21	5.42	-1.58
MW-11	1/4/95	5.04	6.45	-1.69
MW-12	1/4/95	4.58	5.50	-1.48
MW-16	1/4/95	5.53	7.03	-1.50
MW-8	1/10/95	4.88	5.09	-2.32
MW-10	1/10/95	4.21	4.67	-2.18
MW-11	1/10/95	5.04	5.72	-2.37
MW-12	1/10/95	4.58	4.46	-1.99
MW-16	1/10/95	5.53	6.21	-2,40
MW-24	1/10/95	5.49	5.97	-0.48
MW-8	10/2/95	4,88	7.66	-2.78
MW-10	10/2/95	4.21	6.87	-2.66
MW-11	10/2/95	5.04	7.85	-2.81
MW-12	10/2/95	4,58	6.99	-2.41
MW-16	10/2/95	5.53	8.40	-2.87
MW-24	10/2/95	5.49	8.31	-2.82
MW-8	1/8/96	4,88	7.45	-2.57
MW-10	1/8/96	4.21	6.82	-2.61
MW-11	1/8/96	5.04	7.91	-2.87
MW-12	1/8/96	4.58	6.65	-2.07
MW-16	1/8/96	5.53	8.23	-2.70
MW-24	1/8/96	5.49	8.08	-2.59

Notes:

All well elevations are measured from the top of casing.

ft msl = feet above mean sea level

NA = not available

All well elevation data was extracted from past Levine-Fricke reports.

Table 2Water Quality Parameters625 Hegenberger Road, Oakland, California

Well ID	Date	Well Volume (gallons)	Volume Withdrawn (gailons)	Stabilized Temperature (deg. C)	Qualitative Tubidity
MW-8	12/22/93	1.5	4.50	19.40	turbid*
MW-10	12/22/93	1.6	7.00	20.80	moderately turbid
MW-11	12/22/93	1.5	4.50	20.20	turbid
MW-12	12/22/93	1.6	5.30	20.30	moderately turbid
MW-16	12/22/93	1.0	4.50	20.50	turbid
10100+10	12122133	1.1	4.50	20.50	turbiu
MW-8	6/30/94	1.5	8.00	21.00	turbid*
MW-10	6/30/94	1.6	6.00	21.00	turbid
MW-11	6/30/94	1.4	6.00	20.20	turbid
MW-12	6/30/94	1.6	6.00	20.60	moderately turbid
MW-16	6/30/94	1.1	4.50	21.80	turbid
MW-8	9/27/94	1,4	4.50	21.60	turbid*
MW-10	9/27/94	1.5	6.00	22.60	turbid
MW-11	9/27/94	1.3	3.00	21.00	turbid
MW-12	9/27/94	1.5	6.00	22.50	turbid
MW-16	9/27/94	1.0	3.00	22.60	turbid
MW-8	1/10/95	1.7	5,30	17.20	turbid*
MW-10	1/10/95	1.8	6.00	19.50	turbid
MW-11	1/10/95	1.6	5.30	18.60	turbid
MW-12	1/10/95	1.8	6.00	19.30	turbid
MW-16	1/10/95	1.2	6.00	19.30	turbid
MW-24	1/10/95	4.9	41.00	18.90	turbid
MW-8	10/2/95	1.1	11.00	22.80	moderately turbid
MW-10	10/2/95	1.5	11.00	22.60	turbid
MW-11	10/2/95	1.0	12.00	22.00	moderately turbid
MW-12	10/2/95	1.3	11.00	22.90	turbid
MW-16	10/2/95	1.1	11.00	22.60	turbid
MW-24	10/2/95	3.4	20.00	22.80	turbid
MW-8	1/8/96	1.1	12.00	17.30	slightly turbid
MW-10	1/8/96	1.5	10.00	17.90	slightly turbid
MW-10	1/8/96	1.0	5.50	17.60	slightly turbid
MW-12	1/8/96	1.2	10.00	18.00	slightly turbid
MW-16	1/8/96	0.9	5.00	19.00	slightly turbid
MW-24	1/8/96	3.4	35.00	17.60	slightly turbid

Notes:

* A slight hydrocarbon sheen was reported.

** At time of monitoring

Table 3 Historic Water Quality 625 Hegenberger Road, Oakland, California (concentrations reported in milligrams per liter), ppm

Well ID	Date	Consultant/ Lab		Benzene	Toluana		Ethyl- Benzana	Xylenes	TPHg	TPHd	TPHo	Tota Leat
PT 841 102			ntra n. Indi anti					· · · · · · · · · · · · · · · · · · ·	and a the set of parameters	i de l'acception en en experience		LOO
MW-8	(1)	SUB	(2)	3.7	BDL		0.29	0.69	NA	NA	NA	BDI
	5/28/93	HC/SUP		6.4	0.028		0.16	0.036	19	1	NA	(3)
	12/22/93	LF/AEN	(4)	16	5.9993	(5)	0.65	2.7	56	0.3	< 0.2	<0.0
	6/30/94	LF/AEN	(4)	11	4.8		2.2	8.2	41	< 0.5	0.5	< 0.0
	9/27/94	LF/AEN		8.5	0.26		1.6	5.3	28	0.62	< 0.2	<0.0
	1/10/95	LF/AEN		10	11		2.4	12	58	0.07	< 0.2	NA
	10/2/95	AEI/PEL		0.051	0.016		0.054	0.08	28	< 0.05	< 0.5	NA
	1/8/96	AEI/MAI		8.6	13		2.2	12	72	3.7	<0.25	NA
duplicate	1/8/96	AEI/MAI		7.2	9.5		1.6	8	62	NA	NA	NA
MW-10	(1)	SUB		0.0017	BDL		8DL	BDL	NA	NA	NA	BD
	5/28/93	HC/SUP		< 0.0003	< 0.0003		< 0.0003	< 0.0009	< 0.05	0.054	NA	(3)
	12/22/93	LF/AEN		< 0.0005	< 0.0007	(5)	< 0.0005	< 0.0002	< 0.05	0.58	< 0.2	< 0.0
	6/30/94	LF/AEN		< 0.0005	< 0.0005		< 0.0005	< 0.0002	< 0.05	< 0.05	0.6	< 0.0
	9/27/94	LF/AEN		< 0.0005	< 0.0005		< 0.0005	< 0.0002	< 0.05	0.61	< 0.2	< 0.0
	1/10/95	LF/AEN		< 0.0005	< 0.0005		< 0.0005	< 0.0002	< 0.05	0.6	<0.2	NA
	10/2/95	AEI/PEL		0.0044	0.0026		0.0023	0.0064	0.35	< 0.05	< 0.5	NA
	1/8/96	AEI/MAI		0.0058	0.0071		0.0012	0.0064	0.05	< 0.05	< 0.25	NA
MW-11	{1 }	SUB	(6)	0.053	BDL		BDL	BDL	NA	NA	NA	0.2
	5/28/93	HC/SUP		0.45	0.017		0.0015	0.0021	1.2	< 0.05	NA	(3)
	12/22/93	LF/AEN		4.5	0.0383	(5)	0.012	0.043	9.2	0.53	< 0.2	< 0.
	6/30/94	LF/AEN		1.5	0.013		0.69	1.2	8.8	< 0.05	1.1	<0.
duplicate	6/30/94	LF/AEN		1.7	0.014		0.73	1.3	9.7	NA	NA	NA
	9/27/94	LF/AEN		6.5	0.026		0.87	0.59	15	0.91	< 0.2	<0.
	1/10/95	LF/AEN		0.89	0.22		0.84	2,4	14	1,1	0.2	NA
	10/2/95	AEI/PEL		0.047	0.0057		0.011	0.036	7.1	< 0.05	< 0.5	NA
	1/ 8/96	AEI/MAI		1.2	0.099		0.79	1.4	12	2	< 0.25	NA
MW-12	(1)	SUB		0.0017	BDL		BDL	BDL	NA	NA	NA	BD
	5/28/93	HC/SUP		< 0.0003	< 0.0003		< 0.0003	< 0.0009	< 0.05	< 0.05	NA	(3)
	12/22/93	LF/AEN		< 0.0005	< 0.0007	(5)	< 0.0005	< 0.0002	0.05	0.3	< 0.2	< 0.
	6/30/94	LF/AEN		< 0.0005	< 0.0005		< 0.0005	< 0.0002	< 0.05	< 0.05	0.4	< 0.
	9/27/94	LF/AEN		< 0.0005	< 0.0005		< 0.0005	< 0.0002	< 0.05	0.4	< 0.2	< 0.
duplicate	9/27/94	LF/AEN		< 0.0005	< 0.0005		< 0.0005	< 0.0002	< 0.05	NA	NA	NA
	1/10/95	LF/AEN		< 0.0005	< 0.0005		< 0.0005	< 0.0002	< 0.05	0.3	< 0.2	NA
	10/2/95	AEI/PEL		< 0.0005	< 0.0005		< 0.0005	< 0.0005	< 0.05	< 0.05	< 0.5	NA
	1/8/96	AEI/MAI		0.0024	0.0027		0.00054	0.0028	< 0.05	< 0.05	< 0.25	N
MW-16	(1)	SUB	(7)	BDL	BDL		BDL	BDL	NA	NA	NA	BD
14144-10	(1) 5/28/93	HC/SUP	0	0.0028	< 0.0003		< 0.0007	< 0.0009	< 0.05	< 0.05	NA	(3)
	12/22/93	LF/AEN		< 0.0028	< 0.0003	(5)	< 0.0007	< 0.0002	2.2	0.52	<0.2	<0.
	6/30/94	LF/AEN		0.008	< 0.0005	(3)	< 0.0005	< 0.0002	< 0.05	< 0.05	0.9	< 0.
	9/27/94	LF/AEN		0.008	< 0.0005		< 0.0005	< 0.0002	0.07	0.59	< 0.2	<0.
	1/10/95	LF/AEN		0.19	< 0.0005		< 0.0005	< 0.0002	0.3	0.7	< 0.2	N/
	10/2/95	AEI/PEL		0.0077	0.0007		0.0035	0.013	0.55	< 0.05	< 0.5	N/
	1/8/96	AEI/MAI		< 0.0005	< 0.0005		0.004	0.0097	0.36	0.14	. <0.25	N
MW-24		I E/A EN		12	1.9		1_1	1.3	31	0.9	0.2	N
duplicate	1/10/95 1/10/95	LF/AEN LF/AEN		12	2		1.1	1.3	31	0.8	0.2	N/
adhirogra	10/2/95	AEI/PEL		0.044	0.011		0.012	0.04	8.6	< 0.05	< 0.5	N
	1/8/96	AEI/MAI		8.8	0.14		0.5	0.2B	22	1.5	< 0.25	N
Planks												
Blanks Frie Black	E (20 /0.2	HCIEUR		< 0.0003	< 0.0003		< 0.0003	< 0.0009	< 0.05	NA	NA	BC
Trip Blank	5/28/93	HC/SUP		< 0.0003				< 0.0009	< 0.05	NA	NA	(3
AW-12-88	12/22/93	LF/AEN			0.0007 NA		<0.0005 NA	< 0.0002 NA	NA	NA	NA	<0.
4W-16-BB	12/22/93	LF/AEN		NA <0.0005	NA < 0.0005		<0.0005	< 0.0002	< 0.05	NA	NA	<0.
/W-12-BB /W-12-BB	6/30/94 9/27/94	LF/AEN					< 0.0005	< 0.0002	< 0.05	NA	NA	N/
		LF/AEN		< 0.0005	< 0.0005		< 0.0005	< 0.0002	< 0.05	NA	NA	N
Frip Blank	9/27/94	LF/AEN		< 0.0005	< 0.0005		< 0.0005	< 0.0002	< 0.05	004	11/2	N

Table 3 Historic Water Quality 625 Hegenberger Road, Oakland, California (concentrations reported in milligrams per liter)

<u>Notes</u>

BDL	below detection limit
NA	not analyzed
TPHd	total petroleum hydrocarbons as diesel
TPHg	total petroleum hydrocarbons as gasolina
TPHo	total petroleum hydrocarbons as oil
AEN	American Environmental Networks, Pleasant Hill, California
HC .	HartCrowser, San Francisco, California
LF	Levine Fricke, Emeryville, California
SUB	Subsurface Consultants, Oakland, California
SUP	Superior Analytical Laboratories, Martinez, California
AEI	All Environmental, Inc., San Ramon, California
PEL	Priority Analytical Laboratories, Milpitas, California
MAI	McCampbell Analytical Inc., Pacheco, California
(1)	Date of groundwater sampling unavailable.
(2)	18 mg/ total volatile hydrocarbons also detected
(3)	All May 1993 samples also analyzed for total organic lead (DHS Method). The compound was not detected
	above the detection limit of 4 mg/l.
(4)	A slight hydrocarbon sheen was observed on the surface of the well water.
(5)	Toluene detection for 22-Dec-93 were qualified using 0.0007 mg/l as a baseline.
	The bailer blank (MW-12-BB) contained toluene at 0.0007 mg/l.
(6)	0.24 mg/i total volatile hydrocarbons also detected
(7)	0.38 mg/l total volatile hydrocarbons also detected

All Environme 2641 Crow Car	,	Client Pro Investments	ject ID: #	1286; Dive		ate Sampled ate Receive		1			
San Ramon, C	A94583	Client Cont	act: Joe Dura	ake	D	Date Extracted: 01/08-01/09/96 Date Analyzed: 01/08-01/09/96					
		Client P.O:		· ·	D						
EPA methods 503	Gasoline Rai 30, modified 8015, an	• •	-								
Lab ID	Client ID	Matrix	TPH(g) ⁺	Benzene	Toluene	Ethylben- zene	Xylenes	% Rec. Surrogat			
60299	MW-8	w	72,000,a	8600	13,000	2200	12,000	104			
60300	MW-10	w	50,a	5,8	7.1	1.2	6.4	106			
60301	MW-11	w	12,000,a	1200	99	790	1400	104			
60302	MW-12	w	ND	2.4	2.7	0.54	2.8	103			
60303	MW-16	W	360,c	ND	ND	4.0	9.7	96			
60304	MW-24	w	22,000,a	8800	140	500	280	103			
Reporting L	imit unless othe	r- W	50 ug/L	0.5	0.5	0.5	0.5				
wise stated; I tected above	Reporting Limit unless other vise stated; ND means not de ected above the reporting lim	e- nit S	1.0 mg/kg	0.005	0.005	0.005	0.005				

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

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_Edward Hamilton, Lab Director

· · · ·		•	t ID: # 1286; Diver	sified Date Sampled: 01	/08/96
2641 Crow Car	nyon Rd., # 5	Investments		Date Received: 0	1/0 8 /96
San Ramon, C	A94583	Client Contact	: Joe Durake	Date Extracted: 0	1/08/96
		Client P.O:	·	Date Analyzed: 0	1/08/96
				Hydrocarbons as Diesel & method GCFID(3550) or GCF	
Lab ID	Client ID	Matrix	TPH(d) ⁺	TPH(mo) ⁺	% Recover Surrogate
60299	MW-8	w	3700,d	ND	104
60300	MW-10	w	ND	ND	105
60301	MW-11	w	2000,d	ND	106
60302	MW-12	w	ND	ND	105
60303	MW-16	w	140,b	ND	105
60304	MW-24	W	1500, d	ND	106
Reporting L	imit unless other	- W	50 ug/L	250 ug/L	
wise stated: 1	vise stated; ND means not de- ected above the reporting limit	;_	1.0 mg/kg	5.0 mg/kg	

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

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QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/08/96

Matrix: Water

Analyte	Concent	ration	(ug/L)		* Reco	very		
	Sample (#60280) 	MS	MSD	Amount Spiked	MS	MSD	RPD	
TPH (gas)	0.0	100.1	99.0	100	100	99	1.1	
Benzene Toluene	0	9.90	9.80	10	99.0	98.0	1.0	
	0	10.10	10.10	10	101.0	101.0	0.0	
Ethyl Benzene	0	10.10	10.00	10	101.0	100.0	1.0	
Xylenes	0 	30.90	30.10	30	103.0	100.3	2.6	
TPH (diesel)	0	154	153	150	103	102	0.8	
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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

 $RPD = (MS - MSD) / (MS + MSD) \times 2 \times 100$

	McC.	AMPB					AL	,	<u></u>					<u> </u>		C	H	ΔΤ	N	(זר	 ר		TT	ar		50 ND	601		<u>911</u> PE(EX9 CORD
	JOE DURAK		ECO, C/	A 94	# D7 553		FAX	(5	10)	79	8-	162	2	τι	JRN			D	TIM	Ęı.	١	ะ มาร] SH	ź	24)]]UR	4	<u>[]</u> ۲ 8		
					<u> </u>								-		T T	٥T		<u>AN</u>	ALY	<u>212</u>	T RI	<u>u</u> T	ES	T T	<u> </u>	<u> </u>			THE	R	
2691 50-50 TELE: 570 - 5 PROJECT N	ALL ENVIRON CROW CAT N RAMON 320-3224 JMBER: 1286 DCATION: OAELA	<u>_yen</u> <u>C</u> A	Rd 945 FAX H PROJE	51 83 570- CT N	e 5 838 AME: _Î IGNA 1	-21 706	68	7 1E1	60	En En		Ens		ŝ		Grease (5520 E4F/5520 B4F)	IOLAL FEITOREUM HYCHTOCATHOONS (418.1) EPA 601/0010			- PCBs Chiy				taat Metais	2/6010)						COMMENTS
SAMPLE ID	LOCATION		PLING TIME	DITAINERS	TYPE CONTAINERS	VATER	м			_	PRES	HOD	:D	X & TPH O	THP as Diesel (8015) LJ/M	tal retroleun DL	EPA 601/2010	A 602/8020	EPA 608/8080	608/8080	A 424/8240/8260	EPA 625/8270	H - 17 Hetals	A - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	URGANIC LEAD					
MW-8		1/8/90		4	<u> </u>	k	8	-		╀	<u> </u>		╬			<u> </u>	2 8	8	6	8	\$		₹	5	<u> </u>	ă	<u>¥</u>			┟┈╂	
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All Environm	ental, Inc.	Client Proje	ect ID: Div. I	nv., Oaklan	d	Date Sampled	l: 01/ 22/9 6	
2641 Crow Ca	anyon Rd., # 5				ľ	Date Receive	d: 01/31/96	
San Ramon, G	CA94583	Client Cont	act: Joe Dura	ake		Date Extracte	d: 01/31/96	5
		Client P.O:			_	Date Analyze	d: 01/31/96	;
EPA methods 50	Gasoline Ran 30, modified 8015, and							
Lab ID	Client ID	Matrix	TPH(g) ⁺	Benzene	Toluen	Ethylhon	Xylenes	% Rec. Surrogate
61010	VER	w	62,000,a	7200	9500	1600	8000	100
							-	
	-							
Reporting	Limit unless other ND means not de	- w	50 ug/L	0.5	0.5	0.5	0.5	
	the reporting lim		1.0 mg/kg	0.005	0.005	0.005	0.005	

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

C1

Edward Hamilton, Lab Director

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

All Environmental, Inc.	Client Proje	ct ID: Div. Inv., Oakland	Date Sampled: 01/22/96
2641 Crow Canyon Rd., # 5			Date Received: 01/31/96
San Ramon, CA94583	Client Cont	act: Joe Durake	Date Extracted: 02/01-02/02/96
	Client P.O:		Date Analyzed: 02/01-02/02/96
Total Recoverable Petroleum	Hydrocarbor	ns as Oil & Grease (with Silica	Gel Clean-up) by Scanning IR Spec-
EPA method 418.1 or 9073; Standard	Methods 5520 C	trometry* &F	
Lab ID Client ID	Matrix	TRPH ⁺	
61010 VER	w	6.4	
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			· · · · · · · · · · · · · · · · · · ·
Reporting Limit unless othe	r- W	1.0 mg/L	, ,
wise stated; ND means not d tected above the reporting lir	e- nit S	10 mg/kg	

* water samples are reported in mg/L and soils in mg/kg

surrogate diluted out of range

+ At the laboratory's discretion, one positive sample may be run by direct injection chromatography with FID detection. The following comments pertain to this GC result: a) gasoline-range compounds (C6-C12) are present; b) diesel range compounds (C10-C23) are present; c) oil-range compounds (> C18) are present; d) other patterned solvent (?); e) isolated peaks; f) GC compounds are absent or insignificant relative to TRPH inferring that complex biologically derived molecules (lipids?) are the source of IR absorption; h) a lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

DHS Certification No. 1644

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Edward Hamilton, Lab Director

QC REPORT FOR HYDROCARBON ANALYSES

Date:

01/30/96-01/31/96

Matrix: Water

	Concent	ration	(ug/L)		* Reco	very	
Analyte	Sample			Amount			RPD
 	(#60731)	MS	MSD	Spiked	MS	MSD	ļ
TPH (gas)	0.0	104.4	105.5	100			
Benzene	i			100	104	105	1.0
-	0	10	10	10	98.0	103.0	5.0
Toluene	0	10	11	10	100.0	106.0	5.8
Ethyl Benzene) 0	10	11	10	101.0	107.0	5.8
Xylenes	0	31	33	30	103.3		5.9
TPH (diesel)	0	138	144	150	92	96	4.2
TRPH (oil & grease)	0	24300	24900	23700	103	105	2.4
	l						

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

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

QC REPORT FOR HYDROCARBON ANALYSES

Date:

02/01/96-02/02/96

Matrix: Water

Analyte	Concent Sample	ration	(ug/L)	Amount	* Reco	very	
 	(#60904)	MS	MSD	Spiked	MS	MSD	RPD
TPH (gas)	0.0	107.5	105.4	100	108	105	2.0
Benzene Toluene		9	10	10	94.0	96.0	2.1
Ethyl Benzene	0	10	10	10	100.0	97.0	3.0
Xylenes	-	10	10	10	95.0	97.0	2.1
	0	28	29	30	94.7	96.3	1.7
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	0	25400	25400	23700	107	107	0.0
(oil & grease)						207	0.0

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

 $RPD = (MS - MSD) / (MS + MSD) \times 2 \times 100$

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Monitoring Well Number: MW-8

Project Name	Hegenberger	
Job Number	1286	
Project Address	625 Hegenberger Road	
	Oakland, California	
Date of Sampling	1/08/96	
Name of Sampler	Dusty Roy	

2"
4.88
7.45
-2.57
12
Grayish (1st gallon), then yellow/green.
-

GROUNDWATER SAMPLES				
Number of Samples/Container Size	3 x 40 ml VOA's; 1 x 1 liter			
Groundwater Temp/pH/Conductivity #1:	63.2/6.74/603			
Groundwater Temp/pH/Conductivity #1:				
Groundwater Temp/pH/Conductivity #3:				
Appearance of Groundwater Samples	Almost Clear			
COMMENTS (i.e., sample odor	, well recharge time & percent, etc.)			
Fast recharge.	· · · · · · · · · · · · · · · · · · ·			

Monitoring Well Number: MW-10

Project Name	Hegenberger	
Job Number	1286	
Project Address	625 Hegenberger Road	
	Oakland, California	
Date of Sampling	1/08/96	
Name of Sampler	Dusty Roy	

MONITORIN	IG WELL DATA
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade Type and Condition	
Well Cap & Lock OK/Replace	
Elevation of Top of Casing	4.21
Depth of Well	
Depth to Water	6.82
Water Elevation	-2.61
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)	10
Appearance of Purge Water	Grayish (1st gallon), then yellow/green.

GROUNDWATER SAMPLES

Number of Samples/Container Size	3 x 40 ml VOA's; 1 x 1 liter
Groundwater Temp/pH/Conductivity #1:	64.2/6.62/5310
Groundwater Temp/pH/Conductivity #2:	
Groundwater Temp/pH/Conductivity #3:	
Appearance of Groundwater Samples	Yellowish green.
COMMENTS (i.e., sample odor	; well recharge time & percent, etc.)
Fast recharge. Sulfur odor.	

Monitoring Well Number: MW-11

Project Name	Hegenberger
Job Number	1286
Project Address	625 Hegenberger Road
	Oakland, California
Date of Sampling	01/08/96
Name of Sampler	Dusty Roy

MONITORI	NG WELL DATA
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade Type and Condition	
Well Cap & Lock OK/Replace	
Elevation of Top of Casing	5.04
Depth of Well	
Depth to Water	7.91
Water Elevation	-2.87
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)	5.5
Appearance of Purge Water	Olive green.

GROUNDWATER SAMPLES

Number of Samples/Container Size	3 x 40 ml VOA's; 1 x 1 liter
*	
Groundwater Temp/pH/Conductivity #1:	63.7/6.65/885
Groundwater Temp/pH/Conductivity #2:	
Groundwater Temp/pH/Conductivity #3:	
Appearance of Groundwater Samples	Almost Clear
COMMENTS (i.e., sample odor	r, well recharge time & percent, etc.)
Fast recharge. Sulfur odor. Pumped dry a	at 5.5 gallons.

Monitoring Well Number: MW-12

Project Name	Hegenberger	
Job Number	1286	
Project Address	625 Hegenberger Road	
	Oakland, California	
Date of Sampling	01/08/96	
Name of Sampler	Dusty Roy	

MONITORING WELL DATA						
Well Casing Diameter (2"/4"/6")	2"					
Seal at Grade Type and Condition						
Well Cap & Lock OK/Replace						
Elevation of Top of Casing	4.58					
Depth of Well						
Depth to Water	6.65					
Water Elevation	-2.07					
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)	10					
Appearance of Purge Water	Grayish (1st 2 gallons) then yellow/green.					

GROUNDWATER SAMPLES

Number of Samples/Container Size	3 x 40 ml VOA's; 1 x 1 liter
Groundwater Temp/pH/Conductivity #1:	64.4/6.49/1955
Groundwater Temp/pH/Conductivity #2:	
Groundwater Temp/pH/Conductivity #3:	
Appearance of Groundwater Samples	Light yellowish green.
COMMENTS (i.e., sample odor	, well recharge time & percent, etc.)
Fast recharge. Sulfur odor.	

Monitoring Well Number: MW-16

Project Name	Hegenberger	
Job Number	1286	
Project Address	625 Hegenberger Road	
	Oakland, California	
Date of Sampling	01/08/96	
Name of Sampler	Dusty Roy	

MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade Type and Condition	
Well Cap & Lock OK/Replace	
Elevation of Top of Casing	5.53
Depth of Well	
Depth to Water	8.23
Water Elevation	-2.70
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)	5
Appearance of Purge Water	Dark yellowish green.

GROUNDWATER	SAMPLES

Number of Samples/Container Size	3 x 40 ml VOA's; 1 x 1 liter
Groundwater Temp/pH/Conductivity #1:	66.2/7.50/2180
Groundwater Temp/pH/Conductivity #2:	
Groundwater Temp/pH/Conductivity #3:	
Appearance of Groundwater Samples	Yellowish Green
COMMENTS (i.e., sample odor,	, well recharge time & percent, etc.)
Hand bailed. Fast recharge. Sulfur odor.	

Monitoring Well Number: MW-24

Project Name	Hegenberger	
Job Number	1286	
Project Address	625 Hegenberger Road	
	Oakland, California	
Date of Sampling	01/08/96	
Name of Sampler	Dusty Roy	

MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade Type and Condition	
Well Cap & Lock OK/Replace	
Elevation of Top of Casing	5.49
Depth of Well	
Depth to Water	8.08
Water Elevation	-2.59
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)	35
Appearance of Purge Water	

GROUNDWATER SAMPLES

GROUIDIA	
Number of Samples/Container Size	3 x 40 ml VOA's; 1 x 1 liter
Groundwater Temp/pH/Conductivity #1:	63.7/6.67/782
Groundwater Temp/pH/Conductivity #2:	
Groundwater Temp/pH/Conductivity #3:	
Appearance of Groundwater Samples	Almost clear.
COMMENTS (i.e., sample odor	, well recharge time & percent, etc.)
Fast recharge. Sulfur odor.	