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LETTER OF TRANSMITTAL

June 21, 2000

To: Ms. Susan Hugo

Alameda County Environmental Health Services

1131 Harbor Bay Parkway, 2nd Floor

Alameda, CA 94608

Enclosed:

June 2000 Quarterly Monitoring Report Former Berkeley Farms Truck Shop and Yard 4575 San Pablo Avenue Emeryville, CA

geo - logic geotechnical and environmental consulting services | 1140 - 5th Avenue, Crockett, CA 94525 (510) 787-6867 - Fax (510) 787-1457

GL-97-110.R13 Paradiso Job No. 1103-02 June 21, 2000

Mr. Pat Roland Berkeley Farms 25500 Clawiter Road Hayward, California

RE:

2nd Quarter 2000 Monitoring and Sampling Report for Former Berkeley Farms Truck Repair Shop and Yard 4575 San Pablo Avenue, Emeryville, California 94608

Mr. Roland:

This report presents the results of the second quarter 2000 monitoring and sampling of the wells at the subject site. During this quarter, the three wells were monitored and sampled on June 6, 2000. The work during this quarter was performed in compliance with the guidelines established Regional Water Quality Control Board (RWQCB), and the Alameda County Department of Environmental Health (ACDEH).

SITE DESCRIPTION AND BACKGROUND

The subject site is located on the western side of San Pablo Avenue between 45th and 47th Streets in Emeryville, California, and formerly contained a service station facility at the southern portion of the property. Until 1998, the site operated as a truck repair shop and yard for Berkeley Farms. A Site Plan (Figure 1) is attached to this report.

Geo-Logic's previous work at the site includes sampling during overexcavation of a waste oil tank at the northern end of the property. This work is summarized in Geo-Logic's reports (GL-97-110.R1 and GL-97-110.R2), both dated February 10, 1998.

Following this work, installation of three monitoring wells was proposed (workplan/proposal GL-98-110, dated November 15, 1997). The wells were installed in February, 1998. This work, including the results of the first quarter of monitoring and sampling, was documented in Geo-Logic's report (GL-97-110.R3) dated March 7, 1998.

In April and May, 1998, a former service station fuel tank pit at the southern portion of the site was extensively overexcavated. This work, and the results of the second quarter of monitoring and sampling, was documented in Geo-Logic's report (GL-97-110.R4) dated June 9, 1998.

On September 5, 1998, as discussed in a prior meeting with Ms. Susan Hugo of the ACDEH, ORC filter socks were placed in monitoring wells MW2 and MW3. ORC is a insoluble solid peroxygen consisting of magnesium peroxide which has been formulated to release oxygen at a controlled rate when hydrated. The purpose of the ORC in wells MW2 and MW3 was to enhance conditions for the natural biodegradation of petroleum hydrocarbons. Prior to installation of the ORC, baseline measurements of dissolved oxygen in groundwater (DO) were taken. With the concurrence of MS. Susan Hugo of the ACDEH, the ORC was removed from well MW2 on February 5, 1999.

On July 30, 1999, well MW1, damaged during construction, was properly abandoned, and replacement well MW1A was constructed, developed, and initially sampled. This work was documented in Geo-Logic's report (GL-97-110.R9) dated August 12, 1999.

RECENT FIELD ACTIVITIES

Wells MW1A, MW2 and MW3 were monitored and sampled during this quarter on June 6, 2000. Prior to sampling, the wells were checked for depth to water, and the presence of free product and sheen. No free product or sheen was noted in any of the wells. Monitoring data collected this quarter is summarized in Table 1. Water samples were then collected by the use of a clean Teflon bailer. The samples were decanted into clean VOA vials and/or one-liter amber bottles, as appropriate, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory.

HYDROLOGY

On June 6, 2000, the measured depth to ground water in the three monitoring wells varied between 7.15 and 8.42 feet below the tops of the well casings. Since last quarter, the elevation of ground water in the wells has decreased between 2.87 and 3.56 feet. The calculated ground water flow direction at the site on June 6, 2000, was to the west, as shown on the attached Potentiometric Surface Map, Figure 1. The hydraulic gradient at the site on June 6, 2000, was approximately 0.016.

ANALYTICAL RESULTS

Water samples from the three wells were analyzed at McCampbell Analytical, Inc., in Emeryville, California. All samples analyzed were accompanied by properly executed Chain of Custody documentation. The samples were analyzed for TPH as gasoline and TPH as diesel by EPA method 8015, and benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA method 8020. In addition, the sample collected from MW2, located in the downgradient vicinity of a former waste oil tank, was analyzed for TPH as Motor Oil by EPA Method 8015-modified.

The concentrations of TPH as gasoline, benzene, and TPH as diesel detected in the ground water samples collected June 6, 2000, are shown on the attached Figure 2. The results of the water analyses are summarized in Table 2. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

DISTRIBUTION

A copy of this report should be sent to Ms. Susan Hugo of the ACDEH.

LIMITATIONS

Environmental changes, either naturally occurring or artificially induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants. Our studies assume that the field and laboratory data are reasonably representative of the site as a whole, and assume that subsurface conditions are reasonably conducive to interpolation and extrapolation.

The results of this work are based on the data obtained from the field and laboratory analyses obtained from a state-certified laboratory. We have analyzed these data applicable we believe to be currently using what engineering techniques and principles in the Northern California region. We make no warranty, either expressed regarding the above, including laboratory implied, analyses, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

If you have any questions regarding this report, please do not hesitate to call me at (510) 787-6867.

Sincerely,

Geo-Logic

Joel G. Greger, C.E.G.

Certified Engineering Geologist

License No. EG 1633 Exp. Date 8/31/2000

Attachments:

Tables 1 and 2 Figures 1 and 2

Laboratory Analyses and

Chain of Custody documentation

Jore 6. Greger No. 56 1633 Certified Engineering

TABLE 1
SUMMARY OF GROUND WATER MONITORING AND PURGING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)∳	Total Well Depth (feet)*	Product Thickness (feet)	Sheen	Water Purged (gallons)							
WC11 #			impled on Ju			(90220110)							
	(MODI COI	red and sa	mbred ou n	ine 6, 200	<u>,,,</u>								
MW1A	33.59	8.42	16.93	0	No	0							
MW2	32.46	8.32	16.53	0	No	0							
MW3	33.93	7.15	16.58	0	No	0							
	(Monitor	ed and Sa	mpled on Ma	arch 6, 20	000)								
MW1A	36.46	5.55	16.93	0	No	8							
MW2	35.77	5.01	16.54	0	No	8							
ЕWМ	37.49	3.59	16.58	0	No	8							
(Monitored and Sampled on <u>December 8, 1999</u>)													
MW1A	32.95	9.06	16.93	0	No	8							
MW2	31.87	8.91	16.55	0	No	8							
KW3	32.57	8.51	16.58	0	No	8							
	(Monitor	red and Sa	umpled on <u>Se</u>	eptember 6	<u>, 1999</u>)								
MW1A	32.92	9.88	16.94	0	No	8							
MW2	32.16	8.62	16.55	0	No	8							
MW3	32.88	8.20	16.59	0	No	8							
	(Monitor	ed and Sa	impled on <u>Ju</u>	ne 7, 199	<u>9</u>)								
MW1		(We	ell inacces	sible, dam	naged)								
MW2	32.65	8.13	16.55	0	No	8							
MW3	33.57	7.51	16.61	0	No	8							
	(Monitor	red and Sa	mpled on Ma	arch 4, 19	99)								
MW1		(We	ell inaccess	sible, dam	aged)								
MW2	35.28	5.5	16.56	o o	No	8							
MW3	35.85	5.23	16.60	0	No	8							

TABLE 1 - (Continued)

SUMMARY OF GROUND WATER MONITORING AND PURGING DATA

	(Monitored	and Sample	ed on <u>Nover</u>	mber 17, 19	98)							
MW1	32.95	9.06	16.59	0	No	7						
MW2	31.73	9.05	16.55	0	No	7						
MW3	33.09	7.99	16.61	0	No	7						
	(Monitored	and Sample	ed on <u>Augu</u> s	st 21, 1998	<u>1</u>)							
MW1	35.51	7.84	16.60	0	No	7						
MW2		8.61	16.56	0	No	7						
MW3		6.27	16.61	0	No	7						
(Monitored and Sampled on <u>June 3, 1998</u>)												
MW1	35.51	6.50	16.60	0	No	8						
	34.17	6.61	16.57	0	No	8						
MW3	35.42	5.66	16.62	0	No	8						
	(Monitored	and Sampl	ed on <u>Febr</u>	uary 27, 19	998)							
MW1	37.51	4.50	16.61	0	No	8						
MW2	35.61	5.17	16.58	0	No	8						
MW3	37.28	3.80	16.63	0	No	8						
	(Monitore	d and Devel	loped on <u>Fe</u>	ebruary 24,	1998)							
MW1	37.57	4.44	16.59	0	No	24						
MW2	35.69	5.09	16.58	0	No	21						
MW3	37.38	3.70	16.62	0	No	25						

	Top of Casing Elevation*
Well #	<u>(feet)</u>
MW1A	42.01
MW2	40.78
MW3	41.08

- ♦ Depth to water and total well depth measurements are taken from the top of the well casings.
- * The elevation of the tops of the well casings have been surveyed relative to City of Oakland Benchmark No. 241.

TABLE 2
SUMMARY OF LABORATORY ANALYSES
WATER

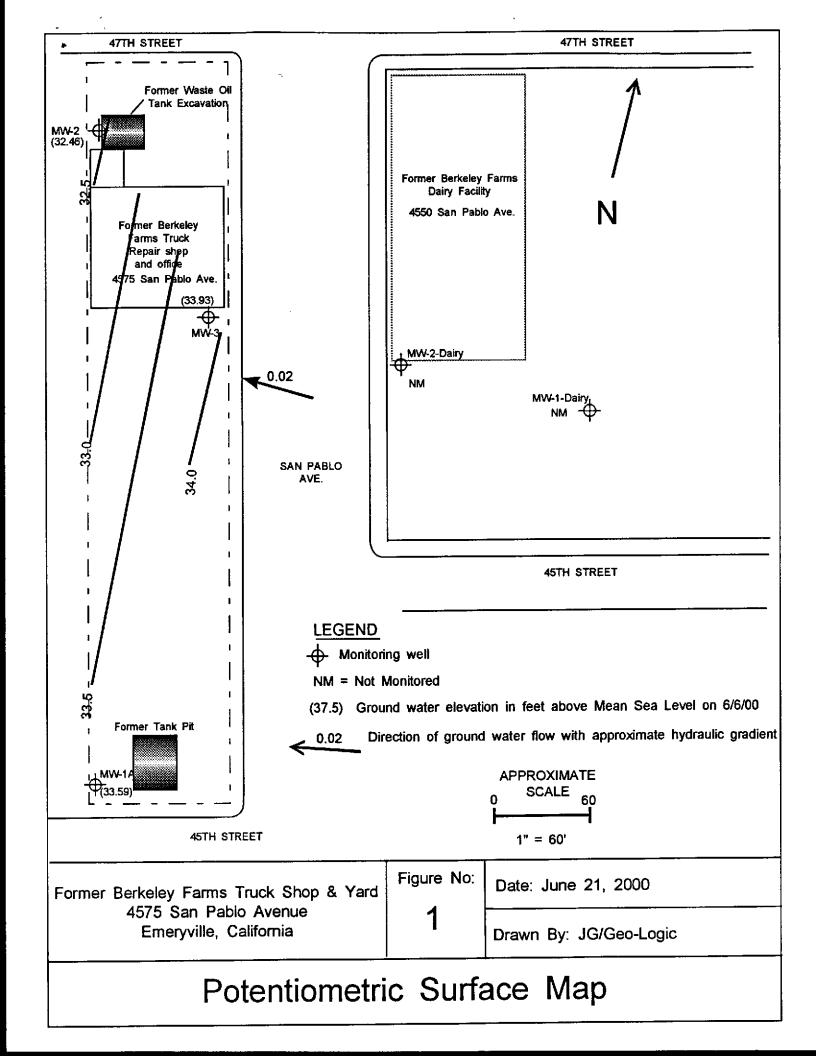
	ample umber	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl benzene	Xylenes
6/6/00	MW1A	630	2,400	270	9.5	79	27
3/6/00	MW1A	2,100	13,000	560	<20	640	1,200
12/8/99	MW1A	310	1,200	93	1.8	48	53
9/6/99	MW1A	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5
8/6/99	MWlA	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5
6/7/99	MW1		(Well	inaccessi	ole, damaged	d)	
3/4/99	MW1	•	(Well	inaccessil	ole, damage	d)	
11/17/98	MW1	88,000	29,000	2,300	3,000	3,600	3,100
8/21/98	MW1+	96,000	38,000	1,700	1,000	2,400	3,300
6/2/98	MW1	105,000	34,000	1,900	1,600	2,400	3,500
2/27/98	MW1	81,000	27,000	2,200	910	1,700	2,700
6/6/00	MW2	- <50	<50	<0.5	<0.5	<0.5	<0.5
3/6/00	MW2	<50	<5.0	<0.5	<0.5	<0.5	<0.5
12/8/99	MW2	<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/6/99	MW2	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5
6/7/99	MW2	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5
3/4/99	MW2	<50	<5.0	<0.5	<0.5	<0.5	<0.5
11/17/98	MW2	4,300	260	190	420	470	600
8/21/98	MW2+	1,900	<5.0	<0.5	<0.5	220	400
6/2/98	MW2	7 , 600	60	220	510	800	1,100
2/27/98	MW2	14,000	<5.0	<0.5	120	460	730
6/6/00	MW3	<50	<50	<0.5	<0.5	<0.5	<0.5
3/6/00	MW3	<50	<5.0	<0.5	<0.5	<0.5	<0.5
12/8/99	MW3	<50	<5.0	<0.5	<0.5	<0.5	<0.5
9/6/99	EWM	<5]. 0	<5.0	<0.5	<0.5	<0.5	<0.5
6/7/99	MW3	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5
3/4/99	MW3	<5∴0	<5.0	<0.5	<0.5	<0.5	<0.5
11/17/98	MW3	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5
8/21/98	MW3+	<5ે. 0	<5.0	<0.5	<0.5	<0.5	<0.5
6/2/98	MW3	<5.0	<5.0	<0.5	<0.5	<0.5	<0.5
2/27/98	MW3		<5.0	<0.5	<0.5	<0.5	<0.5

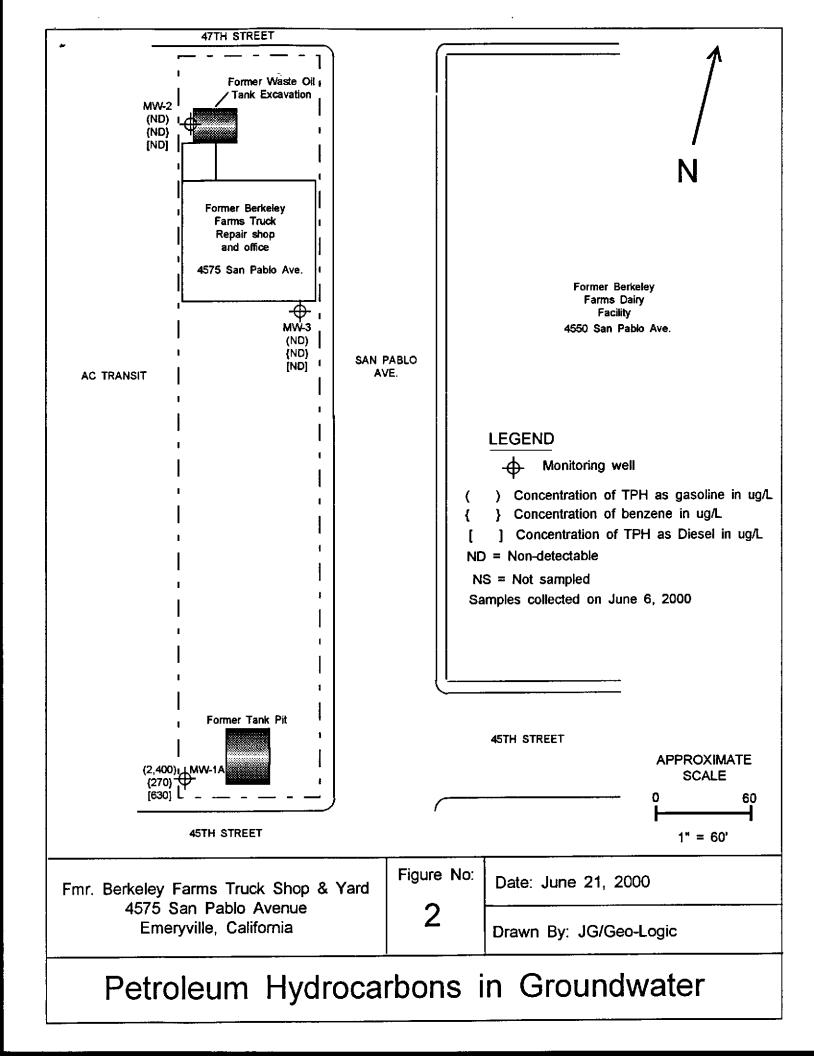
TABLE 2-(Continued)

SUMMARY OF LABORATORY ANALYSES-WATER

Date	Sample <u>Number</u>	TPH as Motor Oi	.1 терн	MTBE	TOTAL LEAD
6/6/00	MW1A			210	
3/6/00	MW1A	320		<400	
12/8/99	MW1A			140	
9/6/99	MW1A			<0.5	
8/6/99	MW1A			<0.5	
6/7/99	MW1	(Well	inaccessible,		
3/4/99	MW1	(Well	inaccessible,)
11/17/98	MW1			<0.5	
6/2/98	MW1*		80,000	<0.5	<5.0
2/27/98	MW1			<0.5	
6/6/00	MW2	<250		<5.0	
3/6/00	MW2	<0.5		<5.0	
12/8/99	MW2	<250		<5.0	
9/6/99	MW2	47		<0.5	
6/7/99	MW2	<0.5		<0.5	
3/4/99	MW2	<0.5		<0.5	
11/17/98	MW2	<0.5		<0.5	
6/2/98	MW2*		3,800	<0.5	<5.0
2/27/98	MW2		20,000**	<0.5	
-1-1				0.1	
6/6/00	MW3			21	
3/6/00	MW3			24/21++	
12/8/99	MW3			18	
9/6/99	MW3			<0.5	
6/7/99	MW3			<0.5	
3/4/99	MW3			<0.5	
11/17/98	MW3		 	<0.5	
6/2/98	MW3*		<5.0	<0.5	<5.0
2/27/98	MW3				

- + Cadmium, chromium, lead, nickel, and zinc were nondetectable, except for 0.078 mg/l of nickel detected in MW1.
- ++ 21 ppb by EPA Method 8260.
- * All EPA Method 8010 constituents were nondetectable.
- ** 20,000 ppb of Total Recoverable Petroleum Hydrocarbons by EPA Method 418.1.
- -- analyses not performed Results are in micrograms per liter ($\mu g/L$), unless otherwise indicated.





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Calcoast Analytical	Client Project ID: #1103-02; Former	Date Sampled: 06/06/2000
4072 Watts Street	Berkeley Farms/KFC 4575 San Pablo Ave Emeryville, CA	Date Received: 06/06/2000
Emeryville, CA 94608	Client Contact: Kevin Yan	Date Extracted: 06/06-06/08/2000
	Client P.O:	Date Analyzed: 06/06-06/08/2000

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

Lab ID	Client LD	Matrix	TP <u>H(g</u>)⁺	МТВЕ	Benzene	Товиспс	Ethylben- zene	Xylenes	% Recovery Surrogate
39686	MWIA	w	2400,a	210	270	9.5	79	79 27	
39687	MW2	w	ND	ND	ND	ND	ND	ND	93
39688	MW3	w	ND	21	ND	ND	ND	ND	99
									
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Reporting	g Limit unless se stated; ND	w	50 ug/L	5.0	0.5	0.5	0.5	0.5	· · · · · · · · · · · · · · · · · · ·
means not	detected above orting limit	5	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 studge samples in mg/kg, and all TCLP and SPLP excracts in ng/L

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 gesoline is significant; b) heavier gesoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromategraphic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); i) 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 pattem.



cluttered chromatogram; sample peak coclutes with surrogate peak

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

Calcoast Analytical	Client Project ID: #1103-02; Former	Date Sampled: 06/06/2000
4072 Watts Street	Berkeley Farms/KFC 4575 San Pablo Ave Emeryville, CA	Date Received: 06/06/2000
Emeryville, CA 94608	Client Contact: Kevin Yan	Date Extracted: 06/06/2000
	Client P.O:	Date Analyzed: 06/09-06/11/2000

Diesel Range (C10-C23) and Oil-Range (C18+) Extractable Hydrocarbons as Diesel and Motor Oil*

EPA methods modified 8015, and 3550 or 3510; California RWOCR (SE Bay Penion) method (C/City/2550) as GCC10/2510)

Lab ID	MW1A W 630,d MW2 W ND		TPH(d)*	TPH(mo)* % Recovery Surrogate							
39686	MWIA	w	630,d	194	102						
39687	MW2	w	ND	ND	102						
39688	MW3	W	ND		102						
				<u> </u>	ļ"						
		· · · · · · · · · · · · · · · · · · ·									
		-									
deporting Limited; ND means	t unless odictwise not detected above	W	50 ug/L	250 ug/L							
the repo	rting limit	s	I.0 mg/kg	5.0 mg/kg	İ						

^{*}water 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.

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.



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

ealcoast Analylical Inc.

Date / Goc Page of

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