November 21, 1997 Report 0164.R1 HSHI3628

Ms. Judy Fabion Hardage Suite Hotels, Inc. 9255 Towne Centre Drive, Suite 900 San Diego, California 92121

RE: GROUNDWATER MONITORING AND SAMPLING REPORT Hardage Suite Hotels, Inc. Site Intersection of Powell Street and Shellmound Street Emeryville, CA

Dear Ms. Fabion:

This report documents the results of the monitoring and sampling of two groundwater monitoring wells at the subject site. This work was performed in accordance with RGA Environmental, Inc's (RGA) proposals dated November 5 and 7, 1997. The wells were monitored and sampled on November 5, 1997 and November 9, 1997. A Site Location Map (Figure 1) and Site Plan (Figure 2) are attached with this report.

### **BACKGROUND**

The site is currently used as a paved parking lot. Review of a 1995 Phase I Environmental Site Assessment (ESA) prepared by EMG indicates that the site was used for industrial activities between 1884 and 1973. In addition, the surrounding properties have historically been used for industrial and commercial activities, and several leaking underground storage tanks have been identified in the vicinity of the site.

Two groundwater monitoring wells were reported to be present at the site in the 1995 Phase I ESA and by Hardage Suite Hotels, Inc. The origin of the wells is presently unknown to RGA. During a site visit after the November 9, 1997 sampling episode, a third groundwater monitoring well was identified at the site. The third monitoring well is located where pallets of pipe had been stored during the November 5 and 9, 1997 sampling episodes.

ENVIRONMENTAL CONSULTANTS GEOLOGISTS ENGINEERS INDUSTRIAL HYGIENISTS

1260 45TH STREET EMERYVILLE, CA 94608-2907 510:547.7771 FAX 510:547.1983

### **FIELD ACTIVITIES**

On November 5, 1997 the two groundwater monitoring wells at the site (designated as MW1 and MW2 on the attached Site Plan, Figure 2) were monitored and sampled by RGA personnel. At the time that the wells were monitored on November 5, 1997, the well caps for wells MW1 and MW2 were observed to have been labeled previously by others as ATD7 and ATD5, respectively. The wells were monitored for depth to water and the presence of free product or sheen. Depth to water was measured to the nearest 0.01 foot using an electric water level indicator relative to the top of the PVC well casing. The measured depth to water in wells MW1 and MW2 was 5.20 and 3.92 feet, respectively. The presence of free product and sheen was evaluated using a transparent bailer. No free product or sheen were observed in either of the monitoring wells. No petroleum hydrocarbon odors were detected in either of the wells.

On November 9, 1997 the two groundwater monitoring wells at the site were remonitored and re-sampled by RGA personnel. The wells were monitored for depth to water and the presence of free product or sheen using methods described above. The measured depth to water in wells MW1 and MW2 was 5.23 and 3.85 feet, respectively. No free product or sheen were observed in either of the monitoring wells. No petroleum hydrocarbon odors were detected in either of the wells.

Prior to sampling, the monitoring wells were purged of a minimum of three casing volumes of water. During purging operations, the field parameters of electrical conductivity, temperature and pH were monitored. Once the field parameters were observed to stabilize, and a minimum of three casing volumes had been purged or the wells had been purged dry and partially recovered, water samples were collected using a clean Teflon bailer. Records of the field parameters measured during well purging are attached with this report.

The water samples were transferred to 40-milliliter glass Volatile Organic Analysis (VOA) vials and 1-liter amber glass bottles which were sealed with Teflon-lined screw caps, and to plastic polypropylene bottles which were sealed with plastic screw caps. The VOA vials were overturned and tapped to assure that no air bubbles were present.

The VOA vials and bottles were then transferred to a cooler with ice, until they were transported directly to McCampbell Analytical, Inc. in Pacheco, California. McCampbell Analytical, Inc. is a State-certified hazardous waste testing laboratory. Chain of custody documentation accompanied the samples to the laboratory.

### **HYDROGEOLOGY**

The measured depth to water in wells MW1 and MW2 on November 5, 1997 was 5.20 and 3.92 feet, respectively. The measured depth to water in wells MW1 and MW2 on November 9, 1997 was 5.23 and 3.85 feet, respectively. Although the groundwater flow direction cannot be determined with the two wells at the site (monitoring of a third well is required for flow direction determination), Ms. Susan Hugo of the Alameda County Department of Environmental Health reported that the groundwater flow direction at the site is towards the west.

### LABORATORY RESULTS

The groundwater samples collected on November 5, 1997 from monitoring wells MW1 and MW2 were analyzed for TPH-G using EPA Method 5030 and Modified EPA Method 8015; benzene, toluene, ethylbenzene, total xylenes (BTEX), and MTBE using EPA Method 8020; TPH-D using EPA Method 3510 in conjunction with Modified EPA Method 8015; and for the metals arsenic, barium, cadmium, chromium, mercury, lead, selenium, and sliver using EPA-approved methods.

The groundwater samples collected on November 9, 1997 from monitoring wells MW1 and MW2 were analyzed for TPH-D using EPA Method 3510 in conjunction with Modified EPA Method 8015; and for chromium using EPA-approved methods.

The laboratory analytical results for the groundwater samples collected on November 5, 1997 show that TPH-G, BTEX and MTBE were not detected. TPH-D was detected in wells MW1 and MW2 at concentrations of 210 and 230 micrograms per liter (ug/L), respectively. Review of the laboratory analytical reports indicates that the TPH-D results are described by the laboratory as aged diesel. All of the metals were either not detected or were at concentrations below their respective Maximum Contaminant Levels (MCLs) with the exception of chromium, which was detected in well MW2 at a concentration of 0.010 ug/L. The chromium MCL is 0.010 ug/L. The laboratory analytical results of the groundwater samples collected on November 5, 1997 are summarized in Table 2. Copies of the laboratory analytical reports and chain of custody documentation are attached with this report.

The laboratory analytical results for the groundwater samples collected on November 9, 1997 show that TPH-D was detected in wells MW1 and MW2 at concentrations of 240 and 220 micrograms per liter (ug/L). Review of the laboratory analytical reports indicates that the TPH-D results are described by the laboratory as aged diesel. Chromium was not detected in well MW2. The laboratory analytical results of the groundwater samples

collected on November 9, 1997 are summarized in Table 2. Copies of the laboratory analytical reports and chain of custody documentation are attached with this report.

### **DISCUSSION AND RECOMMENDATIONS**

Based on the laboratory analytical results of the water samples collected from the monitoring wells, RGA recommends that the following activities be performed.

- o File an Unauthorized Release Form with the Alameda County Department of Environmental Health (ACDEH).
- Provide a copy of this report to Ms. Susan Hugo at the ACDEH, and to Mr. Kevin Graves at the Regional Water Quality Control Board, San Francisco Bay Region. Copies of the report should be accompanied by a transmittal letter signed by a representative of Hardage Suite Hotels, Inc.
- O Perform a file search at the ACDEH to identify the origin of the groundwater monitoring wells at the site.
- o Perform a file search at the ACDEH to identify the source of groundwater contaminants at the site.
- Perform a file search at the ACDEH to determine if the designations written on the wells (ATD5 and ATD7) indicate that these wells are part of a larger groundwater monitoring network.
- O Contact Ms. Susan Hugo at the ACDEH to discuss the need for any additional investigation or groundwater monitoring and sampling.

### **LIMITATIONS**

This report was prepared solely for the use of Hardage Suite Hotels, Inc. The content and conclusions provided by RGA in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with the site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgment based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between borings and may not necessarily apply to the general site as a whole. If future subsurface or other

conditions are revealed which vary from these findings, the newly-revealed conditions must be evaluated and may invalidate the findings of this report.

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous materials or hazardous wastes left onsite, in accordance with existing laws and regulations.

This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. RGA is not responsible for the accuracy or completeness of information provided by other individuals or entities which is used in this report. This report presents our professional judgment based upon data and findings identified in this report and interpretation of such data based upon our experience and background, and no warranty, either express or implied, is made. The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.

Should you have any questions, please do not hesitate to contact us at (510) 547-7771.

Very Truly Yours,

RGA Environmental, Inc.

Karin Schroeter Project Manager

Paul H. King

California Registered Geologist

Registration No.: #5901 Expiration Date: 12/31/99



PHK/bi 0164.R1 HSHI3628

Attachments: Tables 1 & 2

Site Location Map (Figure 1)

Site Plan (Figure 2) Field Parameter Forms

Laboratory Analytical Results Chain of Custody Documentation

TABLE 1
WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW1	11/09/97 11/05/9 <b>7</b>	Unknown	5.23 5.20	Unknown Unknown
MW2	11/09/97 11/05/97	Unknown	3.85 3.92	Unknown Unknown

Notes:

Elev. = Elevation

ft. = feet

### TABLE 2 SUMMARY OF LABORATORY ANALYTICAL RESULTS GROUNDWATER SAMPLES

Well No.	TPH- D	ТРН- G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes
		Samples (	Collected o	n Novembo	er 9, 1997		
MW1	240	NA	NA	NA	NA	NA	NA
MW2*	220	NA	NA	NA	NA	NA	NA
		Samples (	Collected o	n Novembe	er 5, 1997		
MW1**	210	ND	ND	ND	ND	ND	ND ·
MW2**	230	ND	, ND	ND	ND	ND	ND

### Notes:

Results are in ug/L, unless otherwise indicated.

Chromium was not detected.

<sup>\*\*</sup> The metals arsenic, barium, cadmium, chromium, mercury, lead, selenium, and sliver were either not detected or were detected at concentrations below their respective Maximum Contaminant Levels (MCLs) with the exception of chromium, which was detected in well MW2 at a concentration of 0.010 ug/L.

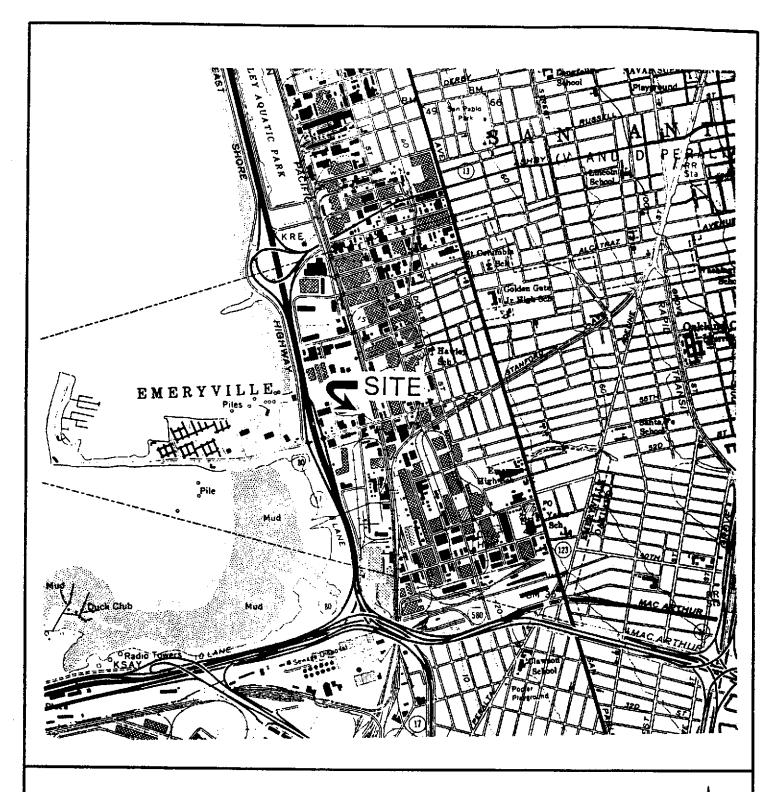
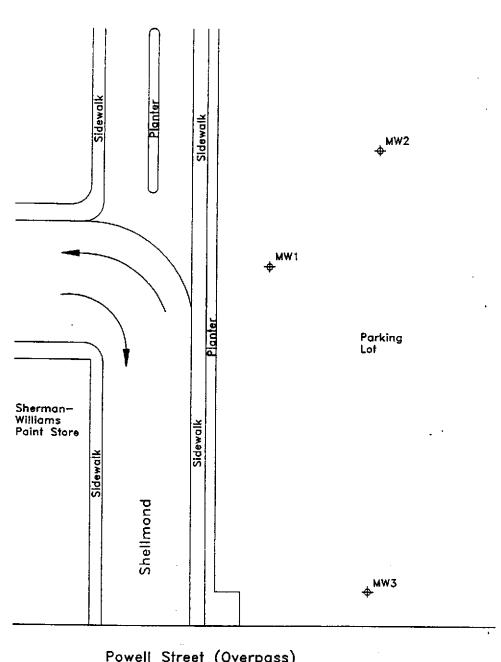


FIGURE 1
SITE LOCATION MAP
Hardage Suite Hotels, Inc.
Intersection of Shellmound and Powell Street (Northeast corner)
Emeryville, California

Source:

U.S. Geological Survey Oakland West, California 7.5 Minute Quadrangle Photorevised, 1980 RGA Environmental, Inc. 1260 45th Street Emeryville, California 94608





### Powell Street (Overpass)

### **LEGEND**

Monitoring Well Locations

FIGURE 2 SITE PLAN Hardage Suite Hotels, Inc. Intersection of Shellmound and Powell Street (Northeast corner) Emeryville, California

Base Map From:

RGA Environmental Inc. November, 1997 (BJ1054)

RGA Environmental, Inc. 1260 45th Street Emeryville, California 94608



# ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET

Site Name _	Hardage Snites	Hotels, Inc	Well No	mw/
Job No. H	SHI 3628	_	Date	15-197
TOC to Wate	r (ft.) 5.70	_	Sheen	None
Well Depth	(ft.) 9.2	_	Free Product	Thickness Ø
Well Diamet	er4"	_	Sample Colle	ection Method
Gal./Casing	vol. 5.3-2.6	! 2	Teflo	nBailer_
TIME	GAL. PURGED	Hq_		BLECTRICAL (MS/cm)
10:55	0,1	5:82	_71.8	4.35×1000
10:57		560	73.9	4.77
10:58		5.55	76.3	4.47
10:59	3	5,57	78.4	3.91
11:00	<u> </u>	5.53	79.1	3.10
11:01		5.35	78.7	5.04
11:02	well de	watered.	Shut off pun	<u>\</u>
11:20	6	5,44	78.8	4.86
<u> 11: 21 </u>		5.40	78,7	3,77 4.95
11:21	well devote	red.	<del></del> .	•
11:39	8	5.44	78.5	4.75
11:40	9	5.47	78.8	4.70
<u> 11:41</u>		5.48	78.8	4.80
11:45	Collect	Samples.		
				- Ang-Parish in .
	<del></del>	<del>,</del> -		
<del></del>			<del> </del>	
<del></del>			<del></del>	<del></del>
<del></del>			<del></del> .	<del></del>
NOTES:	Purged with 1	Honda Pr	mp 2 Foots	-alve
	<u> </u>	solts in	los Plus i	o a felle
PURGE10.92			Expansion	on tight on well Fi
	Organic del	ris (eg gra	us a roots)	in To

# TRUTA ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET

Site Name Harda	ge Suite Wotele, Inc.	Well No	<del></del>
JOD NO. HSHI		Date	5/97 US/97
TOC to Water (ft.)	3,92	Sheen	None
Well Depth (ft.)	9.1	Free Produ	ct Thickness Ø
Well Diameter	4 in	Sample Col	lection Method
Gal./Casing Vol	2.6	7-4	flor Bailer
TIME GAL. PO	JRGEDpB_	TEMPERATURE (F)	ELECTRICAL CONDUCTIVITY
1z:31 0.		77.7	4.75 × 1000
12:32	5,60	78.6	4.85
12:33	11,72	79.2	82.2
12:34 3	5,78	79.6	7.45
12:35 4		79.9	2,08
12:36	5,72	SC. 4	2,01
12:37	5.68	80.7	1,92
12:38 7	5.66	80.8	1,91
12:39	5.62	80.7	1.92
12:40	5.60	80.9	1.90
12:21	<u>5.5%</u>	<u>80,8</u>	<u> </u>
12:45	Collect Sum	ples	
		<del></del>	
	· · ·		
·		<u> </u>	
NOTES:			

PURGE10.92 No bolts in well head cover. Expursion plug is not lightly in place

# GROUNDWATER MONITORING/WELL PURGING DATA SHEET

Site Name Hardage Suite	Hotels, Ixc	Well No	MWI	
JOB NO. WSHI 3628		Date	11/9/97	
TOC to Water (ft.) 5.23	-	Sheen	None	
Well Depth (ft.) 9.Z	<u>.</u>	Free Product	Thickness ø	
Well Diameter 니パ	-	Sample Colle	ection Method	
Gal./Casing Vol. Z.6	-	- Tef	lon Bailer	
TIME GAL. PURGED	_HgT	EMPERATURE (F)	ELECTRICAL CONDUCTIVITY	S/em
6:23 0.1	57.56	69,2	Z.97 X1000	•
6:24	<u>5.45</u>	72.1	4.05 \$	
<u> 6:25</u> _ z	5.47	75.7	<u>3,55</u>	
<u>6:26</u> 3	<u>కా,5</u> ర	73.8	2.97	
6:27 4	<del>4,47</del> 5,49	74.8	<u> </u>	
<u>678 5 </u>	<u>5.47</u>	75.2	2,59	
6:29 6	5.42	74.1	264	
<u>6:30</u> 7	<u>536</u> _	75.3	3.00	
<u>6:31</u> <u>8</u>	<u>5,3</u> 4	75.4	3,45	
<u>6:3i</u> 8	well de	untered	·	
6:54 9	5.50	69,0	3,78	
<b>6</b> :53 10	<u>5.55</u>	73.2	3,36	
6.56 11	<u>5.58</u>	74.1	2,98	
657 12	<u>5.59</u>	74.8	2.86	
6:58 13	<u>5.57</u>	74.8	2,98	
6:58 13	well de	watered		
7:10 Callet	well de sample			
·	<del></del> _			
NOTES:				

### 126A

# GROUNDWATER MONITORING/WELL PURGING DATA SHEET

Site Name <u>}</u>	lardage Suite	<del>_</del>	Well No	mw. z
Job No. H	SHI 3628	<b>_</b>	Date	11/8/97
TOC to Water	(ft.) 3.85	_ 4:55	Sheen	None
Well Depth (	ft.) <u> </u>	<del></del>	Free Produ	act Thickness $\phi$
Well Diamete	r 4 inch	<u>.                                    </u>	Sample Col	lection Method
Gal./Casing	vol. 3.4	_	Tec.	Ion Bailer
TIME PM	GAL. PURGED	Ħq	TEMPERATURE (4)	ELECTRICAL CONDUCTIVITY (MS/cm)
5.07	0.	6.09	67.6	3.01 × 1000
5:08	1	5.94	72.6	2.98
<u>5:0</u> 1	~	5.99	75-9	2.06
5:10	3	5.97	77.1	1.79
<u>5:11</u>	<u> </u>	5.91	78.5	1,70
<u>5:12</u>	- 5	5.84	79.0	1.68
5-13	6	5.78	79.3	1.66
5:14	7	5.75	79.7	1.64
5:15	<u> </u>	5.72	79.9	1.62
5.16	9	<u>5.65</u>	80.4	
5:17	10	5.70	80.2	1.62
5:17	10	well a	lewatered	
<u> </u>		5-62	74.5	<u> </u>
5:29	12	5.72	76.0	
5:30	13	5.70	758	1.57
<u>5:31</u>	14	5.67	<u> 75.3</u>	1.65
<u>5-:32</u>	15	5.66	75.2	1.65
<u>5-35</u>	collect	sample	ა	
<u>•</u>				
NOTES:	K. NO PH	1	1	1)
	IN NO PH	c o-coc.	L eaves	in Well

PURGE10.92 ATD 5 is written on the top of the PVC cap.

110 Second Avenue South, #D7, Pacheco, CA 94553 Telephone: 510-798-1620 Fax: 510-798-1622

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

RGA Environmental	Client Project ID: #HSHI3628;	Date Sampled: 11/05/97		
1260 45th Street	Hardage Suite Hotels- Emeryville	Date Received: 11/05/97		
Emeryville, CA 94608	Client Contact: Harry Lawrence	Date Extracted: 11/05/97		
	Client P.O:	Date Analyzed: 11/05/97		

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) <sup>+</sup>	МТВЕ	Benzene	Toluene	Ethylben- zene	Xylenes	% Recovery Surrogate
82617	MWI	w	ND	ND	ND	ND	ND	ND	94
82618	MW2	w	ND	ND	ND	ND	ND	ND	96
		i							
<u></u>									
								:	<u>. – </u>
				·					
	<u></u>								
				·			, ,		· <del></del> ·
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	S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

<sup>\*</sup> 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

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.

<sup>&</sup>quot; cluttered chromatogram; sample peak coelutes with surrogate peak

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

RGA Environmental			Client Project ID: #HSHI3628;		Date Sampled: 11/05/97		
1260 45 <sup>th</sup> Stre	et	Hardage Suite	Hotels- Emeryville	Date Received: 11/05/97			
Emeryville, C	A 94608	Client Contact:	Harry Lawrence	Date Extracted: 11/05/97			
		Client P.O:		Date Analyzed:	11/05/97		
PA methods mo			xtractable Hydrocarb QCB (SF Bay Region) metho		ID(3510)		
Lab ID	Client ID	Matrix	TPH(d) <sup>*</sup>		% Recovery Surrogate		
82617	MW1	w	210,c	2 22	104		
82618	MW2	w	230,c		104		
	<del></del>						
	<del></del>						

1	
ŀ	* 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
ĺ	extracts in ug/I

50 ug/L

1.0 mg/kg

W.

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.

Reporting Limit unless otherwise stated; ND means not detected above the reporting limit

<sup>&</sup>quot;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.



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Telephone: 510-798-1620 Fax: 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

RGA Environmental	Client P	roject ID: #F		I	Date Sample	1: 11/05/97			
1260 45th Street		Hardoon Cuita Masala E				Date Received: 11/05/97			
Emeryville, CA 94608	Client C	ontact: Harr	y Lawrence	Γ	ate Extracte	d: 11/05/97			
	Client P.	.O:		ſ	ate Analyze	d: 11/05-11	/06/97		
EPA methods 6010/200.7; 7470/7470/2	245.1/245.5 (Hg)	RCRA 7		(Se); 239.2 (F	b, water matrix	:)			
Lab ID	82617	82618				_	••		
Client ID	MWI	MW2		· -	] '	Reporting Lim	it		
Matrix	W	w			S	w	STLC,		
Extraction	Dissolved	Dissolved			TTLC	TTLC	TCLP		
Compound		Concent		ation*		mg/L	mg/L		
Arsenic (As)	ND	ND 0.026			2.5	0.005	0.25		
Barium (Ba)	0.095	0.11			1.0	0.05	0.05		
Cadmium (Cd)	ND	ND			0.5	0.005	0.01		
Chromium (Cr)	0.0055	0.010			0.5	0.005	0.05		
Lead (Pb)	ND	0.016			3.0	0.005	0.2		
Mercury (Hg)	ND	ND			0.06	0.0008	0.0008		
Selenium (Se)	ND	ND			2.5	0.005	0.25		
Silver (Ag)	ND	ND			1.0	0.01	0.05		
% Recovery Surrogate	NA	NA							
Comments		•							

<sup>\*</sup> water samples are reported in mg/L, soil and sludge samples in mg/kg, wipes in ug/wipe and all TCLP / STLC / SPLP extracts in mg/L ND means not detected above the reporting limit; N/A means surrogate not applicable to this analysis

DHS Certification No. 1644

\_\_\_\_\_Edward Hamilton, Lab Director

<sup>&</sup>lt;sup>o</sup> EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC -CA Title 22

<sup>\*</sup> surrogate diluted out of range

<sup>\*</sup> reporting limit raised due to matrix interference

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

### QC REPORT FOR HYDROCARBON ANALYSES

Date: 11/05/97

Matrix: WATER

	Concent	ation	(mg/L)		% Reco	very	
Analyte	Sample			Amount			RPD
	#(82584) _	MS	MSD	Spiked	MS	MSD	٠.
TPH (gas)	0.0	99.4	99.5	100.0	99.4	99.5	0.2
Benzene	0.0	10.6	10.1	10.0	106.0	101.0	4.8
Toluene	0.0	10.7	10.3	10.0	107.0	103.0	3.8
Ethyl Benzene	0.0	10.7	10.4	10.0	107.0	104.0	2.8
Xylenes	0.0	32.2	31.2	30.0	107.3	104.0	3.2
TPH(diesel)	0	149	148	1.50	100	99	0.7
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

### QC REPORT FOR METALS

Date: 11/05/97-11/06/97 Matrix: WATER

Extraction: Dissolved

	Concent	ration		!	% Reco	very	
Analyte	(100)	3/L)		Amount	ĺ	_	RPD
	Sample	MS	MSD	Spiked	MS	MSD	
Arsenic	0.0	5.3	5.2	5.0	     107	104	~ ~
Selenium	0.0	5.2				104	2.7
Molybdenum			5.1	5.0	104	102	2.6
<del>-</del>	0.0	5.4	5.4	5.0	108	108	0.0
Silver	0.0	0.6	0.6	0.5	116	114	1.7
Thallium	0.0	4.8	4.8	5.0	96	95	1.2
Barium	0.0	4.8	4.7	5.0	95	93	2.0
Nickel	0.0	5.0	4.9	5.0	99	98	0.9
Chromium	0.0	5.5	5.5	5.0	111	109	1.3
Vanadium	0.0	5.0	4.9	5.0	101	99	1.9
Beryllium	0.0	5.7	5.6	5.0	113	111	1.7
Zinc	0.0	5.8	5.7	5.0	116	113	2.2
Copper	0.0	4.8	4.6	5.0	96	93	3.7
Antimony	0.0	4.9	4.8	5.0	98	96	2.7
Lead	0.0	5.1	4.9	j 5.0 j	101	98	2.7
Cadmium	0.0	5.6	5.5	5.0	111	109	2.0
Cobalt	0.0	5.4	5.4	5.0	108	108	0.0
Mercury	i o.ooo	0.022	0.021	0.02	112	106	5.5

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

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



### ENVIRONMENTAL INC.

1260 45 TH STREET FAX: (510) 547-1983 TEL: (510) 547-7771

EMERYVILLE, CA 94608

### 9805 X RGA 50

# CHAIN OF CUSTODY

	Project Number: いろけ上 362			Project	t Name: તેજ્સ	Soute blotels - Fmery	] / j	tainers:	/ હું ફુંટું /		7    K	Metals	//	\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\			
	Sampled By: (Printed		ture):		l. Kind		No. of Co.	Analia	J.P.L. (3816.8).			n		rreservatives			
ſ	Sample Number	Date	Time	Т	уре	Sample Location	<del> </del>	H			100	_	- ( u	/_	Remarks		
					····								<u> </u>	725	Liberton Ha		
×	MWI	115/97		Wate	<u> </u>	Well lumi	.5-		쓰	人	X		<u> </u>	ځ	4 Hr Turn Area		
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-			:												82617		
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	,	KI/P			PRESERVATI	VOAS O&G METALS OTHER											
			ONDITION_		APPROPRIAT												
		HEAD SI	ACE ABSEN	Y	CONTAINERS	<b>*</b>											
	· · · · · · · · · · · · · · · · · · ·																
	Relinquished By: (Signature):		Date Time			1	Total No. of Samples Total No. of Containers				Laboratory: McCampbell						
	Relinquished By: (Signature):			Date	Time	Relinquished By: (Signature):	Laboratory Contac Ed Hamilt						Laboratory Phone Number:				
	Relinquished By: (Sign	nature):		Date	Time	Received For Laboratory By: (Signature)			Sa			naly	sis Re	alysis Request Sheet d (') Yes (*) No			

comments: VOAs are preserved with HCl. Metals are not preserved. Polease filter and preserve upon receipt at liboratory.

110 Second Avenue South, #D7, Pacheco, CA 94553 Telephone: 510-798-1620 Fax: 510-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com

RGA Environmental	Client Project ID: #HSHI3628;	Date Sampled: 11/09/97
1260 45th Street	Hardage Smith Hotels, Inc.	Date Received: 11/10/97
Emeryville, CA 94608	Client Contact: Harry Lawrence	Date Extracted: 11/12/97
	Client P.O:	Date Analyzed: 11/12/97
Diese	Range (C10-C23) Extractable Hydrocan	hone or Discol *

EPA methods modified 8015, and 3550 or 3510; California RWOCR (SE Bay Pagion) method CCED/2550) as

Lab ID	Client ID	Matrix	TPH(d) <sup>+</sup>	% Recovery Surrogate
82833	MW-1	w	240,c	100
82834	MW-2	w	220,c	100
Reporting Lim	it unless otherwise	w .	50 ug/L	
stated; ND means not detected above the reporting limit		s		

<sup>\*</sup> 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

<sup>\*</sup> 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.

<sup>\*</sup>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.

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RGA Environmental 1260 45 <sup>th</sup> Street Emeryville, CA 94608				ject ID: #HSHI3628;	Date Sampled: 11/09/97					
1260 45	<sup>th</sup> Street		Hardage S	mith Hotels, Inc.	Date Received: 11/10/97					
Emeryv	ille, CA 94608		Client Con	tact: Harry Lawrence	Date Extracted:					
			Client P.O		Date Analyzed:	11/11/97				
EPA analy	vtical methods 601	0/200.7, 239.2	+	Chromium*	<u> </u>					
Lab ID	Client ID	Matrix	Extraction	Chrom	ium	% Recovery Surrogate				
82834	MW2	w	Dissolved	ND		NA				
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Reporting Limit unless		s	TTLC	0.5 mg/	kg					
otherwi:	se stated; ND	w	TTLC	0.005 m	g/L					
	oorting limit		STLC, TCLP	0.05 mg	/L					

<sup>\*</sup> water samples are reported in mg/L, soil and sludge samples in mg/kg, wipes in ug/wipe and all TCLP / STLC / SPLP extracts in mg/L

<sup>\*</sup>Lead is analysed using EPA method 6010 (ICP)for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

<sup>&</sup>lt;sup>o</sup> EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC - CA Title 22

surrogate diluted out of range; N/A means surrogate not applicable to this analysis

<sup>\*</sup> reporting limit raised due to matrix interference

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

### QC REPORT FOR METALS

Date: 11/10/97-11/11/97 Matrix: WATER

Extraction: Dissolved

7 m = 1 t -	Concent				% Reco	very	
Analyte		3/L)		Amount			RPD
	Sample	MS	MSD	Spiked	MS	MSD	
Arsenic	0.0	4.8	4.9	5.0	96	98	2.6
Selenium	0.0	4.8	4.8	5.0	95	95	0.1
Molybdenum	0.0	4.8	4.9	5.0	96	97	0.9
Silver	0.0	0.5	0.5	0.5	98	98	0.1
Thallium	0.0	4.5	4.6	5.0	89	92	2.9
Barium	0.0	4.3	4.3	5.0 j	86	86	0.3
Nickel	0.0	4.6	4.6	5.0	92	92	0.5
Chromium	0.0	4.9	4.8	5.0	97	97	0.8
Vanadium	0.0	4.5	4.5	5.0	90	89	0.4
Beryllium	0.0	4.9	5.0	5.0	99	100	1.4
Zinc	0.0	5.1	5.2	5.0	102	103	1.3
Copper	0.0	4.4	4.4	5.0	88	88	0.8
Antimony	0.0	4.5	4.5	5.0	90	90	0.4
Lead	0.0	4.5	4.6	5.0	90	91	1.1
Cadmium	0.0	4.8	4.9	5.0	97	98	0.8
Cobalt	0.0	4.7	4.8	5.0	94	95	1.7
Mercury	0.000	0.022	0.021	0.02	112	106	5.5

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

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



### ENVIRONMENTAL INC.

1260 45 TH STREET FAX: (510) 547-1983 Tist: (510) 547-7771

EMERYVILLE, CA 94608

## CHAIN OF CUSTODY

				·				_				XF	26A51	
	Project Number: いるみと ろんころ Sampled By: (Printed		lure).	Project Name:	Socilie in	etels, Inc En	וועקיויי	Analysis(es).		E A		T /	9844 So <sub>vije</sub>	
L	Sampled By. (Filling		73	Cul H Ki	na T	etels, Inc Fin	7 8				//		Kemarks	i
	Sample Number	Date	Time	Туре	Sam	ole Location						H H		
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-						PRESERVATION					<u> </u>			
-					D CONDITION DESCRIPTION DE SPACE ABSENTATION DE LA COMPANION D	APPROPRIATE CONTAINERS		<del> </del>			-			
							<del>                                     </del>			_	-		***************************************	
_					RECIEL	7)								•
	Relinquished By: (Sig	rrica		Date 7100	1 ,		Total No. of Samples Containers		lainers	Laboratory: Mc.Camplel				
		6751	4EMQ	Date Time	Relinquishé	d Ry: \Signature):		ralory (			La	bora	itory Phone Numb	ber:
	Relinquished by: (Sig	nature):		Date Time	Received For I (Signature)	aboratory By:			ampl	e Ana	lysis	Req	quest Sheet (14) No	

Comments:

Sample for Chromium not preserved in the field. Please filter and preserve upon receipt at the laboratory,