

5500 Shellmound Street, Emeryville, CA 94608-241

Fax: 510-547-5043 Phone: 510-450-6000

SID 5824

May 9, 1997

Susan L. Hugo Alameda County Department of Environmental Health Hazardous Materials Division 1131 Harbor Bay Parkway, Room 250 Alameda, CA 94502

Re: First Quarter 1997

Days Inn 1603 Powell Street Emeryville, California WA Job #149-1262-01

Dear Ms. Hugo:

This status report satisfies the quarterly reporting requirements prescribed by California Administrative Code Title 23 Waters, Division 3, Chapter 16 Article 5, Section 2652.d for the site referenced above (Figure 1). A summary of activities performed in the first quarter 1997 and proposed activities for the second quarter 1997 are presented below.

First Quarter 1997 Activities

- WA measured ground water depths and collected ground water samples from the site wells. The first quarter 1997 sampling was delayed until April 11, 1997 due to the recent change in ownership of the property. The samples were submitted to a state-certified analytical laboratory. The sample collection records are included as Attachment A and the certified analytic reports and chain-of-custody forms are included as Attachment B.
- WA calculated ground water elevations and compiled the analytic data (Table 1) and contoured ground water elevations (Figure 2).

Second Quarter 1997 Activities

• WA will measure water levels in each well and collect ground water samples near the end of the quarter.

THE DATA, FINDINGS, RECOMMENDATIONS, SPECIFICATIONS, AND PROFESSIONAL OPINIONS CONTAINED IN THIS DOCUMENT WERE PREPARED SOLELY FOR THE USE OF CLEMENT CHEN AND ASSOCIATES WEISS ASSOCIATES MAKES NO OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED, AND IS NOT RESPONSIBLE FOR THE INTERPRETATION BY OTHERS OF THE CONTENT HEREIN





- WA will report the results of the second quarter well sampling. The report will include
 a summary of the quarter's activities, proposed activities for the upcoming quarter,
 tabulated ground water elevation and analytic data and a ground water elevation
 contour map.
- If hydrocarbon concentrations in ground water do not change significantly, WA will
 request that the Alameda County Department of Environmental Health review the case
 for closure.

Please call if you have any questions or comments.



Sincerely,

Weiss Associates

Thomas Fojut, R.G. Project Hydrogeologist

Attachments:

Figures Table

A - Sample Collection Records

B - Certified Analytic Report and Chain-of-Custody Form

cc: Rod Chen, Clement Chen & Associates, 831 Montgomery Street, San Francisco, CA 94133

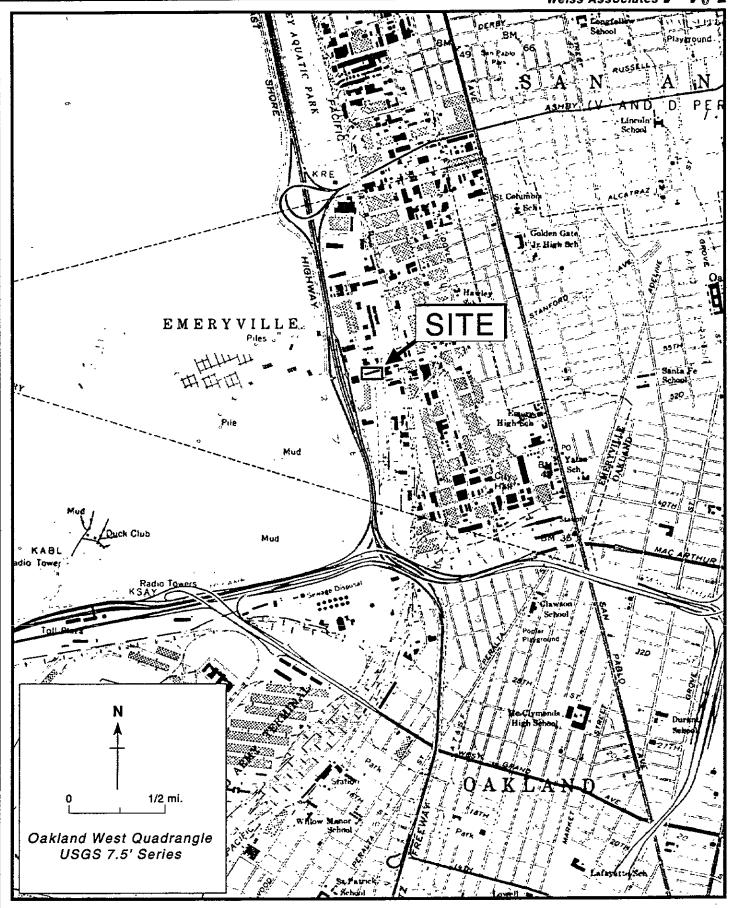


Figure 1. Site Location Map - Days Inn, 1603 Powell Street, Emeryville, California

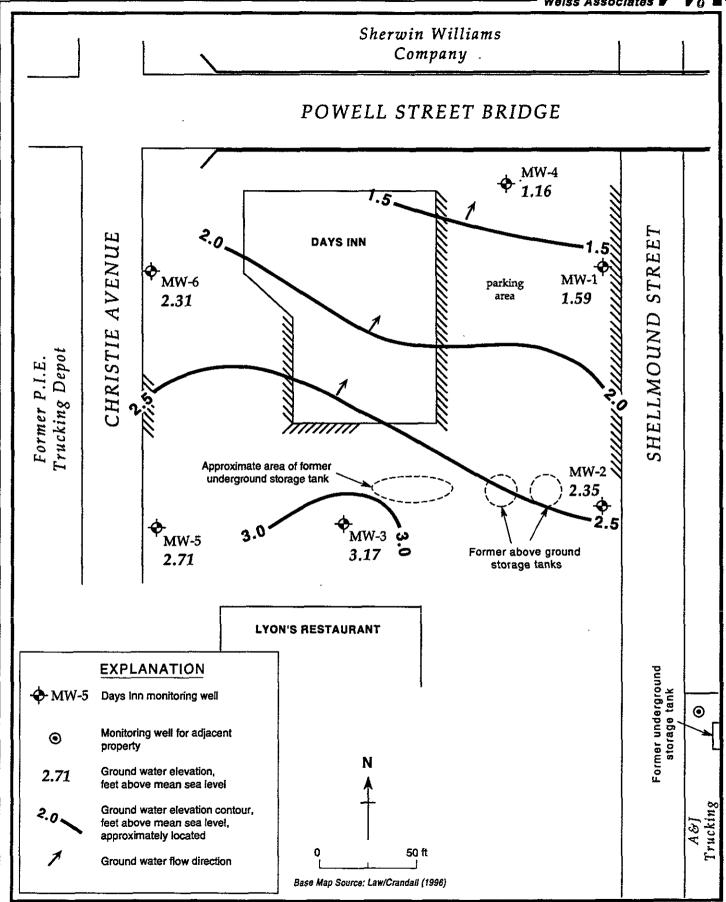


Figure 2. Ground Water Elevations - April 11, 1997 - Days Inn Hotel, 1603 Powell Street, Emeryville, California

Table 1. Ground Water Elevations and Analytic Data - Days Inn, 1603 Powell St, Emeryville, California Well ID/ (3000 mg/e) TOC Ground Water Sample Water TDS TPH-MO Elevation Date Depth Elevation TPH-D TPH-G В Υ E Х MTBE **PAHs** (ft above msl) (ft) (ft above msl) -parts per billion (µg/L)-MW-1 04/24/96 6.72 1.67 <200 660 <50 < 0.5 < 0.5 < 0.5 < 2.0 <50 f ---1.700^d 8.39 12/19/96 6.88 1.51 7,210,000 1.100° < 0.5 < 0.5 < 0.5 < 0.5 a 320^d 04/11/97 6.80 1.59 <50 < 0.5 < 0.5 < 0.5 0.97 < 5.0 b cND. MW-2 04/24/96 6.43 2.37 300 < 0.5 < 0.5 < 0.5 <2.0 <50 1.600 <50 c ,70 1.600 d 8.80 12/19/96 5.73 3.07 1.000,000 1.800° < 0.5 < 0.5 < 0.5 <0.5 04/11/97 6.45 2.35 ---370 <50 < 0.5 < 0.5 < 0.5 < 0.5 <5.0 ---MW-3 3.08 < 0.5 <2.0 04/24/96 6.41 <200 580 <50 < 0.5 < 0.5 <50 cM) 9.49 12/19/96 5.14 4.35 1,870,000 1,300° 1.000^{d} < 0.5 < 0.5 < 0.5 < 0.5 c 4/2 3.17 04/11/97 6.32 330 <50 < 0.5 < 0.5 < 0.5 < 0.5 <5.0 ___ ---0.57 c 210 MW-4 04/24/96 7.39 <200 ND < 50 < 0.5 < 0.5 < 0.5 <2.0 <50 360° 130^d 7.96 12/19/96 6.35 1.61 3,960,000 < 0.5 < 0.5 < 0.5 < 0.5 C MD 04/11/97 6.80 1.16 <50 <50 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 c 1/1 2.55 < 0.5 <2.0 MW-5 04/24/96 7.49 < 200 440 <50 < 0.5 < 0.5 <50 770 å 10.04 12/19/96 6.47 3.57 1,100,000 1,800° < 0.5 < 0.5 < 0.5 < 0.5 ---C N/2 2.71 500 d 04/11/97 7.33 < 50 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 MW-6 6.77 2.28 <200 230 <50 < 0.5 < 0.5 < 0.5 < 2.0 <50 04/24/96 490 d 2.97 2,080,000 650° < 0.5 < 0.5 < 0.5 < 0.5 9.05 12/19/96 6.08 88 d 2.31 < 50 < 0.5 < 0.5 < 0.5 < 0.5 <5.0 04/11/97 6.74

Abbreviations:

TOC = Top-of-well casing

msl = Mean sea level

TDS = Total dissolved solids by EPA Method 160.1

TPH-MO = Total petroleum hydrocarbons as motor oil by modified EPA Method 8015

TPH-D = Total petroleum hydrocarbons as diesel by modified EPA Method 8015

TPH-G = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015

B = Benzene by EPA Method 8020

T=Toluene by EPA Method 8020

E =Ethylbenzene by EPA Method 8020

X = Xylenes by EPA Method 8020

MTBE = Methyl tertiary-butyl ether by EPA Method 8020

PAHs = Polynuclear aromatic hydrocarbons by EPA Method 8270

--- = Not analyzed

<n = Not detected at laboratory method detection limit of n µg/L

Notes:

- a = 93 ppb acenapthene, 12 ppb fluoranthene, 12 ppb fluorene, 41 ppb phenanthrene, 12 ppb pyrene detected
- b = 47 ppb acenapthene, 3.8 ppb anthracene, 9.9 ppb fluoranthene, 6.0 ppb fluorene, 2.7 ppb napthalene, 25 ppb phenanthrene, 8.0 ppb pyrene detected
- c = No PAHs detected above laboratory method detection limits
- d = Laboratory reported that chromatogram does not represent a standard diesel pattern
- e = Laboratory reported that chromatogram does not represent a standard motor oil pattern
- f = 85 ppb acenapthene, 15 ppb fluorene, 34 ppb phenanthrene detected

ATTACHMENT A

SAMPLE COLLECTION RECORDS



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рН		MIAH	mact	urei	ID Nun	uper	□ 4					4-"	ate	Time	111111111111111111111111111111111111111	nitials
Thermor				- 1					<u>'</u>		10			-	-	
Conduct								1		/		 - -				
Turbid							 1 1	11	-/							
ORI								+#				 			_	
DO								•				+		······································		_
MEASUR		TS		1												
pH	Temp.		Ec	- 	Turb		Eh	D	.O.	Vo	lume		ate	Time	T	ritials
	°C		 C/μ m h	ios	ntu	+	mV	 	pm		irged		arc	X IIIIC		IIII
		1	<u> </u>			+			•			 				
$\overline{}$							•	\				+-				
						+	A }	1	-/			1	-			
		1				_	-/\	11 11				+-				
								\					-			
							·								1	
SAMPLIN	VG	$\overline{}$									V-2011 ALA					
SAMPLIN	G MET	нор:						S	AMPLE	TIME	:		3 7	133	-	
Pump ID#			$\overline{}$	□Bla	dder	□ Sub	mersible		□ Sum		l Perist	altic		ted:	Ves □	No
Tubing:		□ Tyg		□ PV			ethylene		☐ Teflo		Dispo			ted:		
Bailer ID#			<u> </u>	□ PV			ethylene		□ Teflo		Dispo		 	ted: 🗆		
Sample Po	rt:			□ PV			ethylene		☐ Teflo		J Stainle		☐ Bras		Steel	
low Rate:	:		gpm	Totali:						gal.	Time:			ate:	*	
EVACUAT	TION T	IME	1st l	Purge	2nd P	urge	3rd Pt	ırge	4th P	urge	:					
Stop:	123	0				_					Tot	al Evac	. Vol.:		5	gal.
Start:	1220						<u> </u>				Tota	l Evac.	Time:		8	min.
Elapsed 7							<u> </u>				Eva	cuation	n Rate:		62	gpm
WELL RI		RY	<u> </u>				_			-	•	Time	Vo	lume		ΓW
				Evac	uated Dry	?	☐ Ye	s eti	Vo						,	
OTW Du	ring E	vacuat	ion:			ft.										-
DTW Du	ring E	vacuat	ion:		1.	ft.										
80 * HV	VC:				NT.	ft.	MWI	O - 80	%HW	C = 80)%DT\	V				ft
OTW at S	Sample	Time	:	Ì	1	ft.	% Re	cover	y at Sa	ımple	Time:					%
Calculation	ns:															
SAMPLE						-										
Color:					w 🗆 Bro								Other:			
Odor:					iesel □							1	Other:			
Solids:					y ©∕ Sma			Moder	ate Qua	intity [J Large					
					☐ Organ								Other:			
	I ∐ Ser	parate P	hase I	ivdroca	rbons 🗆	Sheen		1easur	able Am	iount:		I				



Job Nan Sampled	ne: <u>Dar</u> d By: _	ysI	<u> </u>	Job#:	: <u>149-</u>	1262	107	_ Sa	mple I	D#: _	MU- Date	e:	Well N	lame:_ 47	m t	1-4
CALIBR	RATIONS	S:									 					
Met	er	Manu	ufact	urer	ID Numl	oer	Ca	llibra	tion Pe	erforn	ned	Da	ıte	Time	Ir	nitials
рŀ	I						□ 4	[] 7	[1 0					
Thermo	meter					$\neg \uparrow$		<u> </u>							+	
Conduc	ctivity						ſ									
Turbi	dity						411	4 -								
OR	Р						1 D									
DO)															
Measu	REMEN	TS										•			,	
pН	Temp.		Ec		Turb		Eh	D	.0.	Vo	lume	Da	te	Time	Ir	nitials
	°C	sc	$1/\mu$ mh	ios	ntu]	mV	p	pm	Pu	rged					
						<u> </u>										
								1								
	<u> </u>	<u> </u>					<u>~/v</u>									
						<u> </u>		ļ.,								
		Z		1	·	<u> </u>										
					-	<u> </u>		<u> </u>	_			<u> </u>	l_		Щ.	
Sampli	ING														:_	
Sampli	NG MET	HOD:						S	AMPLE	Тіме	:		105	2		
Pump ID	#:			□Bla	dder □	l Subr	nersible	(⊐ Sump) [l Peristali	tic	Dedica	ted: 🛘	Yes □	No
Tubing:		□ Tygo	on	□ PV	C E	l Poly	ethylene		□ Teflo		l Disposa		Dedica	ted: 🛘	Yes □	No
Bailer ID				□ PV	C [l Poly	ethylene	. [□ Teflo	n G	Disposa	ble	Dedica	ted: 🗆	Yes 🖭	No No
Sample P				□ PV		l Poly	ethylene	[☐ Teflo		3 Stainles	s	☐ Bras	s 🗆	Steel	
Flow Rat			gpm	Totaliz						_	Time:		D	ate:		
EVACUA	ATION T	IME	lst	Purge	2nd Pu	rge	3rd Pu	ırge	4th P	urge					· · · ·	
Stop:	1050	•			<u> </u>								. Vol.:		6.5	gal.
Start:	1037										 		Time:		1.3	min.
Elapsed						:		<u> </u>			<u> </u>		Rate:	<u> </u>	15	gpm
WELL F	RECOVE	RY		T =				<u> </u>			· · ·	Time	Vo	lume	· D	TW
DON'T D	· .			Evac	uated Dry?		☐ Yes		Ю	•						
DTW D				-		ft.	 	_								
DTW D		vacuati	ion:	-		ft.	3.633/1	2 00	0/1137	C = 90)0/ D/T/3/	,	<u> </u>			
.80 * H		T:		-		ft.)%DTW			·····		ft %
DTW at Calculation		: Time	:			ft.	70 Ke	cover	y at Sa	imple	ime;					76
Calculation	ons.															
SAMPLE	<u> </u>					-	/		-						-	
Color:					w 🗆 Brov			_					Other:			
Odor:					Diesel □ So								Other:			
Solids:					y 🗆 Smal			Moder	ate Qua	entity [☐ Large (-	<u> </u>	
					☐ Organi								Other:			
	□ Se	parate P	hase l	Hydroca	arbons 🗆 S	Sheen	\square N	1easura	able An	nount:		- 1				- !



Job N Samp	ame: DAy led By:	SInv	LJob# Se	: <u>14</u>	19-12	162 -le	27 Sam	ple II)#: <u>W</u>	₩-4 Date:	We	il Nam		<u>U-</u>	4
	LE TYPE									Date.					 -
SAMI □ Or	•	Duplicate		rip Bla	nk [☐ Field :	Rlank	ПБ	quip. Bla	nk	Ot	hor	···		
WEAT		Dupneau		Tip Dia	uik t	i Field	Dialik	<u> </u>	quip. Dia	alik.		nei.			-
Su		Cloudy	□ Ra	iny	Пп	rizzly	☐ Bre	e7V	ПХ	Vindy	Ten	nperatu	re: "7	50 c	
	TYPE		L 10	iniy .	100	TIZZIY	1 11 15/0		· - •	r may				D. ►	
		□ Extrac	tion	☐ Pie	ziome	ter 🔲	Other:			Loca	tion: E				
WEL	L MEASURI	EMENTS		M	easur	ement	Tin	ıe :	Date	e Ir	ritials	Formu	ilas/Con	versi	ns Pou
Depth	to Water		DTW		6.80	ft.	092	0	4/11/4	7 5	34G-	r = we	ii radius	m n.	•
	to Product		DTP		NA	Į ft.						ŀ	of water		nπ.
	ct Thickne		PT			ft.						7.48 g	cyl π	rn	
_	fied Well D		SWD		\underline{V}	ft.			1			_	sing = 0.	163	gal/ft
	ured Well I	Depth	MWD		20.1		ļ <u></u>		<u> </u>				sing = 0.		_
Well	Diameter	· · · · · · · · · · · · · · · · · · ·	D	_	2	in.	<u> </u>		`			V _{4"} ca	sing = 0.	653	gal/ft
								•				-	sing = I.	_	
EVAC	UATION CA	I CIII ATI	ONG		- 1	Formu	la	1	V	alue		V _s ~ca 	sing = 2.	.61 ga	л/tt
	t of Water		ONS	· ·	HW	C=MWD				31	ft.				
	Casing Vol					V= HWC				16	gal.				
	Casings Vo		be Eva	cuated	N					3	541.				
	to be Evacı				=W(CV * N			1	50	gal.				
WELI	STATUS							-	<u> </u>	<u> </u>		,	. 7., 1.		
Casin	g: 🖭 OK	☐ Prol	olem:			-	Seal:	19	ОK	☐ Pro	blem:				
Plug:	⊡∕бк	12 Prot	olem:	leed	5 h	CK	Vault:	G	бк	☐ Pro	blem:				
EVAC	UATION EQ							-1		1.			•		. • •
Pump	ID#:		Bladde	r 🗆 :	Subme	rsible	☐ Surr	ıp	☐ Peri	staltic	Dedic	ated:	☐ Ye	s	□ No
Bailer	ID#: δ'έρο	paloie 🗆	PVC		Polyet	hylene	☐ Tefl	on	☐ Stai	nless	Dedic	ated:	☐ Ye	s	□ No
EQUII	MENT DEC	ONTAMI	NATION			-					Tim	e]	Date :	In	itials
☐ Ste	am □ Al	conox	□ DI	Water		Other:	Not	APP	licable	?					
Samp	les Collect	ed		-		-		٠.٠	 	-	<u> </u>		,	-	
Qty	Sample ID	Cont. Type	Vol.	Fil.	Ref.	Pres.			alyze Fo			alytic ethod	Tur	п	LAB
3	juw-4	UV	4000	N	Y	HCL	TP	H-61	BIE,	X	8015	1/20	N		MCC
1	V	WIA	12	4)	7	NOW		T^{ρ}	HD		80/	5	1		V
		<u> </u>													
											_				
						<u> </u>				<u>-</u>			 		
Notes	•					L						 · · · · · -	1		
140162	•														



	ame: Days led By:	SIUN	Job#	: 14 sc	9-126 S-	2-107	Sam	ple II)#: <u>W</u>	W-5 Date:	We <i>4</i> /	ll Nai	me: _ <i>h</i>	y le	J5
SAMP	LE TYPE	<u>.</u>				-									
☐ Ori	ginal 🗆 I	Duplicate		rip Bla	ınk [□ Field I	3lank	□ Ed	quip. Bla	ınk	☐ Oth	er:			
WEAT		· · · · · · · · · · · · · · · · · · ·			•		······································	• • •			<u> </u>			·	
□ /Sui	nny 🗆 (Cloudy	□ Ra	iny	□D	rizzly	☐ Bre	ezy.	U W	indy	Tem	perat	ure: 25	* /-	
	TYPE								-	,					
		☐ Extrac	tion	☐ Pie	ziome	ter 🔲 (Other:		*	-1	tion: <i>50</i>				
	L MEASURE	EMENTS				ement	Tim		Date		itials		nulas/Con vell radius		
	to Water		DTW	7	<u>33</u>	ft.	100	<u> </u>	#/(1/	97 5	SLG-		it of wate		
	to Product		DTP	/	voue	ft.							in cyl π		
	ct Thicknes		PT	_	Non								gal/ft ³		
	fied Well D		SWD MWD		NA	ft.	<u> </u>						casing = 0	.163	gal/ft
	Measured Well Depth MWD 15.14 ft. $V_{3^{**}}$ casing = 0.367 gal/ft Well Diameter D in. $V_{4^{**}}$ casing = 0.653 gal/ft														
well.	Diameter					111.							_		-
	$V_{6"}$ casing = 1.47 gal/ft $V_{8"}$ casing = 2.61 gal/ft														
EVAC	V _{8"} casing = 2.61 gal/ft EVACUATION CALCULATIONS Formula Value														
	EVACUATION CALCULATIONS Formula Value Height of Water Column HWC=MWD - DTW (も) ft.														
	Casing Volu				WC	V= HWC	* V _D		1,7		gal.				
	Casings Vol		be Eva	cuated	N				(* 1	3					
Total	to be Evacu	ated			=W	CV * N	,		3.81		gal.				
WELL	STATUS				<u> </u>					,					
Casin	g: 🗹 OK	☐ Prol	olem:				Seal:		OK	☐ Pro	blem:				
Plug:	□ ok	☐ Prol	olem:				Vault:	<u>U</u>	OK	□ Pro	blem:				
EVAC	UATION EQ	UIPMENT	•						•	-			:		
Pump	ID#:		Bladde	r 🗆	Subme	rsible	☐ Sum	ıp	☐ Peri	staltic	Dedica	ated:	□ Ye	es	□ No
Bailer	ID#: 1566	Able 🗆	PVC		Polyet	hylene	☐ Tefl	on	☐ Stair	nless	Dedica	ated:	□ Y	es	□ No
Equii	PMENT DEC	ONTAMI	NATION			-				`	Time	2	Date	Iı	nitials
☐ Ste	am □ Al	conox	□ D	Water		Other:	٠								
Samp	les Collecte	ed				·						3	•		
Qty	Sample	Cont.	Vol.	Fil.	Ref.	Pres.		An	alyze Fo	r	4	alytic		m	LAB
	ID	Type										thod			
3	mor5		40m	<u>ν</u>	_{-1	HCC			BTE			120			MCC
	mu-3	WA	12	J	V	None		77	H - Y)		82	15	1		V
ļ							-				-				
		<u>.</u>													
						<u> </u>	+								
Notes		·	<u> </u>			<u> </u>	1.				. 		1		
												-			

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Page



Job Nar Sample	ne: <u>Da</u> d By:	45 I	hN	Job#	: <u>149</u> - SLG	-/26	2-10-	7 Sa	ımple I	D#: .	<u>ww-5</u> _ Date	- ::	Well N 4/11	Vame: <u>/</u>	in W	<u>-5</u>
CALIBI	RATIONS	;;														-
Met	ter	Man	ufact	urer	ID Numb	er	Ca	alibra	tion P	erforn	ned	D	ate	Time	Tī	nitials
pΙ	1						□ 4		□ <i>7</i>		□ 10					
Thermo	meter		·							·					\dashv	
Condu	ctivity						$\overline{}$	1,,,,,,,,							\dashv	
Turbi	idity		,			7/	114								\dashv	
OR	P.	-							*****						\top	
DO	O															
Measu	REMEN	rs		•							·	-				
pН	Temp.		Ec		Turb		Eh	D	.0.	Vo	lume	Da	ite	Time	I	nitials
	°C	SC	J/μ mh	ios	ntu]	mV	P	pm	Pu	rged				\top	
			·				·									
							11	4								
							to 11	* /								
		1_						•								
SAMPL	ING														-	
Sampli	NG METI	HOD:						S.	AMPLE	TIME	:		120	52		
Pump ID	#:			□Bla	dder 🗆	Subn	nersible		□ Sump) [] Peristalti	ic ;	Dedica	ted: 🔲	Yes 🗆	No .
Tubing:	ĺ	J Tygo	on	□ PV	СП	Poly	ethylene		☐ Teflo	n C	J Disposal	ole	Dedicat	ted: 🔲	Yes 🗆	No
Bailer ID	#:			□ PV		Poly	ethylene		☐ Teflo	n [Disposat	le	Dedicat	ted: 🗆	Yes 🗆	No
Sample P				□ PV		Poly	ethylene	: [☐ Teflo	n [3 Stainless		☐ Bras	s 🗆	Steel	
Flow Rat			gpm	Totalia						gal.	Time:		D	ate:		
	ATION T	ME	lst	Purge	2nd Pur	ge	3rd Pu	ırge	4th P	urge			-			
Stop:	1200												. Vol.:		4	gal.
Start:	115	5			<u> </u>						Total I				5	min.
Elapsed													Rate:	•	(0	gpm
WELL F	RECOVER	RY							_		T	ime	Vo	lume	D'	TW
				Evac	uated Dry?		☐ Yes		Vo	•						
	uring Ev					ft.										
	uring Ev	acuat	ion:			ft.										
.80 * H				<u> </u>		ft.	<u> </u>				%DTW					ft
	Sample	Time	:	<u> </u>		ft.	% Re	cover	y at Sa	mple	Time:					%
Calculati	ons:															
Sample						-										
Color:					w 🗆 Brow								Other:			
Odor:					iesel 🗆 So				Other:							
Solids:					y I Small			Moder	rate Qua	intity [∃ Large Q			:		
					☐ Organic							100	Other:			
	□ Sep	arate P	hase l	Hydroca	irbons 🏻 Sl	heen	\square N	leasur	able An	iount:		1				



Job Name: <u>DAYS Inv</u> Sampled By:	1_ Job#: Sl	6-	-126	2-107	, Samj 	ple II)#: <u>/u</u>	W 6 Date:	We	ll Nan	ne: <u>w</u>	W	<u>-6</u>
SAMPLE TYPE									<u> </u>		·····		
☐ Original ☐ Duplicate	e 🗆 Tr	ip Bla	nk [J Field I	Blank	□ Ed	quip. Bla	ank	☐ Otl	ner:			
Weather			-				<u> </u>						
☑ Sunny ☐ Cloudy	☐ Rai	ny	□ D:	rizzly	☐ Bre	ezy	□ V	Vindy	Ten	peratu	re: 70	00	=
WELL TYPE	<u></u>	· .					· ·	,	 - - - - - - - - -			` `	
☐ Monitoring ☐ Extra	ction	□ Piez	iomet	er 🗆 (Other:			Loca	tion: W	· sile	of bld	g. 1	4 Chr
WELL MEASUREMENTS		M	easur	ement	Tim	e	Dat	e In	itials		las/Conv		
Depth to Water	DTW	14-	6.45	674st.	92	5	4/11	67 5	36-		ll radius		
Depth to Product	DTP		Non							i	of water	_	in II.
Product Thickness	PT		None	ft.							cyl πι	r-h	
Specified Well Depth	SWD		20,1		[7.48 g V ca	ai/π sing = 0.	163	oal/ft
Measured Well Depth	MWD	A5-7	5.0 1	7 ft.						_	sing = 0.		_
Well Diameter	D		2	in.			<u> </u>				sing = 0.		-
										•	sing = 1.	_	
Ever cover many Cover and a second				17	1_		17	- 1		V _{8″} ca	sing = 2.	61 g	al/ft
EVACUATION CALCULAT	IONS		1137/	Formu C=MWD				alue	· A				
Height of Water Column Well Casing Volume				V= HWC				<u>37 </u>	ft.	I			
Well Casing Volumes to	he Evec	ıntad	N	V-11WC	V D			.17	gal.				
Total to be Evacuated	De Evac	<u>aicu</u>		CV * N			7.	<u>,</u> -2	gal.				
WELL STATUS	-	 	1				ان في	53_	, gai.		· :	- 72	,
Casing: OK Pro	hlam:			•	Seal:	100	бк	□ Dre	blem:	 	:		
Plug: OK Pro			•		Vault:		σκ σκ		blem:				
EVACUATION EQUIPMENT					vaust.	16	UK	LILIT	bolein.				1
	Bladder	П	ubme	rsible	☐ Sum	n	□ Per	staltic	Dedic	ated·	☐ Ye		□ No
	PVC			rylene	☐ Tefl		☐ Stai		Dedic		☐ Ye	-	
EQUIPMENT DECONTAMI			Olyca	iyiciic j	LI TEIL	OII			Time		Date		itials
☐ Steam →☐ Alconox	□ DI	Votor		Other:			***		11111		vale	. 111	,tțiais
Samples Collected		water	<u> </u>	Ouler.					<u> </u>				
Qty Sample Cont.	Vol.	Fil.	Ref.	Pres.	τ -	Δn	alyze Fo		- An	alytic	Tur		LAB
ID Type	V 01.	111.	1	1163.		ZXII	alyze P	<i>,</i>		ethod	, ui	"	LAD
3 hwb WV	40mD	7	7	HEL	4	PH-L	-1BIG	· ·		120	Ŋ		tre
1 V WA		7.		Nort			1-D		901		17		V
V V V	-	*	**	,-0-0	 	,			100	<u> </u>		7	
												\neg	
Notes:													
		··· ·			·				·				



Job Nan Sampled	ne: <u>Day</u> HBy: _	15 Iv	<u>""</u>	Job#	: 14 5-	9-126	z -10	7 Sa	mple I	D#: _	WW-6 Date		Well N	Iame: <u>I</u> 17	'UW-1	<u></u>
CALIBR	ATIONS	S:				_,										-
Met	er	Man	ufact	urer	ID Nu	ımber	C	alibra	tion P	erforn	ned	Da	te	Time	In	itials
pН	I						□ 4		□ 7	Ī	□ 10					
Thermo	meter			-				1								
Conduc	tivity						- 11	1/1								
Turbi	dity				_		7	14								10.00
OR	P															
DC)		£											,		
Measu	REMEN	TS				-			-	- :	-	٠.	• • •			
pН	Temp.		Ec		Turb)	Eh	D	.0.	Vo	lume	Da	te	Time	_ In	itials
	°C	SC	C/µmh	ios 🗍	ntu		mV	p	pm	Pa	rged					
							<u> </u>		_/							
								\perp_{\sim}	_		•					
1							1/14			<u> </u>						
					_/		1/1	<u> </u>								
								<u> </u>								
			_					<u> </u>		<u> </u>					<u> </u>	
Sampli	NG						-			·-		-			, - f	*
Sampli	NG MET	HOD:						S	AMPLE	TIME	:		1133	3		
Pump ID#				□ Bla	adder	☐ Sub	mersible	:	□ Sum _l) [] Peristaltic	;	Dedicat	ed: 🗆 `	Yes □	No
Tubing:		□ Týgo	on	□PV	C	☐ Poly	ethylen	e l	□ Teflo	n [l Disposab	le	Dedicat	ed: 🗆 🗅	Yes □]	No
Bailer ID	#:			□ PV	C	□ Poly	ethylen	e l	□ Teflo	n 🛭	Disposab	le	Dedicat	ed: 🗆 🕆	es □ ː	No
Sample P				□ PV		☐ Poly	ethylen	e l	□ Teflo	n [] Stainless		☐ Bras	s □ 5	Steel	
Flow Rate			gpm	Total						gal.	Time:		Da	ite:		
EVACUA	TION T	IME		Purge	2nd	Purge	3rd P	urge	4th P	urge		(:	-	
Stop:				31									Vol.:	6	<u>.5</u>	gal.
Start:			u	22					<u> </u>		Total E				9	min.
Elapsed							<u> </u>				Evacu				2	gpm
WELL R	ECOVE	RY	·····					-	<u>. </u>		T	me	Vol	ume	<u>D</u>	ſW
				Eva	cuated D			s <u>U1</u>	Йo	·						
DTW D						ft.										
DTW D		vacuat	ion:			ft.										
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ATTACHMENT B

CERTIFIED ANALYTIC REPORT AND CHAIN-OF-CUSTODY FORM

04/18/97

Dear Tom:

Enclosed are:

- 1). the results of 6 samples from your # 149-1262-107 project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

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

Weiss Associates	Client Project ID: # 149-1262-107	Date Sampled: 04/11/97		
5500 Shellmound Street		Date Received: 04/11/97		
Emeryville, CA 94608	Client Contact: Tom Fojut	Date Extracted: 04/11-04/17/97		
	Client P.O:	Date Analyzed: 04/11-04/17/97		

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	% Rec. Surrogate
75508	MW-1	w	ND	ND	ND	ND	ND	0.97	101
75509	MW-2	w	ND	ND	ND	ND	ND	ND	103
75510	MW-3	w	ND	ND	ND	ND	ND	ND	105
75511	MW-4	w	ND	ND	ND	ND	ND	ND	101
75512	MW-5	w	ND	ND	ND	ND	ND	ND	102
75513	MW-6	w	ND	ND	ND	ND	ND	ND	99
Reporting	Limit unless	w	50 ug/L	5.0	0.5	0.5	0.5	0.5	
otherwise stated; ND means not detected above the reporting limit		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

^{*} water and vapor samples are reported in ug/L, soil and sludge 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.

Date Received: 04/11/97	
Date Received: 04/11/97	
Date Extracted: 04/11-04/17/97 Date Analyzed: 04/11-04/17/97	

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 GCF1D(5030) Ethylben-% Rec. TPH(g)⁺ Lab ID Client ID Matrix MTBE Benzene Toluene Xylenes zene Surrogate 75508 MW-1 W ND ND ND ND 0.97 101 75509 MW-2 W ND ND ND ND ND 103 75510 MW-3 W ND ND ND ND ND 105 75511 MW-4 W ND ND ND ND ND 101 75512 MW-5 W ND ND ND ND ND 102 75513 MW-6 W ND ND ND ND ND 99 w 5.0 0.5 0.5 Reporting Limit unless 50 ug/L 0.5 0.5 otherwise stated; ND means not detected S $1.0 \, \text{mg/kg}$ 0.05 0.005 0.005 0.005 0.005 above the reporting limit

^{*} water and vapor samples are reported in ug/L, soil and sludge 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) stronglyaged 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.

Weiss Associates	Client Project ID: # 149-1262-107	Date Sampled: 04/11/97		
5500 Shellmound Street		Date Received: 04/11/97		
Emeryville, CA 94608	Client Contact: Tom Fojut	Date Extracted: 04/11-04/14/97		
	Client P.O:	Date Analyzed: 04/11-04/14/97		

		Dent F.O	. Date Analyzed.	04/11-04/14/9/	
EPA methods mo			C23) Extractable Hydrocarbons as Diesel * rnia RWQCB (SF Bay Region) method GCFID(3550) or GCFII	0(3510)	
Lab ID	Lab ID Client ID		TPH(d) ⁺	% Recovery Surrogate	
75508	MW-1	w	320,b	81	
75509	MW-2	w	370,c	103	
75510	MW-3	w	330,c	102	
75511	MW-4	W	ND .	110	
75512	MW-5	w	500,g/e	113	
75513	MW-6	w	88,b	100	
	· · · · · · · · · · · · · · · · · · ·				
Reporting L	imit unless other-	W	50 ug/L		
Reporting Limit unless other- wise stated; ND means not de- tected above the reporting limit		S	1.0 mg/kg		

^{*} water samples are reported in ug/L, soil and sludge 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 (fuel oil?); 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.

QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/11/97

Matrix: Water

	Concent	ration	(mg/L)		% Reco	very	
Analyte	Sample			Amount			RPD
[]	(#75417) 	MS	MSD	Spiked 	MS	MSD	
TPH (gas)	0.0	95.3	96.8	100.0	95.3	96.8	1.6
Benzene	0.0	8.4	8.8	10.0	84.0	88.0	4.7
Toluene	0.0	8.8	9.3	10.0	88.0	93.0	
!	:						5.5
Ethyl Benzene	0.0	9.3	9.6	10.0	93.0	96.0	3.2
Xylenes	0.0	27.6	28.6	30.0	92.0	95.3	3.6
 TPH (diesel) 	0	137	133	150	91	88	3.1
 TRPH (oil & grease) 	0	22200	24400	 23700 	94	103	9.4

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

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

QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/14/97

Matrix: Water

	Concentr	ation	(mg/L)		% Reco	very	
Analyte	Sample			Amount			RPD
	(#75 4 97) 	MS	MSD	Spiked	MS	MSD	
TPH (gas)	0.0	91.7	95.2	100.0	91.7	95.2	3.8
<u>-</u>	0.0	8.5	8.5	100.0	85.0	85.0	0.0
Benzene	!						
Toluene	0.0	8.9	9.0	10.0	89.0	90.0	1.1
Ethyl Benzene	0.0	9.0	9.3	10.0	90.0	93.0	3.3
Xylenes	0.0	26.9	28.1	30.0	89.7	93.7	4.4
 TPH (diesel) 	0	160	158	150	107	105	1.5
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 = $(MS - MSD) / (MS + MSD) \times 2 \times 100$

QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/16/97-04/17/97 Matrix: Water

	Concent	ration	(mg/L)		% Reco	very	
Analyte	Sample			Amount			RPD
	(#75541) 	MS	MSD	Spiked 	MS	MSD	
TPH (gas)	0.0	99.1	94.0	100.0	99.1	94.0	5.2
Benzene	0.0	8.6	8.0	10,0	86.0	80.0	7.2
Toluene	0.0	8.8	8.4	10.0	88.0	84.0	4.7
Ethyl Benzene	0.0	9.3	9.0	10.0	93.0	90.0	3.3
Xylenes	0.0	27.9	27.0	30.0	93.0	90.0	3.3
TPH (diesel)	0	146	146	150	97	98	0.4
TRPH (oil & grease)	0	24500	24600	23700	103	104	0.4

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

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

CHROMALAB, INC.

Environmental Services (SDB)

April 21, 1997

Submission #: 9704228

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: WA-149-1262-107

Project#: 8460

Received: April 14, 1997

re: One sample for Polynuclear Aromatic Hydrocarbons (PAHs) analysis.

Method: SW846 Method 8270A Nov 1990

Client Sample ID: MW-1

Spl#: 126238 Sampled: April 11, 1997 Matrix: WATER

Extracted: April 18, 1997

Run#: 6374 Analyzed: April 18, 1997

	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK SPIKE	DILUTION FACTOR
<u>ANALYTE</u>	(ug/L)	(ug/L)	(ug/L)	(%)	
NAPHTHALENE	2.7	2.0	N.D.		1
ACENAPHTHYLENE	N.D.	2.0	N.D.		1
ACENAPHTHENE	47	2.0	N.D.	71.0	1
FLUORENE	6.0	5.0	N.D.		1
PHENANTHRENE	25	2.0	N.D.		1
ANTHRACENE	3.8	2.0	N.D.		1
FLUORANTHENE	9.9	2.0	N.D.		1
PYRENE	8.0	2.0	N.D.	64.7	1
BENZO (A) ANTHRACENE	N.D.	2.0	N.D.		1
CHRYSENE	N.D.	2.0	N.D.		1
BENZO (B) FLUORANTHENE	N.D.	2.0	N.D.		1
BENZO (K) FLUORANTHENE	N.D.	2.0	N.D.		1
BENZO (A) PYRENE	N.D.	2.0	N.D.		1
INDENO(1,2,3-CD)PYRENE	N.D.	2.0	N.D.		1
DIBENZ O (A , H) ANTHRACENE	N.D.	2.0	N.D.		1
BENZO (GHZ) PERYLENE	N.D.	2.0	N.D.		1
(widelf en					

Michael Lee Chemist Chip Poalinelli Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

April 21, 1997

Submission #: 9704228

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: WA-149-1262-107

Project#: 8460

Received: April 14, 1997

re: Surrogate report for 1 sample for Polynuclear Aromatic

Method: SW846 Method 8270A Nov 1990

Lab Run#: 6374
Matrix: WATER

Sample#	Client Sample ID	Surrogate	<pre>% RecoveryRecovered_Limits</pre>
126238-1	MW-1	NITROBENZENE-D5	62.0 35-114
126238-1	MW-1	2-FLUOROBIPHENYL	66.7 43-116
126238-1	MW-1	TERPHENYL-D14	60.5 33-141
			% Recovery
Sample#	QC Sample Type	Surrogate	Recovered Limits
127041-1	Reagent blank (MDB)	NITROBENZENE-D5	68.0 35-114
127041-1	Reagent blank (MDB)	2-FLUOROBIPHENYL	66.7 43-116
127041-1	Reagent blank (MDB)	TERPHENYL-D14	70.3 33-141
127042-1	Spiked blank (BSP)	NITROBENZENE-D5	69.8 35-114
127042-1	Spiked blank (BSP)	2-FLUOROBIPHENYL	73.8 43-116
127042-1	Spiked blank (BSP)	TERPHENYL-D14	73.1 33-141
127043-1	Spiked blank duplicate	(BSD) NITROBENZENE-D5	64.0 35-114
127043-1	Spiked blank duplicate	(BSD)2-FLUOROBIPHENYL	70.3 43-116
127043-1	Spiked blank duplicate	(BSD)TERPHENYL-D14	66.7 33-141

\$105 QCSURR1229 MIKELEE 21-Apr-97 12

Weiss Associates Environmental and Geologic Services

5500 Shellmound Street, Emeryville, CA 94608 Phone: 510-450-6000 Fax: 510-547-5043

AguaTierra Associates Incorporated, DBA

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Please send analytic results and a copy of the signed chain of custody form to:

Lab Personnel:

PLEASE INCLUDE QA/OC DATA IF BOX IS CHECKED.

- 1) | Specify analytic method and detection Valimit in report.
- 2) Notify us if there are any anomalous peaks in GC or other scans.
- 3) -ANY QUESTIONS/CLARIFICATIONS:

Sampled by: Sheila Garrett	_	aboratory Name: MF CAMPbell		
				Con a commo 22
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Affiliation	Affiliation	Affiliation, Telephone		

Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered YY/N); 4 = Refrigerated (Y/N)

Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]

K. OFFICE FORMS CHARNOC DOC



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