



WOODFIN SUITE HOTELS

February 26, 2001



Ms. Susan Hugo
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

STD 6593

Re: Woodfin Suite Hotel *5800 Shellmound*
Emeryville, California

Dear Ms. Hugo:

At Tom Farrell's request, enclosed please find a copy of the Monitoring and Sampling Report 0164.R8, dated January 31, 2001 for the above referenced project.

Please let me know if you require anything further.

Yours sincerely,

BAC
Beth A. Chaney

Assistant to Thomas D. Farrell
Executive Vice President
and General Counsel

/bac
Enclosure

cc: Tom Farrell



February 15, 2001
RGA Job # HSHI3908
Letter 0164.L37



Mr. Tom Farrell
Hardage Construction Corporation
12730 High Bluff Drive, Suite 250
San Diego, CA 92130

RE: MONITORING AND SAMPLING REPORT TRANSMITTAL
Hardage Construction Corporation Site
5800 Shellmound Street
Emeryville, California

Dear Mr. Farrell:

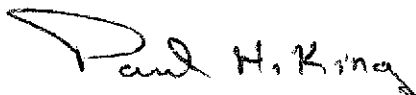
Please find enclosed five copies of the Monitoring and Sampling Report 0164.R8, dated January 31, 2001 for the subject site. Please contact us if you need additional copies of this report. One copy should be forwarded to each of the following people:

- ✓ • Ms. Susan Hugo
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502
- Mr. Chuck Headlee
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

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

Sincerely,

RGA Environmental, Inc.



Paul King
Hydrogeologist

Enclosures

PHK
0164.L37



4701 Doyle Street
Suite 14
Emeryville, CA 94608

510 547 7771
FAX 547 1983

January 31, 2001
RGA Job # HSHI3908
Report 0164.R8

Mr. Tom Farrell
Hardage Construction Corporation
12730 High Bluff Drive, Suite 250
San Diego, CA 92130

RE: QUARTERLY MONITORING AND SAMPLING REPORT
Hardage Construction Corporation Site
5800 Shellmound Street
Emeryville, CA 94608

Dear Mr. Farrell:

RGA Environmental, Inc. (RGA) is pleased to present this report documenting the results of the monitoring and sampling of the seven groundwater monitoring wells at the subject site. The wells are designated as ATD1B, ATD2A, ATD3, ATD4A, ATD5, ATD6, and ATD7. The wells were monitored and sampled on January 15, 2001. The monitoring and sampling was performed to evaluate groundwater conditions as part of the quarterly monitoring and sampling program requested by Ms. Susan Hugo of the Alameda County Department of Environmental Health (ACDEH). A Site Location Map (Figure 1) and Site Plan (Figure 2) are attached with this report.

All work was performed under the direct supervision of an appropriately registered professional. This report is prepared in accordance with guidelines set forth in the document "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites" dated August 10, 1990 and "Appendix A - Workplan for Initial Subsurface Investigation" dated August 20, 1991.

BACKGROUND

A summary of investigations performed at the subject site is provided in RGA's "Environmental Site Assessment Update Report" dated December 11, 1997. A total of seven groundwater monitoring wells were installed at the site by others during previous subsurface investigations. Based on discussions with Ms. Susan Hugo of the ACDEH, the seven groundwater monitoring wells were determined to be adequate to characterize groundwater conditions at the subject site. One of the wells installed by others (ATD1) appeared to have been destroyed by others, and was subsequently replaced with a well designated as ATD1A. One of the wells installed by others (ATD2) was destroyed and replaced with well ATD2A because the wellhead had been removed during construction and the well had filled with gravel.



4701 Doyle Street
Suite 14
Emeryville, CA 94608

510 547 7771
FAX 547 1983

One of the wells (ATD4) was destroyed and replaced with well ATD4A so as not to be located within the footprint of the new hotel at the site. Installation of the three wells was performed to restore the site groundwater monitoring network to a total of seven wells. Documentation of replacement of the wells is provided in RGA's report 0164.R4, "Well Installation Report," dated May 2, 2000.

Recent quarterly monitoring and sampling activity revealed that one well in the system (ATD1A) was partially full of sand. Documentation of attempts to flush and purge the sand out of ATD1A with clean water can be found in RGA's Report 0164.R5, "Quarterly Monitoring and Sampling Report," dated September 6, 2000. The sand in the well was the sand used for construction of the well filter pack. Based upon repeated attempts to remove the sand, it was determined that well replacement was appropriate. A Monitoring Well Replacement Work Plan (Letter 0164.L29) dated September 13, 2000 was submitted to the ACDEH for review and approval. The work plan was verbally approved by Ms. Susan Hugo of the ACDEH on September 19, 2000. On October 2, 2000, RGA personnel oversaw the destruction of ATD1A and the installation of one replacement groundwater monitoring well, designated as ATD1B, in the same borehole. Documentation of replacement of this well is provided in RGA's Report 0164.R6, "Monitoring Well Replacement Report," dated October 25, 2000.

FIELD ACTIVITIES

On January 15, 2001, the seven groundwater monitoring wells at the site (designated as ATD1B, ATD2A, ATD3, ATD4A, ATD5, ATD6, and ATD7 on the attached Site Plan) were monitored by RGA personnel. The groundwater monitoring 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, and the presence of free product or sheen was evaluated using a transparent bailer. No sheen was observed on the water from any of the wells, with the exception of well ATD6. Free product was not observed in any of the wells. A faint sulfurous odor was detected from well ATD2A, and a creosote-like odor was detected from well ATD6. Depth to water level measurements for the wells are presented in Table 1. Surveyed wellhead elevations were obtained during this quarter. Calculated groundwater surface elevations are also presented in Table 1.

All of the wells were sampled on January 15, 2001. After monitoring and prior to sampling, the monitoring wells were purged of a minimum of three casing volumes of water or until the wells were purged dry. 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

Water levels were measured in the monitoring wells once during the quarter. The measured depth to water in wells ATD1B through ATD7 ranged from 2.73 to 6.28 feet. Since the previous quarter, groundwater levels have increased in all of the wells by 0.31 to 2.2 feet with the exception of ATD3, where the water level decreased by 0.46 feet.

Based on the wellhead elevation survey data obtained from Santina & Thompson (State-licensed surveyors) and the measured depth to groundwater, the groundwater flow direction on January 15, 2001 was calculated to be to the west-southwest with a gradient of 0.012. This flow direction is consistent with previous reports by others which have shown that the groundwater flow direction at the site is westerly, towards San Francisco Bay. The groundwater monitoring data collected during this monitoring and sampling episode is presented in Table 1.

LABORATORY RESULTS

The groundwater samples collected on October 25 and 26, 2000 from monitoring wells ATD1B, ATD2A, ATD3, ATD4A, ATD5, ATD6, and ATD7 were analyzed for the following constituents: Total Petroleum Hydrocarbons as Diesel (TPH-D) using EPA Method 3510 in conjunction with Modified EPA Method 8015; benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8020; and the RCRA 8 metals (arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver) by various EPA-approved methods.

The laboratory analytical results of the groundwater samples collected on January 15, 2001 show: that TPH-D was detected in wells ATD1B, ATD2A, ATD3, ATD6, and ATD7 at concentrations ranging from 0.088 to 0.53 ppm, and in wells ATD4A and ATD5 at concentrations of 2.5 and 1.2 ppm, respectively. Benzene was not detected with the exception of wells ATD2A and ATD4A, where it was detected at concentrations of 0.0019 and 0.002 ppm, respectively. Review of the laboratory analytical reports indicates that the TPH-D results for wells ATD2A, ATD5, ATD6 and ATD7 are described as possibly aged diesel and a medium boiling point pattern that does not match diesel fuel.

The laboratory analytical results for the RCRA 8 metals for the groundwater samples collected on January 15, 2001 show: that cadmium, chromium, mercury, selenium and silver were not detected in any of the wells. Arsenic was detected in wells ATD5, and ATD6 at concentrations of 0.084 and 0.0065 ppm, respectively. Barium was detected in all of the wells at concentrations ranging from 0.027 to 0.15 ppm, with the exception of well ATD2A, where it was not detected. Lead was detected in wells ATD4A and ATD5 at concentrations of 0.10 ppm and 0.017 ppm, respectively.

Since the previous quarter when the wells sampled on October 25 and 26, 2000, TPH-D concentrations have increased in all of the wells except in well ATD4A where the TPH-D concentration has decreased. Benzene concentrations have decreased in the two wells where benzene was detected, since the previous quarter. Similarly, since the previous quarterly monitoring and sampling episode, concentrations of the RCRA 8 metals have decreased in all of the wells with the exception of arsenic in well ATD5 and barium in wells ATD1B, ATD3 and ATD5. The laboratory analytical results for organic compound analysis of the groundwater samples are summarized in Table 2. Laboratory analytical results for metals analysis of the groundwater samples are summarized in Table 3. Copies of the laboratory analytical reports and chain of custody documentation are attached with this report.

DISCUSSION AND RECOMMENDATIONS

All of the wells were monitored and sampled one time during the quarter. Sheen was detected in well ATD6 only. No measurable free product layers were detected in any of the wells.

The sample results showed that TPH-D was detected in all of the wells at concentrations ranging from 0.088 to 2.5 ppm. Benzene was not detected with the exception of wells ATD2A and ATD4A, where it was detected at concentrations of 0.0019 and 0.002 ppm, respectively. Review of the laboratory analytical reports indicates that the TPH-D results for wells ATD2A, ATD5, ATD6 and ATD7 are described by the laboratory as possibly aged diesel and a medium boiling point pattern that does not match diesel fuel.

None of the RCRA metals were detected at concentrations exceeding their respective MCL values with the exception of arsenic in well ATD5 and lead in well ATD4A.

Wellhead elevation survey data was obtained from a State-licensed surveyor, and the groundwater surface elevations calculated for the wells. Based on this information, the groundwater flow direction on January 15, 2001 was calculated to be to the west-southwest with a gradient of 0.012. This flow direction is consistent with previous reports by others which have shown that the groundwater flow direction at the site is westerly, towards San Francisco Bay.

Based on the sample results, RGA recommends that the quarterly groundwater monitoring and sampling program be continued for one more quarter, followed by evaluation for case closure.

LIMITATIONS

This report was prepared solely for the use of Hardage Construction Corporation. 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 site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgement 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.

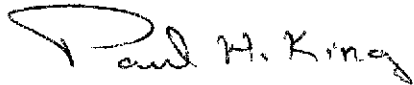
This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information gained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner 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 judgement 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 call us at (510) 547-7771.

Sincerely,

RGA Environmental



Paul H. King
California Registered Geologist
Registration No.: 5907
Expires: 12/31/01



Steff Steiner
Project Manager

Attachments: Tables 1, 2, & 3
Site Location Map (Figure 1)
Site Plan Showing Well Locations (Figure 2)
Wellhead Elevation Survey Data
Monitoring Well Purge Data Sheets
Laboratory Analytical Results
Chain of Custody Documentation

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0164.R8

TABLE 1
WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
ATD1B+	1/15/01	8.77	2.73	6.04
	10/25/00	Unknown	3.56	Unknown
ATD1A+	10/2/00	Destroyed and replaced by well ATD1B		
	8/15/00	Unknown	3.90	Unknown
	8/10/00	Unknown	6.10	Unknown
	7/17/00	Unknown	5.22	Unknown
ATD2A	1/15/01	9.23	2.94	6.29
	10/25/00	Unknown	3.95	Unknown
	7/17/00	Unknown	3.91	Unknown
	8/26/98	Unknown	3.77	Unknown
ATD3	1/15/01	9.96	4.37	5.59
	10/26/00	Unknown	3.91	Unknown
	7/17/00	Unknown	3.64	Unknown
	8/26/98	Unknown	3.37	Unknown
ATD4A	1/15/01	10.28	6.28	4.00
	10/26/00	Unknown	6.59	Unknown
	7/17/00	Unknown	4.30	Unknown
ATD5	1/15/01	10.05	5.21	4.84
	10/25/00	Unknown	6.21	Unknown
	7/17/00	Unknown	5.96	Unknown
	11/9/97	Unknown	3.85	Unknown
	11/5/97	Unknown	3.92	Unknown

Notes:

+ = Well ATD1A was replaced by Well ATD1B on October 2, 2000.

Elev. = Elevation

ft. = feet

TABLE 2
SUMMARY OF LABORATORY ANALYTICAL RESULTS
GROUNDWATER SAMPLES
ORGANIC ANALYSIS RESULTS

Well No.	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes
(Samples Collected on January 15, 2001)							
ATD1B	0.088	NA	NA	ND	ND	ND	ND
ATD2A	0.53	NA	NA	0.0019	ND	ND	ND
ATD3	0.1	NA	NA	ND	ND	ND	ND
ATD4A	2.5	NA	NA	0.002	0.00098	ND	0.0014
ATD5	1.2	NA	NA	ND	ND	0.012	0.025
ATD6	0.9	NA	NA	ND	ND	0.0011	ND
ATD7	0.25	NA	NA	ND	ND	ND	ND

Notes:

NA = Not Analyzed.

ND = Not Detected.

Results are in ppm (mg/L), unless otherwise indicated.

TABLE 2
(Continued)
SUMMARY OF LABORATORY ANALYTICAL RESULTS
GROUNDWATER SAMPLES
ORGANIC ANALYSIS RESULTS

Well No.	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes
(Samples Collected on August 26, 1998)							
ATD2	1.2	ND	NA	0.0021	ND	ND	ND
ATD3	ND	ND	NA	ND	ND	ND	ND
(Samples Collected on November 9, 1997)							
ATD5	0.22	NA	NA	NA	NA	NA	NA
ATD7	0.24	NA	NA	NA	NA	NA	NA
(Samples Collected on November 5, 1997)							
ATD5	0.23	ND	ND	ND	ND	ND	ND
ATD7	0.21	ND	ND	ND	ND	ND	ND

Notes:

NA = Not Analyzed.

ND = Not Detected.

* = Laboratory analytical report note: oil-range compounds significant in TPH-D result.

** = Laboratory analytical report note: gasoline-range compounds significant in TPH-D result.

*** = Laboratory analytical report note: both diesel- and oil-range compounds are significant in the TPH-D result.

Results are in ppm (mg/L), unless otherwise indicated.

TABLE 3
(Continued)
SUMMARY OF LABORATORY ANALYTICAL RESULTS
GROUNDWATER SAMPLES
METALS RESULTS

Well No.	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
MCL	0.05	1.00	0.01	None	0.05	0.002	0.01	0.05
(Samples Collected on October 25 and 26, 2000)								
ATD1B	ND	0.078	ND	ND	ND	ND	ND	ND
ATD2A	0.0077	ND	ND	ND	ND	ND	ND	ND
ATD3	ND	0.14	ND	ND	ND	ND	ND	ND
ATD4A	0.23	0.12	ND	ND	0.12	ND	ND	ND
ATD5	0.022	ND	ND	ND	0.027	ND	ND	ND
ATD6	NA	NA	NA	NA	NA	NA	NA	NA
ATD7	ND	0.16	ND	ND	ND	ND	ND	ND
(Samples Collected on July 17, 18, and August 15, 2000)								
ATD1A	0.015	0.22	ND	ND	ND	ND	ND	ND
ATD2A	0.0087	ND	ND	ND	ND	ND	ND	ND
ATD3	ND	0.14	ND	ND	ND	ND	ND	ND
ATD4A	10	0.34	ND	0.031	0.72	0.006	ND	ND
ATD5	0.016	ND	ND	0.024	0.04	0.001	ND	ND
ATD6	0.0066	0.088	ND	ND	ND	ND	ND	ND
ATD7	ND	0.11	ND	0.17	ND	ND	ND	ND
(Samples Collected on August 26, 1998)								
ATD2	0.023	ND	ND	ND	ND	ND	ND	ND
ATD3	ND	ND	ND	ND	ND	ND	ND	ND
(Samples Collected on November 9, 1997)								
ATD5	NA	NA	NA	ND	NA	NA	NA	NA
ATD7	NA	NA	NA	NA	NA	NA	NA	NA
(Samples Collected on November 5, 1997)								
ATD5	0.026	0.11	ND	0.01	0.016	ND	ND	ND
ATD7	ND	0.095	ND	0.0055	ND	ND	ND	ND

Notes:

MCL = Maximum Concentration Limit.

NA = Not Analyzed.

ND = Not Detected.

Results are in ppm (mg/L), unless otherwise indicated.

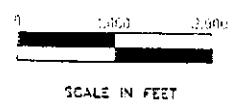


FIGURE 1
 SITE LOCATION MAP
 Hardage Construction Corporation Site
 5800 Shellmound Street
 Emeryville, California



Source:
 U.S. Geological Survey
 Oakland West, California
 7.5 Minute Quadrangle
 Photorevised, 1980

RGA Environmental, Inc.
 4701 Doyle Street, Suite 14
 Emeryville, California 94608



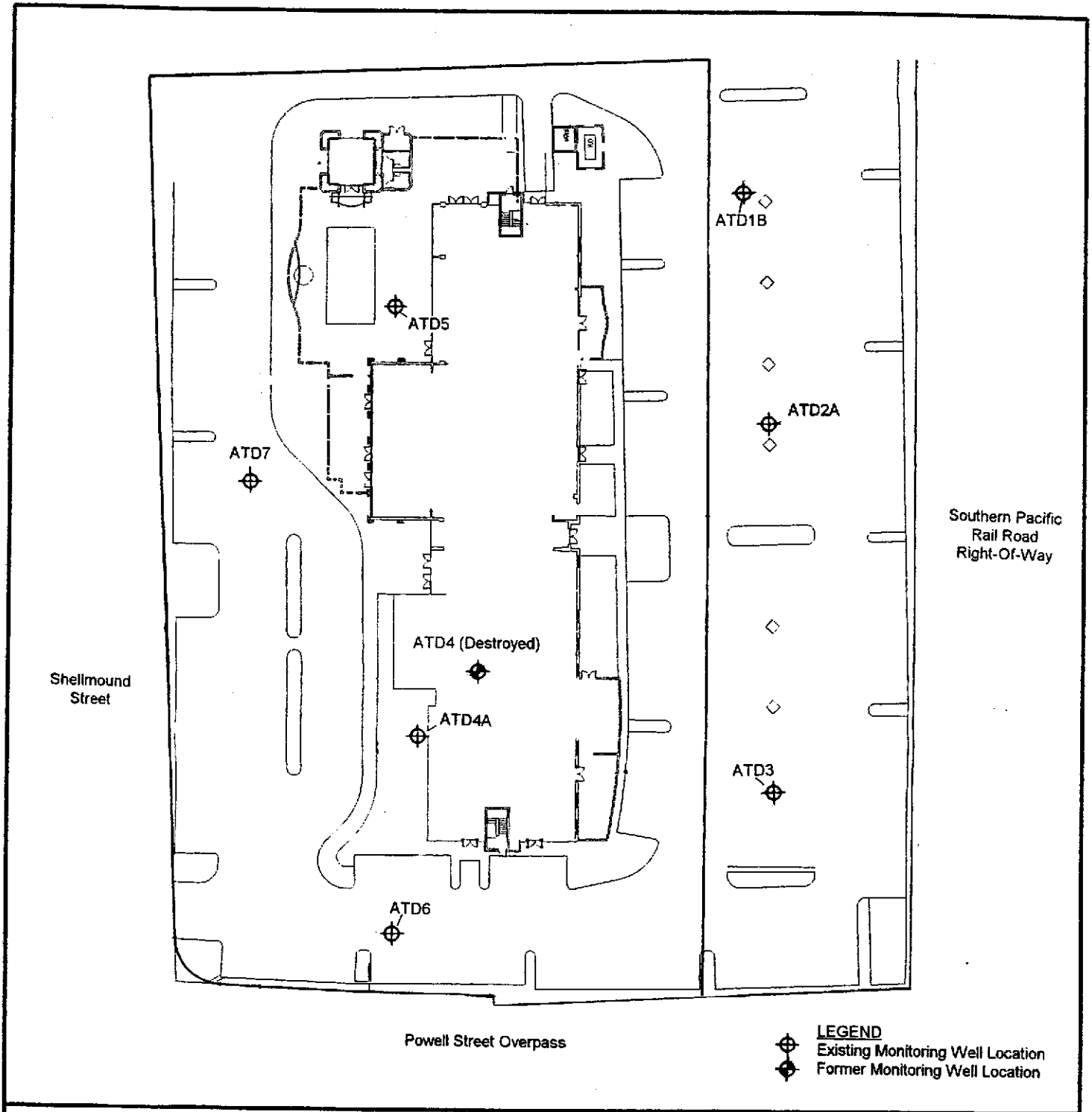
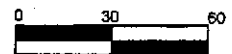


FIGURE 2
SITE PLAN
 Hardage Construction Corporation Site
 5800 Shellmound Street
 Emeryville, California



Source:
 Santina & Thompson, Inc.
 Woodfin Suite Hotel
 Monitoring Well Location and Elevation Map
 March, 1999

RGA Environmental, Inc.
 4701 Doyle Street, Suite 14
 Emeryville, California 94608



SCALE IN FEET

WOODFIN SUITE HOTEL

MONITORING WELL LOCATION AND ELEVATION MAP

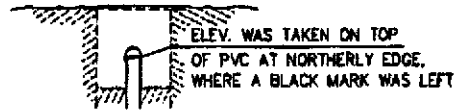
BENCH MARK:

DESCRIPTION: TEMPORARY BENCHMARK
LOCATION: ON TOP OF A FIRE HYDRANT UNDERNEATH POWELL OVERPASS, 250' EAST OF THE C/L OF SHELLMOUND STREET AND 25' NORTH OF THE C/L OF POWELL STREET.

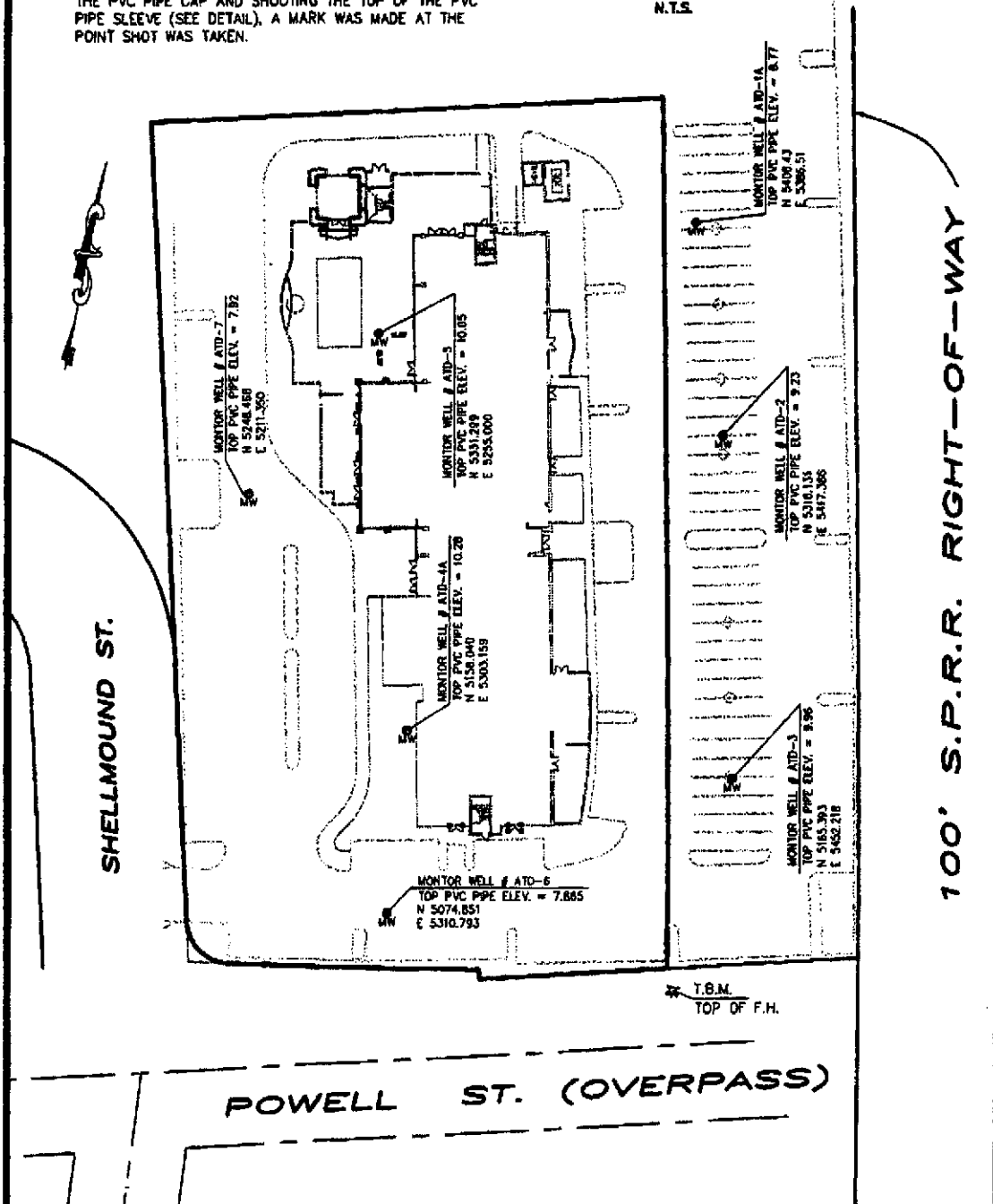
ELEVATION: 10.79'
DATUM:

NOTES:

- ALL OF THE MONITORING WELL WERE SHOT BY TAKING OFF THE PVC PIPE CAP AND SHOOTING THE TOP OF THE PVC PIPE SLEEVE (SEE DETAIL), A MARK WAS MADE AT THE POINT SHOT WAS TAKEN.



MONITORING WELL
TYPICAL ELEVATION SHOT LOCATION
 N.T.S.



DATE: Jan. 3, 2001
SCALE: 1" = 60'
DRAWN BY: JMR
CHECKED BY: JMR/BL

MUNICIPAL ENGINEERING
 RAILROAD ENGINEERING
 SURVEYING
 PLUMBING

SANTINA & THOMPSON, INC.

1355 WILLOW WAY, SUITE 280 CONCORD, CA. 94520



McCAMPBELL ANALYTICAL INC.

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

RGA Environmental 4701 Doyle Street, #14 Emeryville, CA 94608	Client Project ID: HSH13908; Hardage	Date Sampled: 01/15/2001
		Date Received: 01/16/2001
	Client Contact: Paul King	Date Extracted: 01/16/2001
	Client P.O:	Date Analyzed: 01/17-01/23/2001

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

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

Lab ID	Client ID	Matrix	TPH(d) [†]	% Recovery Surrogate
57982	ATD-1B	W	88,b	106
57983	ATD-2A	W	530,c/e	107
57984	ATD-3	W	100,b	106
57985	ATD-4A	W	2500,a	109
57986	ATD-5	W	1200,c/e	102
57987	ATD-6	W	900,c/e	104
57988	ATD-7	W	250,c/e	103
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	


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

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

*The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (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.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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

RGA Environmental 4701 Doyle Street, #14 Emeryville, CA 94608	Client Project ID: HSHI3908; Hardage	Date Sampled: 01/15/2001
	Client Contact: Paul King	Date Received: 01/16/2001
	Client P.O:	Date Extracted: 01/16/2001
		Date Analyzed: 01/16/2001

RCRA Metals*							
EPA methods 6010/200.7; 7470/7470/245.1/245.5 (Hg); 7060/206.2 (As); 7740/270.2 (Se); 239.2 (Pb, water matrix)							
Lab ID	57982	57983	57984	57985	Reporting Limit		
Client ID	ATD-1B	ATD-2A	ATD-3	ATD-4A	S	W	STLC, TCLP
Matrix	W	W	W	W			
Extraction ^o	Dissolved	Dissolved	Dissolved	Dissolved	TTLIC	Dissolved	
Compound	Concentration*				mg/kg	mg/L	mg/L
Arsenic (As)	ND	ND	ND	ND	2.5	0.005	0.25
Barium (Ba)	0.14	ND	0.15	0.088	1.0	0.05	0.05
Cadmium (Cd)	ND	ND	ND	ND	0.5	0.005	0.01
Chromium (Cr)	ND	ND	ND	ND	0.5	0.02	0.05
Lead (Pb)	ND	ND	ND	0.10	3.0	0.005	0.2
Mercury (Hg)	ND	ND	ND	ND	0.06	0.0008	0.005
Selenium (Se)	ND	ND	ND	ND	2.5	0.005	0.25
Silver (Ag)	ND	ND	ND	ND	1.0	0.01	0.05
% Recovery Surrogate	N/A	N/A	N/A	N/A			
Comments							

* 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

^o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLIC), 3040(organic matrices, TTLIC), 3050(solids, TTLIC); STLC -CA Title 22

[®] DISTLC extractions are performed using STLC methodology except that deionized water is substituted for citric acid buffer as the extraction fluid. DISTLC results are not applicable to STLC regulatory limits.

[®] surrogate diluted out of range

[®] 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.

DHS Certification No. 1644

 Edward Hamilton, Lab Director



McCAMPBELL ANALYTICAL INC.

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

RGA Environmental 4701 Doyle Street, #14 Emeryville, CA 94608	Client Project ID: HSH13908; Hardage	Date Sampled: 01/15/2001
		Date Received: 01/16/2001
	Client Contact: Paul King	Date Extracted: 01/16/2001
	Client P.O:	Date Analyzed: 01/16-01/18/2001

RCRA Metals*

EPA methods 6010/200.7; 7470/7470/245.1/245.5 (Hg); 7060/206.2 (As); 7740/270.2 (Sc); 239.2 (Pb, water matrix)

Lab ID	57986	57987	57988	Reporting Limit		
				S	W	STLC, TCLP
Client ID	ATD-5	ATD-6	ATD-7	TTLIC	Dissolved	mg/L
Matrix	W	W	W			
Extraction ^o	Dissolved	Dissolved	Dissolved	mg/kg	mg/L	mg/L
Compound	Concentration*			mg/kg	mg/L	mg/L
Arsenic (As)	0.084	0.0065	ND	2.5	0.005	0.25
Barium (Ba)	0.027	0.075	0.14	1.0	0.05	0.05
Cadmium (Cd)	ND	ND	ND	0.5	0.005	0.01
Chromium (Cr)	ND	ND	ND	0.5	0.02	0.05
Lead (Pb)	0.017	ND	ND	3.0	0.005	0.2
Mercury (Hg)	ND	ND	ND	0.06	0.0008	0.005
Selenium (Sc)	ND	ND	ND	2.5	0.005	0.25
Silver (Ag)	ND	ND	ND	1.0	0.01	0.05
% Recovery Surrogate	N/A	N/A	N/A			
Comments						

* 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

^o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLIC), 3040(organic matrices, TTLIC), 3050(solids, TTLIC); STLC -CA Title 22

^u DISTLC extractions are performed using STLC methodology except that deionized water is substituted for citric acid buffer as the extraction fluid. DISTLC results are not applicable to STLC regulatory limits.

[†] surrogate diluted out of range

⁴ 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.

DHS Certification No. 1644

 Edward Hamilton, Lab Director



ENVIRONMENTAL INC.

4701 Doyle St, #100-45-11111111
FAX: (510) 547-1983

TEL: (510) 547-7771
EMERYVILLE, CA 94608

CHAIN OF CUSTODY

24025 ZVGA F2.doc

Project Number: WSHE 3908	Project Name: Mortgage
Sampled By: (Printed and Signature): Paul H. King	

No. of Containers:	Analysis(es):			Preservatives	Remarks
	TPH - Diesel	BTEX	PCRA & Metals		
					57982
6	X	X	X	ICE	Normal Turn Around
6	X	X	X	"	"
6	X	X	X	"	57983
6	X	X	X	"	57984
6	X	X	X	"	57985
6	X	X	X	"	57986
6	X	X	X	"	57987
6	X	X	X	"	57988

Sample Number	Date	Time	Type	Sample Location
ATD-1B	1/15/01		Water	
ATD-2A	"		"	
ATD-3	"		"	
ATD-4A	"		"	
ATD-5	"		"	
ATD-6	"		"	
ATD-7	"		"	

Relinquished By: (Signature): Paul H. King	Date: 1/16/01	Time: 10:00 AM	Relinquished By: (Signature): [Signature]	Total No. of Samples: 7	Total No. of Containers: 42	Laboratory: McCampbell Analytical
Relinquished By: (Signature): [Signature]	Date: 1/16/01	Time: 17:41	Relinquished By: (Signature): [Signature]	Laboratory Contact: Ed Hamilton	Laboratory Phone Number: 925-798-1620	
Relinquished By: (Signature):	Date:	Time:	Received For Laboratory By: (Signature): [Signature]	Sample Analysis Request Sheet Attached () Yes (X) No		

Comments: Please filter and preserve samples in polypropylene containers for metals analysis

ICE? GOOD CONDITION HEAD SPACE ABSENT

PRESERVATION APPROPRIATE CONTAINERS

VOAS O&G METALS OTHER

filtered & preserved in lab w/ manual

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