

CITY OF OAKLAND



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ENVIRONMENTAL SERVICES • 1333 BROADWAY, SUITE 330A • OAKLAND, CALIFORNIA 94612

Public Works Agency

(510) 238-6688 FAX (510) 238-7286 TDD (510) 238-7644

March 25, 1998

Mr. Larry Seto Alameda County Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Subject:

Environmental Site Assessment Report - Housewives Marketplace

818 Jefferson Street, Oakland, California (97102)

Dear Mr. Seto:

Enclosed is one copy of the report entitled *Report of Additional Soil and Groundwater Sampling Results, The Housewives Market and Retail/Office Space*, prepared by our consultant, SECOR International Inc., dated March 16, 1998. No soil or groundwater contamination was found in any of the six additional borings that were drilled. Based on these results, it appears that the contaminated groundwater is limited to the northeast portion of the property near the corner of 9th and Clay Streets. Because the existing building constrains excavation at this time, the City will address cleanup of as part of the planned redevelopment of the site.

Please call me at 238-7695, or Andrew Clark-Clough at 238-6361, if you have any questions or require additional information.

Sincerely,

Mark B. Hersh

Environmental Program Specialist

Muss B Henl

cc: Janet Howley, CEDA Projects Division (w encl.)

Andrew Clark-Clough. PWA Environmental Services (wo encl.)

Leroy Griffin, OES Hazardous Materials Supervisor (w o encl.)



REPORT OF ADDITIONAL
SOIL AND GROUNDWATER
SAMPLING RESULTS
THE HOUSEWIVES MARKET AND
RETAIL/OFFICE SPACE
8TH, 9TH, CLAY AND JEFFERSON STREETS
OAKLAND, CALIFORNIA

SECOR Job No. 70100-019-04

Prepared For:

The City of Oakland Public Works Agency Environmental Services Division 1333 Broadway, Suite 330 Oakland, California 94612

Submitted By:

SECOR International Incorporated 1390 Willow Pass Road Suite 360 Concord, California 94520

March 16, 1998

Prepared By:

Charles Melancon Staff Geologist

Knotike Trees

Reviewed By:

Robert Robitaille
Project Geologist

Bruce E. Scarbrough, R.G Principal Geologist

TABLE OF CONTENTS

			Page
1.0	INTROI	DUCTION	. 1-1
	1.1	Background	. 1-1
2.0	SCOPE	OF WORK	. 2-1
	2.1	Pre-field Activities	2-1
	2.2	Field Activities	2-1
	2.3	Sample Analysis	. 2-2
3.0	RESULT	rs	3-1
	3.1	Hydrogeology and Geology	3-1
	3.2	Soil Analytical and PID Results	
	3.3	Groundwater Analytical Results	
4.0	SUMMA	ARY AND CONCLUSIONS	<i>A</i> _1

i

LIST OF FIGURES

FIGURE 1 Site Location Map

FIGURE 2 Site Plan and Boring Locations

LIST OF TABLES

TABLE 1 Summary of Soil Analytical Results

TABLE 2 Summary of Groundwater Analytical Results

LIST OF APPENDICES

APPENDIX A Permits

APPENDIX B Boring Logs

APPENDIX C Laboratory Analytical Reports and Chain-of-Custody Records

1.0 INTRODUCTION

This report presents the results of a soil and groundwater investigation conducted at the Housewives Market and retail/office space located north of 8th Street, south of 9th Street, east of Jefferson Street, and west of Clay Street in Oakland, Alameda County, California (the subject property). The investigation was performed by SECOR International Incorporated (SECOR) for the City of Oakland, Public Works Agency, Environmental Services Division at the request of Mr. Mark Hersh in support of a potential redevelopment of the subject property. The purpose of the investigation was to assess the lateral extent and identify possible source area(s) of the petroleum hydrocarbon contaminated groundwater discovered during the October 1997 investigation activities.

1.1 Background

The subject property is located in a retail/commercial area in the city of Oakland, Alameda County, California. The property consists of the block bounded by Clay and Jefferson Streets, and 8th and 9th Streets (Figure 1). The subject property is occupied by a parking lot and three individual, but contiguous buildings, housing several retail tenants. The buildings and subject property features are depicted on Figure 2.

The subject property is at an elevation of approximately 33 feet above mean sea level (msl). The area gently slopes to the west-southwest. The nearest water body is the Oakland Inner Harbor, which is part of San Francisco Bay. The Oakland Inner Harbor is located approximately one-half mile south of the subject property. The subject property is located within a large area of regional subsidence and sediment fill known as the San Francisco Bay trough which extends from the Hayward fault westward across Oakland and San Francisco Bay. The bedrock block within this trough has been tilted to the east, causing the maximum subsidence and subsequent maximum accumulation of sediments to occur in the eastern part of the trough within an area including the present City of Oakland. This subsidence and deposition of successive layers of sediments has been occurring since the start of Pleistocene time (about 2 million years ago). Development of the San Francisco Bay trough is directly related to the evolution of the San Andreas fault system, which contains the Hayward and San Andreas faults, as well as other faults to the east. The subject property is directly underlain by three geologic units that are part of the sedimentary fill of the San Francisco Bay trough. These units are (from ground surface down) the Merritt Sand, the San Antonio Formation, and the Alameda Formation. These units are Pleistocene in age (Woodward-Clyde Consultants, 1991).

Based on information gathered during this investigation, groundwater beneath the property is present at depths of 24 to 26 feet below ground surface (bgs). Based on information gathered during the Phase I Environmental Site Assessment (ESA), groundwater beneath the subject property appears generally to flow to the southwest toward the Oakland Inner Harbor

HSWIT, 494 Rm. - WM March 16 1998 SECOR 105 No. 7013014019494 A Phase I ESA was performed in support of a potential financial transaction regarding the subject property. Results were presented in the report titled Phase I Environmental Site Assessment Report (SECOR, September 10, 1997). Results of the Phase I ESA indicated that two former gasoline stations were present on the subject property (one in the southwest corner and one in the northeast corner) from sometime between 1913 and 1951 to sometime prior to 1957. In addition, several facilities in the vicinity of the subject property have been documented as using chemicals or having had releases of chemicals to soil and/or groundwater. The California Environmental Protection Agency (Cal-EPA) Leaking Underground Storage Tank (LUST) list identified 16 LUST facilities located within one-quarter mile of the subject property. Five of the facilities are located within a one-eight mile radius of the subject property (SECOR, 1997). According to a report prepared by Woodward-Clyde consultants, a gasoline plume was present beneath a former gasoline station, located 150 feet north and crossgradient of the subject property at 901-999 Jefferson Street. The report indicated that up to 26,000 micrograms per liter ($\mu g/\ell$) gasoline was present in the groundwater. The subject property was granted case closure in December 1996 by the Alameda County Environmental Health Department.

A Phase II investigation was performed at the subject property on October 21, 1997. No soil impacts were detected during the investigation, however, significant groundwater contamination consisting of gasoline constituents and mineral spirits were found in boring GP-4 located at the northeast corner of the subject property. The groundwater sample collected from boring GP-4 contained concentrations of benzene at 3,200 $\mu g/\ell$, toluene at 13,000 $\mu g/\ell$, ethylbenzene at 13,000 $\mu g/\ell$, xylenes at 53,000 $\mu g/\ell$, total petroleum hydrocarbons as gasoline (TPHg) at 1,700,000 $\mu g/\ell$, and total petroleum hydrocarbons as mineral spirits (TPHms) at 210,000 $\mu g/\ell$. Additionally, concentrations of total petroleum hydrocarbons as motor oil (TPHmo) at 670 $\mu g/\ell$ were detected in groundwater collected from boring GP-1 located near the southeast corner of the subject property.

2.0 SCOPE OF WORK

2.1 Pre-field Activities

SECOR obtained a drilling permit from the Alameda County Public Works Agency and an excavation permit from the City of Oakland Office of Planning and Building prior to conducting field activities. Copies of the approved drilling Permit No. 978WR028 and excavation Permit No. X9800045 are included in Appendix A. In addition, an existing Health and Safety Plan (HASP) specific to the subject property was updated based on the work previously performed at the subject property. Underground Service Alert was notified prior to commencement of field activities so that underground utilities in the vicinity of the borings could be identified and the boring locations modified, if necessary.

2.2 Field Activities

On January 16, 1998, C.U. Survey, a professional utility locating contractor, conducted a survey of the area in the vicinity of the proposed boring locations. On January 22 and 23, 1998, six boreholes (GP-5 through GP-10) were advanced by Vironex at the locations shown in Figure 2. Four borings (GP-5, GP-6, GP-9, and GP-10) were advanced in locations surrounding the previous boring location of GP-4 where the grab groundwater sample collected during the previous investigation indicated petroleum hydrocarbon impact to groundwater. Two additional borings (GP-7 and GP-8) were advanced in an area of no previous investigation.

Boreholes were advanced to depths ranging from 24 to 28 feet bgs using a truck-mounted direct-push sampler. The borings were continuously cored using a 4-foot long by 1.75-inch inside-diameter core barrel. The soils encountered were logged by a SECOR geologist in an attempt to produce an accurate lithologic and stratigraphic profile for each borehole. Soil samples for possible laboratory analysis were collected at approximately 5-foot intervals by cutting the 4-foot acetate soil sample liners at the desired interval and capping the ends of the cut tube using Teflon and tight-fitting plastic end caps. The soil adjacent to the retained samples was screened in the field for the presence of volatile organic compounds (VOCs) using a photo-ionization detector (PID). Groundwater was encountered at depths ranging from approximately 22.5 to 23.5 feet in each of the boreholes. One grab groundwater sample was collected from each borehole by lowering a disposable bailer into each borehole, retrieving the bailer, and dispensing the sample into laboratory supplied sample containers. Collected soil and groundwater samples were labeled with sample names, the time and date of collection, and placed on ice in an insulated cooler for transport under chain-of-custody to a California state-certified analytical laboratory. Upon completion of sampling activities, the boreholes were abandoned by backfilling with Portland cement and completed at the surface with asphalt to match the existing cover.

Between borings, drilling and sampling equipment contacting subsurface soils was decontaminated to prevent cross-contamination. Rinsate water generated during field activities was used for mixing the cement grout for borehole abandonment. Four 5-gallon buckets of soil cuttings were generated during sampling activities. The buckets were labeled and left on-site as directed by the City of Oakland.

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2.3 Sample Analysis

One groundwater sample and two samples from each boring were analyzed by Superior Analytical Laboratory. The soil samples and four groundwater samples were analyzed for a total petroleum hydrocarbon (TPH) scan and benzene, toluene, ethylbenzene and xylenes (BTEX) in accordance with Environmental Protection Agency (EPA) Method 8015 (modified) and EPA Method 8020, respectively. The groundwater samples from boreholes GP-5 and GP-7 were only analyzed for total petroleum hydrocarbons as gasoline (TPHg) and BTEX by EPA Method 8015 (modified) and EPA Method 8020, respectively. These boreholes produced insufficient groundwater for the collection of the liter bottles needed to perform the TPH scan.

3.0 RESULTS

3.1 Hydrogeology and Geology

The subsurface was explored to a maximum depth of 28 feet during this investigation. Asphalt and baserock fill was present in the top 1-foot of all borings. Beneath the baserock fill the subject property geology consists of a continuous unit of fine-grained sand with trace amounts of silt. Groundwater was observed in the borings at depths ranging from 22.5 to 23.5 feet bgs. In all cases, the groundwater was found in an apparently unconfined condition. Boring logs are included in Appendix B.

3.2 Soil Analytical and PID Results

Soil samples collected from the borings at 15 feet bgs and just above first encountered groundwater (depths ranging from 21.5 to 23 feet bgs) were submitted for laboratory analysis. None of the 12 soil samples analyzed contained concentrations of BTEX or TPH above laboratory reporting limits. Soil analytical results are summarized in Table 1 and copies of the laboratory analytical reports provided as Appendix C.

Significant levels of volatile organic compounds were not detected by the PID during field screening of the soil collected from the borings. PID readings are included on the boring logs (Appendix B).

3.3 Groundwater Analytical Results

The groundwater samples collected from the six borings (GP-5 through GP-10) did not contain TPHg or BTEX compounds above laboratory detection limits. The groundwater samples collected from borings GP-6, GP-8, GP-9, and GP-10 that produced sufficient groundwater to run a TPH scan contained no petroleum hydrocarbons above the laboratory detection limits. Groundwater analytical results are summarized in Table 2 and copies of the laboratory analytical reports are provided as Appendix C.

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4.0 SUMMARY AND CONCLUSIONS

During both, this phase of site investigation activities and the previous site investigation performed on October 21, 1997, the soils encountered in all boring locations consisted of one continuous unit of fine-grained sand with trace amounts of silt and clay, which is interpreted to be Merritt Sand. Groundwater was observed in the borings at depths ranging from 22.5 to 26 feet bgs. In all cases, the groundwater was found in an apparently unconfined condition.

During the previous site investigation performed in October1997, significant elevated concentrations of gasoline constituents and mineral spirits were found in the groundwater beneath the northeast corner of the subject property in the vicinity of boring GP-4. The groundwater sample collected from boring GP-4 contained concentrations of benzene at 3,200 μ g/ ℓ , toluene at 13,000 μ g/ ℓ , ethylbenzene at 13,000 μ g/ ℓ , xylenes at 53,000 μ g/ ℓ , gasoline at 1,700,000 μ g/ ℓ , and TPHms at 210,000 μ g/ ℓ .

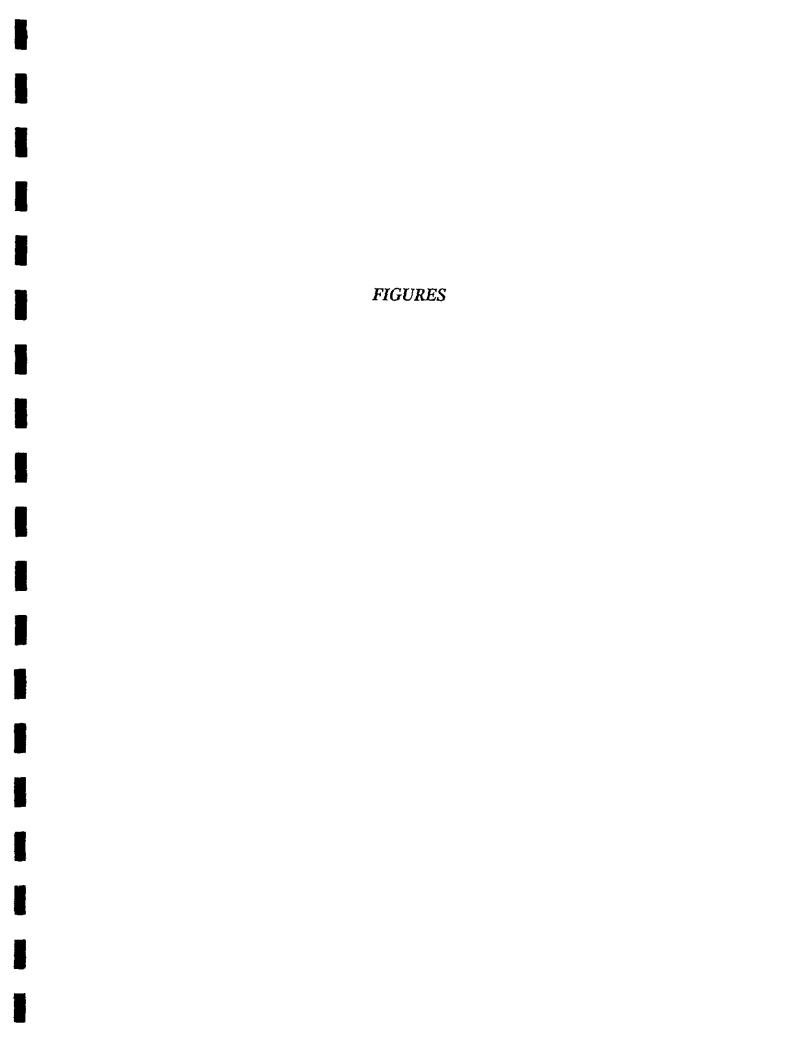
Analysis of soil and groundwater samples from the six recent borings (GP-5 through GP-10) found no detectable levels of petroleum hydrocarbons in soil and groundwater at these locations. Therefore, no additional areas of contaminated soil or groundwater were identified during this project.

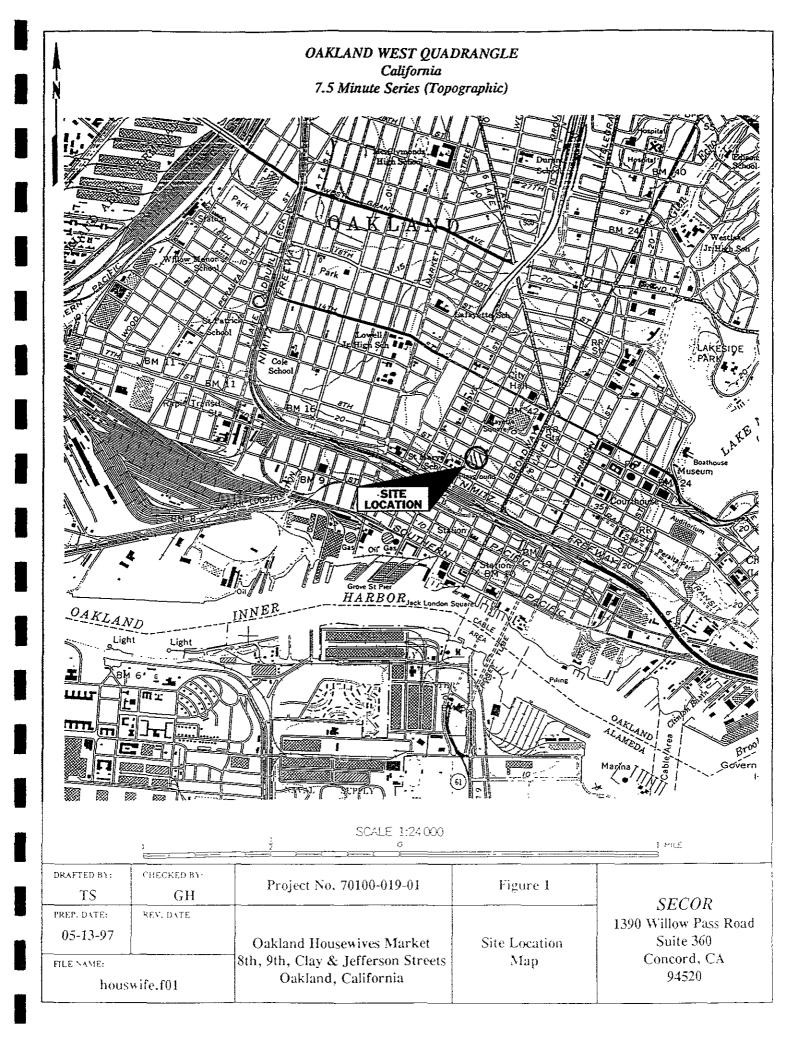
Four of the six additional boreholes advanced during this phase of field investigation activities were located surrounding the location of the previously documented groundwater contamination at boring GP-4 in the northeast corner of the subject property. Because no contaminated soil or groundwater was found at apparent for upgradient boring GP-5 or crossoradient boring GP-6 and GP-10, the source of the contamination is likely. upgradient boring GP-5 or crossgradient borings GP-6 and GP-10, the source of the contamination is likely within the boundaries of the northeast portion of the subject property. In addition, because no detectable concentrations of petroleum hydrocarbons were found in the borings GP-9 and GP-3 located in the apparent downgradient direction, the area of affected groundwater and possible affected soil is apparently limited to the northeast corner of the subject property.

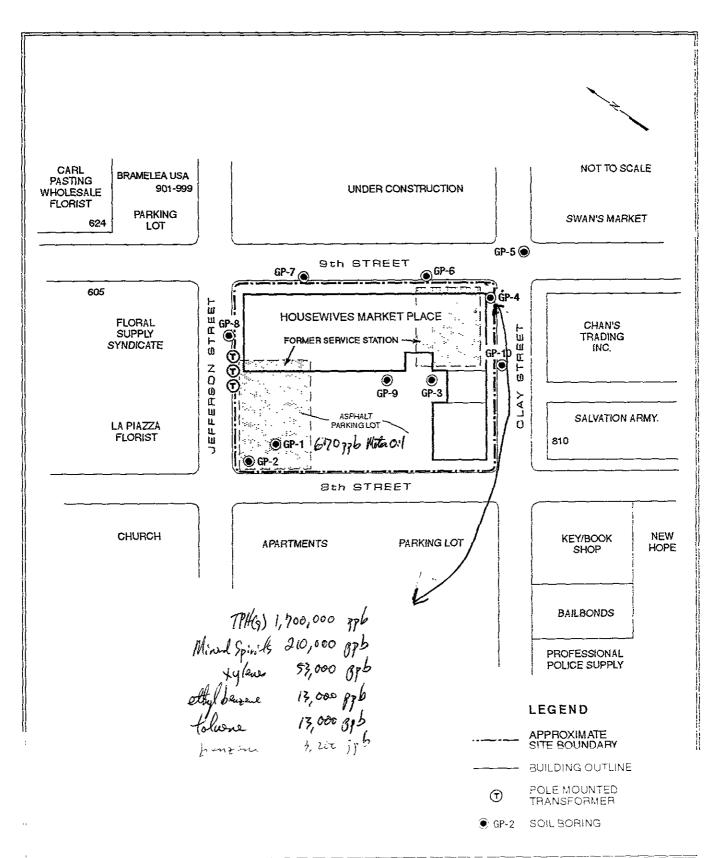
Based on the results of this investigation and the previous investigation, the area of contaminated groundwater appears to be limited to the northeast corner of the subject property. BTEX concentrations in groundwater from former boring GP-4 located in the sidewalk near the northeast corner of the subject property exceed maximum contaminant levels (MCLs) for drinking water, and benzene concentrations are above the Draft State Water Resources Control Board's (SWRCB) Policy of Investigation and Cleanup of Petroleum Discharges to Soil and Groundwater (Resolution No. 1021b). Although impacts were not detected in soil samples collected from the area, field personnel noted a strong hydrocarbon odor and soil staining at depths greater than 11 feet in soil collected from GP-4. This suggests the possible presence of an on-site source, possibly an abandoned underground storage tank (UST) affiliated with the former gasoline station.

SECOR is aware that redevelopment of the subject property may be occurring in the near future. SECOR recommends that the City of Oakland and/or it's contractors include provisions for the safe handling of contaminated groundwater and of potentially impacted soils underlying the building in the northeast corner of the property during redevelopment activities. In addition, the City of Oakland should be aware of the possibility of encountering buried tanks and associated piping during subsurface work in both the southwest and northeast corners of the property.

BSWFE-14 RAL - WP6 Marca 16, 1998 SECOR Jon No. 70,004013434







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, PEM	<u>GH</u>	70100-019-01	TITLE	BORING LOCATION MAP	1390 Willow Pass Road
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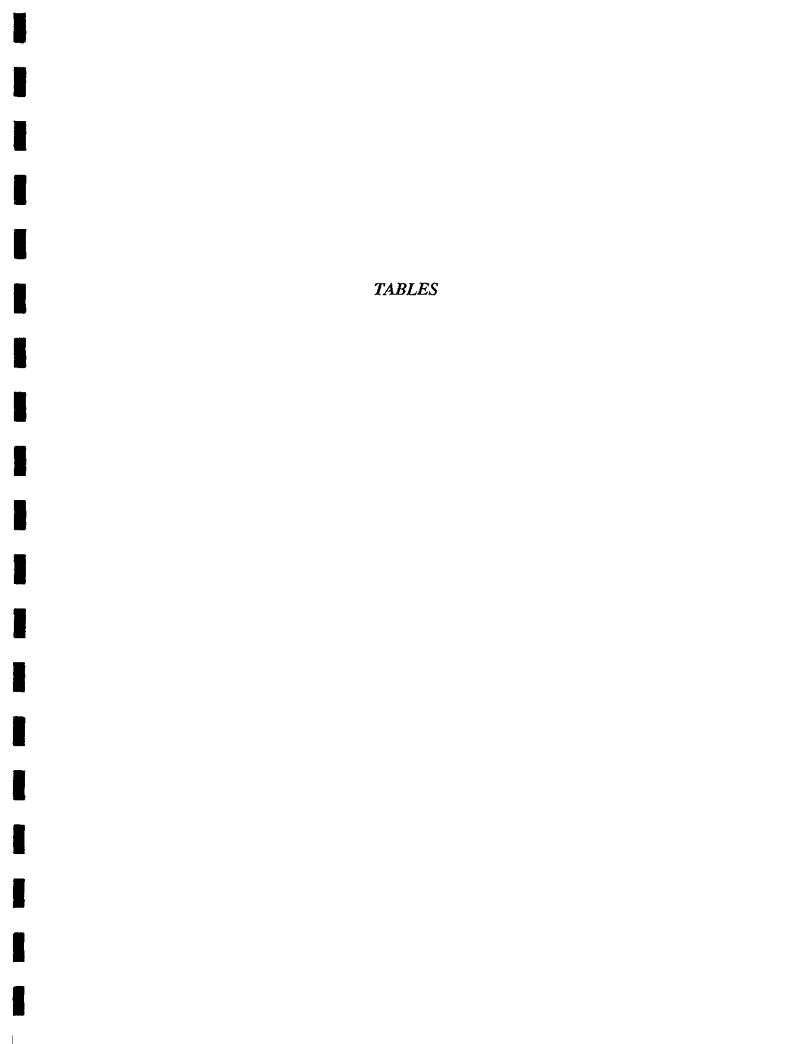


TABLE 1

SUMMARY OF SOIL ANALYTICAL RESULTS

The Housewives Marketplace and Associated Retail/Office Space 8th, 9th, Clay and Jefferson Streets Oakland, California

Boring (mg/kg)	G	P-5	G	P-6	G	P-7	GP-8		
Depth (feet)	15	23	15	22	15	21.5	15	21	
Benzene	ND(< 0.005)	ND(<0.005)							
Toluene	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)	
Ethylbenzene	ND(< 0.005)	ND(<0.005)							
Xylenes	ND(< 0.005)	ND(<0.005)							
TPH Fuel Scan	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)	
Gasoline	ND(<1.0)	ND(<1.0)							

Notes:

Samples collected January 1998

mg/kg = milligrams per kilograms

ND = below laboratory detection limits (detection limit indicated in parentheses)

TABLE 1 - Continued SUMMARY OF SOIL ANALYTICAL RESULTS

The Housewives Marketplace and Associated Retail/Office Space 8th, 9th, Clay and Jefferson Streets Oakland, California

Boring (mg/kg)	G	P-9	GP-10			
Depth (feet)	15	22	15	21.5		
Benzene	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)		
Toluene	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)		
Ethylbenzene	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)		
Xylenes	ND(<0.005)	ND(<0.005)	ND(<0.005)	ND(<0.005)		
TPH Fuel Scan	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)		
Gasoline	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)		

Notes:

Samples collected October 21, 1997

mg/kg = milligrams per kilograms

ND = below laboratory detection limits (detection limit indicated in parentheses)

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

The Housewives Marketplace and Associated Retail/Office Space 8th, 9th, Clay and Jefferson Streets Oakland, California

BORING (ug/l)	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10
Benzene	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
Toluene	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
Ethylbenzene	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
Xylenes	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
TPH Fuel Scan	NA	ND(<50)	NA	ND(<50)	ND(<50)	ND(<50)
Gasoline	ND(<50)*	ND(<50)	ND(<50)*	ND(<50)	ND(<50)	ND(<50)

Notes:

Samples GP-1 through GP-4 collected October 21, 1997; Samples GP-5 through GP-10 collected on January 22 and 23, 1998.

ug/l = micrograms per liter

ND = Below laboratory detection limits (detection limit indicated in parentheses)

* = Analyzed by EPA SW-846 Method 8015 (modified)

APPENDIX A

Permits



EXCAVATION PERMIT

Carlton Cooper - Inspector

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TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

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PERMIT NUMBER	X 9 800041	SITE ADDRESS/LOCATION		CLAY ST.					
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PH	IONE NUMBER						
·		(Permit not valid without 24-F	lour number)						
CONTRACTOR'S LICENSE #	AND CLASS	CITY BUSINESS TAX #							
ATTENTION:									
State law requires the inquiry identification	at the contractor/owner call <i>Undergro</i> number issued by USA. The USA a	ound Service Alert (USA) two working day clephone number is 1 (800) 642-2444. U	ys before excavating. Thi INDERGROUND SERVI	s permit is not valid unless applicant has secur CE ALERT (USA) #:	ed an				
2) 48 hours prio	r to starting work, YOU	U MUST CALL (510) 238-	3651 TO SCHEI	DULE AN INSPECTION.					
OWNER/BUILDER									
I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil peralty of not more than \$500): I as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale). I as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures m									
WORKER'S COMPENSATION					İ				
□ I hereby affirm that I have a o	ertificate of consent to self-insure, or	r a certificate of Worker's Compensation	Insurance, or a certified c	opy thereof (Sec. 3700, Labor Code).					
Policy #	Compan	ny Name							
☐ I certify that in the performan of California (not required for wo	ce of the work for which this permit in the valued at one hundred dollars (\$10	is issued, I shall not employ any person i 30) or less).	n any manner so as to bec	come subject to the Worker's Compensation La	ìws				
NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Chapter 6, Article 2 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodity injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.									
I hereby affirm that I am liceased this permit and agree to be required. Sighteness of Permit acc	ements, and that the above information	vision 3 of the Business and Professions (In is true and correct under penalty of law Owner	Code and my license is in	full force and effect (if contractor), that I have	; read				
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RESURFACED 1981	REQUIRED 3 YES X	NO (NOV 1 - JAN 1)	□ YES ¥NO	(7AM-9AM & 4PM-6PM) Y YES □ N	:0				
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EXCAVATION PERMIT

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PERMIT NUMBER X 9	800046	SITE ADDRESS/LOCATION	801 CLAY ST						
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER							
<u> </u>	<u></u> _	(Permit not valid without 24-Hour number)	·						
CONTRACTOR'S LICENSE # AND	CLASS	CITY BUSINESS TAX #							
inquiry identification num	iber issued by USA. The USA telephone	vice Alert (USA) two working days before excavati e number is 1 (800) 642-2444. UNDERGROUND UST CALL (510) 238-3651 TO SO	ng. This permit is not valid unless applicant has secured an SERVICE ALERT (USA) #:						
	·—								
OWNER/BUILDER I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500): I as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale). I as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code). I as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code): I as owner of the property who builds or improves thereon, and who contractor for such projects with a contractor(s) licensed pursuant to the Contractor's License law). I am exempt under Sec									
WORKER'S COMPENSATION									
☐ I hereby affirm that I have a certifi	cate of consent to self-insure, or a certifi	icate of Worker's Compensation Insurance, or a ce	rtified copy thereof (Sec. 3700, Labor Code).						
Policy #	Company Name								
D I certify that in the performance of		f, I shall not employ any person in any manner so a	is to become subject to the Worker's Compensation Laws						
NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Chapter 6, Article 2 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.									
I hereby affirm that I am licensed order provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its reprintments, and that the above information is true and correct under penalty of law.									
DATE STREET LAST	Agent for O Contractor O Owser SPECIAL PAYING DETAIL	HOLIDAY RESTRICTION?	LIMITED OPERATION AREA?						
RESURFACED 1988	REQUIRED? SYES YNO	(NOV I - JAN I) C YES YO	TAM-9AM & 4PM-6PM) YES = NO						
ISSUED BY	Mulle	DATE ISSUED	(SP						



EXCAVATION PERMIT

CIVIL

TO EXCAVATE IN STREI	ETS OR OTHER SPECIFIED WORK ENGINEERING								
PAGE 2 of 2	un H., before 8th 89th								
PERMIT NUMBER X 98 00047	SITE ADDRESS/LOCATION 80/ CCAY 57								
APPROX. START DATE APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)								
CONTRACTOR'S LICENSE # AND CLASS	CITY BUSINESS TAX #								
ATTENTION:									
State law requires that the contractor/owner call <i>Underground</i> inquiry identification number issued by USA. The USA teleph	Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an ione number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #:								
2) 48 hours prior to starting work, YOU M	AUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.								
OWNER/BUILDER									
construct, alter, improve, demolish, or repair any structure, prior to its isst provisions of the Contractor's License law Chapter 9 (commencing with Se alleged exemption. Any violation of Section 7031.5 by any applicant for a CI, as an owner of the property, or my employees with wages as their so Professions Code: The Contractor's License Law does not apply to an own provided that such improvements are not intended or offered for sale. If he burden of proving that he did not build or improve for the purpose of sale). It is owner of the property, am exempt from the sale requirements of the be performed prior to sale, (3) I have resided in the residence for the 12 me structures more than once during any three-year period. (Sec. 7044 Busines CI, as owner of the property, am exclusively contracting with licensed co does not apply to an owner of property who builds or improves thereon, and	I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500): I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improves thereon, and who does not apply to another the property, an exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the I2 months prior to completion of the work, and (4) I have n								
WORKER'S COMPENSATION									
D I hereby affirm that I have a certificate of consent to self-insure, or a ce	rtificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).								
Policy # Company No	ате								
	ued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws								
comply with such provisions or this permit shall be deemed revoked. This upon the express condition that the permittee shall be responsible for all clai the obligations with respect to street maintenance. The permittee shall, and employees, from and against any and all suits, claims, or actions brought by	you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith permit is issued pursuant to all provisions of Chapter 6, Article 2 of the Oakland Municipal Code. It is granted into an all liabilities arising out of work performed under the permit or arising out of permitnee's failure to perform by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and any person for or on account of any bodity injuries, disease or illness or damage to persons and/or property mit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This ted by the Director of the Office of Planning and Building.								
I hereby affirm that I am licensed under provisions of Chapter 9 of Division this permit and agree to its regardements, and that the above information is to Signature of Perfected Agent for Contractor Own	1/16/98								
DATE STREET LAST SPECIAL PAVING DETAIL	HOLIDAY RESTRICTION? LIMITED OPERATION AREA?								
RESURFACED 1993 REQUIRED? YES = NO	(NOV 1 - JAN 1) = YES XNO (TAM-9AM & 4PM-6PM) XYES = NO								
issued by Miller	DATE ISSUED								

APPENDIX B

Boring Logs

Project:							8TH, 9TH, CLAY A			Log	of Boring/Monitoring Well:
Boring L					E FIG			Project No.: 70100-	· · · · · · · · · · · · · · · · · · ·	1	GP-5
1							SEOPROBE	Logged By: C. MEL.	ANCON	<u> </u>	
Sampling								Device: OVM 580B :/Time: 1/23/98//1		Con	nments:
Stort Do			-								
First Wo	oter (bo	gs): ~	23.5	FI			'	Water Level (bgs): NA			
Sample Number			읈		2		Surface Elevation: N	A Casing Top E	Elevation: NA		
įź		PIO (ppm)	Depth (Feet)	چ	USCS Symbol	Level	4.17	THOLOGIC DESCRIPT	ION		Boring Abandonment/
l d		0	spth	Recovery	SSS	Water		size, consistency, mois			Well Construction Details
Š	<u> </u>	<u>a</u>	ā	œ) j	≯					
			0 —		255		ASPHALT AND	BASEROCK			- 1/2
			1 —		000				(0) 04410 (05		- <i>M</i>
1			2 -				YELLOWISH BR	ROWN (10YR 5/ d is fine—graine	6) SAND (SP	oist	
			3				(0,90,10,0)	is inte-grante	a, dense, m	OISE	L W
1							(, , , ,				- <i>M</i>
			4 –								F 💹
GP-5-5		0	5 —								
1			6 —								t M
	}		7 -								F 💹
}			8 -		2' 5'						
			9 —								
20 5 40			_								-
GP-5-10		0	10—								
			11 —								
1			12-								Grout
			13-		13.75 14.45						F 💹
1			14-								
GP-5-15		0	15-								
10-5-15		0	-		5.5						F 💹
			16-								
			17-								
		<u> </u>	18—								- <i>//</i> //
			19-								
GP-5-20		0	20-				at ~20' beco	mes very dense	<u>.</u>		
	***************************************	_	-					_			E 💹
			21				$\begin{array}{c} \text{at } \sim 21^{\circ} \text{ color} \\ (2.5Y 4/4) \end{array}$	change to Oliv	ve Brown		F M
1			22-				(2.01 1/1)				
GP-5-23		0	23—			_∇				İ	
			24-			-					- <i>M</i>
1	,	•	25								
			26 —	,, .							
			20 <u>-</u>								
		,	27-	,							- -
			28 -								
			29 —		1					-	
1		:	<i>5</i> 2−		·					11	

Peviewed 3 / ______ Date ______ Date _____

Page_1_of_1_

							H, CLAY A			KLAND, CA	Log	of Boring/Monitoring Well:
Boring Location			···		_				70100-019			GP-6
Subcontractor						SEOPROBE			C. MELANC	NC	ļ	
Sampling Meth								Device: OVM			Con	mments:
Start Date/Tim					0				/98//1100		-	
First Water (bo]s): ~	22.5	FT	·		i		· · · · · · · · · · · · · · · · · · ·	ps): ~22.5 F		<u> </u>	
Sample Number	PID (ppm)	Depth (Feet)	Recovery	USCS Symbol	Water Level		LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)					Boring Abandonment/ Well Construction Details
		0 —		9378		ASDHAI	T AND R	ASEBUCK				
GP-6-5	0	1 — 2 — 3 — 4 — 5 — 6 — 7 — 10 — 11 — 12 — 13 — 13 — 13 — 15 — 15 — 15 — 15 — 15				YELLO	T AND B. WISH BRIGHT, sand (0,90,10	OWN (10	YR 5/6) grained,	SAND (SP dense,))	
GP-6-15 GP-6-20 GP-6-22 GP-6-23	0 0 0	14— 15— 16— 17— 18— 19— 20— 21— 22— 23— 24—			▼ ∇ ▼ ₹	at ~2 -	1' color	change				
		25— 26— 27— 28— 29—										

Pcge_1_of_1_

Project:								Project No.: 70100-01		Log or Boring/Monitoring Well:
	Boring Location: GP-7 (SEE FIGURE 2) Project No.: 70100-019-04 Subcontractor and Equipment: VIRONEX/GEOPROBE Logged By: C. MELANCON									GP-7
Sampling N								ng Device: OVM 580B		Comments:
Start Date								ate/Time: 1/22/98//150	0	
First Woter								d Water Level (bgs): NA		
nber			①		loc		Surface Elevation:	NA Casing Top Elev	ation: NA	
Somple Number		PID (ppm)	Depth (Feet)	Recovery	USCS Symbol	Woter Level	(color, gra	LITHOLOGIC DESCRIPTION ain size, consistency, moistur	N re, other)	Boring Abandonment/ Well Construction Details
			0 —		200		ASPHALT AND	D BASEROCK	<u></u>	
GP-7-5	eria	0	1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 —				YELLOWISH B	BROWN (10YR 5/6) nd is fine-grained,	SAND (SP dense,	
GP-7-10 GP-7-15		0	10- 11- 12- 13- 14- 15-							Grout
		0	16— 17— 17— 18—				at ~18' bec	comes very dense		
CP-7-20		0	20 —				ļ			
GP-7-21.5		0	21 — 22— 22— 23— 24—			- V	color change (2.5Y 4/4)	e at ~21' to Olive	Brown	
			25			!				- - - - - -
:			29 -							
	!		i !3::				<u></u>			

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Page_1_of_1 .

Project:		SEWI	/ES	MARK	<u>ET -</u>	8TH, 9TH, CLAY	AND JE	fferson st	. <mark>, C</mark> AKLAND, C	A Log	g of Boring/Monitoring Well:
Boring Loca				E FIG		<u> </u>		t No.: 70100-			GP-8
						EOPROBE		d By: C. MEL	ANCON		
Sampling M								OVM 580B		Cor	nments:
Start Date					0			1/22/98//			
First Water	(bgs): ~	22.5	FI			Stabilize	d Water Le	vel (bgs): ∼22	2.5 FT.		
Sample Number	(mc	(Feet)	2	Symbol	Level		NA LITHOLOG	Casing Top GIC DESCRIP			Boring Abandonment/
Sample	PID (ppm)	Depth (Feet)	Recovery	USCS	Water			onsistency, moi			Well Construction Details
		0 -		250 250 250 250		ASPHALT AN	D BASE	ROCK			
	0	2 3				YELLOWISH E with silt, sa wet (0,90,10	nd is f	(10YR 5/ ine—graine	(6) SAND (9) ed, moist to	SP)	
GP-8-5		4 — 5 —				, wor (0,00,10	,0)				F -
	0	6 - 7 -									- - -
	0	8 — 9 —									- - -
GP-8-10	0	10- 11- 12-									
	0	13									Grout
GP-8-15		15— 16—									
	0	17— 18— 19—									
GP-8-20		-				at 2002 h	0000	conc dana	•		L M
i l	0	20—				at ~20' bed		-			F Ø
GP-8-21	0	21 — 22—			▼▽	at ~21' col (2.5Y 4/4) - at ~22.5 we		ige to Oli	ve Brown		
GP-8-23	0	23— 24—			∓						- - -
		25 -				· · · ·					- VZZZI -
		27— 28—	!	í							- - -
		29 -									_
-	i	31.—	j						- 		
	•										

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Page_1_of_1_

Project							2) Project No.: 70100-019-04	Log of Boring/Monitoring Well:
	Location tractor						SEOPROBE Logged By: C. MELANCON	GP-9
	ig Meth						Monitoring Device: OVM 5808	Comments:
	ote/Tim						Finish Date/Time: 1/22/98//1700	
	ater (bo						Stabilized Water Level (bgs): NA	
							Surface Elevation: NA Casing Top Elevation: NA	
Sample Number	_	<u>ج</u>	Depth (Feet)	_	Symbol	Level		Boring Abandonment/
ple	Interval Recovery	PID (ppm)	th (Recovery	SS	er L	LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)	Well Construction Details
Sar	Reg	윤	Dep	Rec	nscs	Water		
			0 -		255		ASPHALT AND BASEROCK	
			1 —		000		YELLOWISH BROWN (10YR 5/6) SAND (SP	,
			2 —				with silt, sand is fine—grained, dense, mo	pist _
		ŀ	3 —				(0,90,10,0)	F
]		4 —					F Ø
GP-9-5		0	5 —					L Ø
			6 —					E Ø
			7 -					E M
			-					F Ø
			8 —					F
			9 —					
GP-9-10		0	10-					
			11 —					F 💹
			12-		2.54	}		- Grout
			13—		24.7		: 	F
			14-					
GP-9-15		0	15					L //
			16—					E M
			10					F
			'/-					F
			18 - -					
			19—					
GP-9-20		0	20—		2.~~		at ∼20' becomes very dense	E M
			21 —				at ~21' color change to Light Olive Brow	'n -
GP - 9-22		0	22-				(2.5Y 5/4)	F
			23 —			7		
GP-9-24		0	24-			$ \stackrel{\checkmark}{+} $		L Ø
		١						
	. :	'	ے ا					F
			25—		:			
			27—		1			- }-
			28—		;	ļ		
			23-		!			-
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		,						

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 Date

 Revised By
 Date

Page<u>1</u>of<u>1</u>

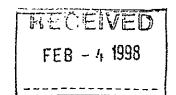
Project:		**					H, CLAY A			AKLAND, CA	Log	of Boring/Monitoring Well:
Boring Locat			. 					 	70100-019		4	GP-10
Subcontracto						<u>SEOPROBE</u>			C. MELANO	CON	-	
Sampling Me								Device: OVM			Con	nments:
Start Date/					0		 	/Time: 1/23		J	-	
First Water	(bgs): ~	22.5	FT	 _			·	later Level (bo	······································		Щ,	
Sample Number	PID (ppm)	Depth (Feet)	Recovery	USCS Symbol	Water Level	Surface Ele	<u>ال</u>	HOLOGIC Di size, consiste	ESCRIPTION		-	Boring Abandonment/ Well Construction Details
		0 -		25.5		ACDHA	UT AND	BASEROC	K			- V/A
GP-10-5	0	1 — 2 — 3 — 4 — 5 — 6 —				YELLO		OWN (10	YR 5/6)	SAND (SP dense, mo	oist	
GP-10-10	0	7 — 8 — 9 — 10 — 11 — 12 —										Grout
GP-10-15	O	13- 14- 15- 16- 17- 18-										- - - - - - - -
		19-				at ~1	19' color	change	to Olive	Brown		F Ø
GP-10-20	0	20-				(2.5Y	4/4) 20' beca	mes very	dense			F Ø
GP-10.21.5	0	21 - 22 - 23 - 23 - 2			<u> </u>				331100			
	0	24-			ļ	1						
	1	25-			:							
İ	1	26-		<u> </u> '	1	 						
		27-	-		l							-
	1	_دري. _دري.	-	İ	!							
		175	-	:	! ! !							-
		∠9—	-		,							
		<u>:</u> 30—			! .	1						
												

Revised By Date

Paga <u>1 of 1</u>

APPENDIX C

Laboratory Analytical Reports and Chain-of-Custody Records



SECOR 90 Montgomery Street Suite 620 San Francisco, CA 94105 Attn: Chris Desotio

Date:	1/30/98
Date Received:	1/23/98
Date Analyzed:	1/27/98
Project:	70100-014
Sampled By:	Client

Certified Analytical Report

Water Sample Analysis:

Test	GP-7	GP-8	GP-9	GP-6	Units	PQL	EPA
						~	Method#
Sample Matrix	Water	Water	Water	Water			
Sample Date	1/22/98	1/22/98	1/22/98	1/23/98			
Sample Time	15:20	13:00	17:20	11:00			
Lab#	E2210	E2206	E2207	E2208			
DF-Extractable		1	1	1			
TPH-Extractable	na	ND	ND	ND	μg/liter	50.0 μg/l	8015M
(Fuel Scan)					1.0	- 4.0 P.B.	
DF-Gas/BTEX	1	I	1	1			
TPH-Gasoline	ND	ND	ND	ND	μg/liter	50.0 μg/l	8015M
Benzene	ND	ND	ND	ND	μg/liter	0.5 μg/l	8020
Toluene	ND	ND	ND	ND	μg/liter	0.5 μg/l	8020
Ethyl Benzene	ND	ND	ND	ND	μg/liter	0.5 μg/l	8020
Xylenes	ND	ND	ND	ND	μg/liter	0.5 μg/l	8020

1. DLR=DF x PQL

2. na: Not Analyzed

3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)

Michael N. Golden, Lab Director

DF=Dilution Factor
OLR=Detection Reporting Limit

PQI - Practical Quantitation Limit
ND=None Detected at or above DLR

SECOR 90 Montgomery Street Suite 620 San Francisco, CA 94105 Attn: Chris Desotio

Date:	1/30/98	
Date Received:	1/23/98	
Date Analyzed:	1/26-27/98	
Project:	70100-014	
Sampled By:	Client	

Certified Analytical Report

Water Sample Analysis:

Test	GP-10	GP-5	Units	PQL	EPA Method #
Sample Matrix	Water	Water			
Sample Date	1/23/98	1/23/98			
Sample Time	13:00	15:30			
Lab#	E2209	E2211			
DF-Extractable	1				
TPH-Extractable	ND	na	μg/liter	50.0 μg/l	8015M
(Fuel Scan)					
DF-Gas/BTEX	1	1			
TPH-Gasoline	ND	ND	μg/liter	50.0 μg/l	8015M
Benzene	ND	ND	μg/liter	0.5 μg/l	8020
Toluene	ND	ND	μg/liter	0.5 μg/l	8020
Ethyl Benzene	ND	ND	μg/liter	0.5 μg/l	8020
Xylenes	ND	ND	μg/liter	0.5 μg/l	8020

- 1. DLR=DF x PQL
- 2. na: Not analyzed
- 3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)

Michael N. Golden, Lab Director

DI=Dilution Factor
DLR=Detection Reporting Limit

PQI =Practical Quantitation Limit ND=Isona Detected at or above DLR

SECOR 90 Montgomery Street Suite 620 San Francisco, CA 94105 Attn: Chris Desotio

Date:	1/30/98	
Date Received:	1/23/98	
Date Analyzed:	1/26-28	
Project:	70100-014	
Sampled By:	Client	

Certified Analytical Report

Soil Sample Analysis:

Test	GP-	GP-8, 15'	GP-8, 21'	GP-9, 15'	Units	PQL	EPA
	7,21.5					į	Method#
Sample Matrix	Soil	Soil	Soil	Soil			
Sample Date	1/22/98	1/22/98	1/22/98	1/22/98			
Sample Time	····						
Lab#	E2213	E2214	E2215	E2216	_		
DF-Extractable	1	1	I	1			
TPH-Extractable	ND	ND	ND	ND	mg/kg	1.0 mg/kg	8015M
(Fuel Scan)							
DF-Gas/BTEX	1	1	I	1			
TPH-Gasoline	ND	ND	ND	ND	mg/kg	1.0 mg/kg	8015M
Benzene	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020
Toluene	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020
Ethyl Benzene	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020
Xylenes	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020

- 1. DLR=DF x PQL
- 2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)

Michael N. Golden, Lab Director

D. =Dilution Factor
DI R=Detection Reporting Limit

PQL=Prectical Quantitation Limit
N.)=None Detected at or above DLR

SECOR 90 Montgomery Street Suite 620 San Francisco, CA 94105 Attn: Chris Desotio

Date:	1/30/98	
Date Received:	1/23/98	
Date Analyzed:	1/26-28/98	
Project:	70100-014	_
Sampled By:	Client	

Certified Analytical Report

Soil Sample Analysis:

Test	GP-9, 22'	GP-6, 15'	GP-6, 22'	GP-10,15'	Units	PQL	EPA
							Method#
Sample Matrix	Soil	Soil	Soil	Soil		-	
Sample Date	1/22/98	1/23/98	1/23/98	1/23/98			
Sample Time							
Lab#	E2217	E2218	E2219	E2220	,		
DF-Extractable	1	1	1	1			
TPH-Extractable	ND	ND	ND	ND	mg/kg	1.0 mg/kg	8015M
(Fuel Scan)							ļ
DF-Gas/BTEX	1 -	1	I	1			
TPH-Gasoline	ND	ND	ND	ND	mg/kg	1.0 mg/kg	8015M
Benzene	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020
Toluene	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020
Ethyl Benzene	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020
Xylenes	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020

- 1. DLR=DF x PQL
- 2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)

Michae' N Golden, Lab Director

DF=Dilution I actor DFR Detection Reporting I init

PQL-Practical Quantitation Limit ND=None Detected at or above DLR

Environmental Analysis Since 1983

SECOR 90 Montgomery Street Suite 620 San Francisco, CA 94105 Attn: Chris Desotio

Date:	1/30/98	
Date Received:	1/23/98	
Date Analyzed:	1/26-28/98	
Project:	70100-014	
Sampled By:	Client	

Certified Analytical Report

Soil Sample Analysis:

Test	GP-7, 15'	GP-10,	GP-5, 15'	GP-5, 23'	Units	PQL	EPA
		21.5'					Method#
Sample Matrix	Soil	Soil	Soil	Soil			
Sample Date	1/22/98	1/23/98	1/23/98	1/23/98			
Sample Time							
Lab #	E2212	E2221	E2222	E2223			
DF-Extractable	1	1	1	1			
TPH-Extractable	ND	ND	ND	ND	mg/kg	1.0 mg/kg	8015M
(Fuel Scan)							
DF-Gas/BTEX	1	1	I	1			
TPH-Gasoline	ND	ND	ND	ND	mg/kg	1.0 mg/kg	8015M
Benzene	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020
Toluene	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020
Ethyl Benzene	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020
Xylenes	ND	ND	ND	ND	mg/kg	0.005 mg/kg	8020

- 1. DLR=DF x PQL
- 2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)

Michael > Golden, Lab Director

DE=Dilution Factor
DER=Detection Reporting Limit

POL. Practical Quantitation Limit ND=None Detected at or above DLR

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

 QC Batch #: DS980109
 Date analyzed: 01/28/98

 Matrix: Soil
 Date extracted: 01/28/98

 Units: mg/Kg
 Quality Control Sample: E2221

PARAMETE	Method #	MB mg/Kg	SA mg/Kg	SR mg/Kg	SP mg/Kg	SP %R	SPD mg/Kg	SPD %R	RPD	QC RPD !	LIMITS %R
Diesel	8015M	<1.0	25	ND	25	100	23	92	7.5	25	50-150

Note: LCS and LCSD results reported for the following Parameter:

None

Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.

Definition of Terms:

MB: Method Blank

na: Not Analyzed in QC batch

SA: Spike Added SR: Sample Result

RPD(%): Duplicate Analysis - Relative Percent Difference

SP: Spike Result

SP (%R): Spike % Recovery

SPD: Spike Duplicate Result

SPD (%R): Spike Duplicate % Recovery

NC: Not Calculated

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG4980126

Matrix: Soil

Units: ug/kg

Date Analyzed: 01/26/98 Quality Control Sample: E2212

PARAMETER	Method #	MB ug/kg	SA ug/kg	SR ug/kg	SP ug/kg	SP % R	SPD ug/kg	SPD %R	RPD	: ~	LIMITS VISORY) %R
Benzene	! 8020	<5.0 !	80	ND I	74	92	78	98	5.5	1 25 1	50-150
Toluene	8020	<5.0	80	ND	73	91	77	97	5.8	25	50-150
Ethyl Benzene	8020	<5.0	80	ND !	74	93	79	99	6.2	25	50-150
Xylenes	8020	<5.0 i	240	i ND i	228	95	237	99	3.9	່ 25 ໍ່	50-150
Gasoline	8015	<1000.00	1000	ND	970	¦ 97 ¦	910	91	6.4	25	50-150

Note: LCS and LCSD results reported for the following Parameters:

Gasoline

Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.

Definition of Terms:

na: Not Analyzed in QC batch

MB: Method Blank SA: Spike Added SR: Sample Result

RPD(%): Duplicate Analysis - Relative Percent Difference

SP: Spike Result
SP (%R): Spike % Recovery
SPD: Spike Duplicate Result
SPD (%R): Spike % Recovery
NC: Not Calculated

525 Del Rey Avenue, Suite E Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: DW980103

Date analyzed:

01/23/98

Matrix: Water

Date extracted:

01/23/98

Units: µg/L

Quality Control Sample:

Blank Spike

		ug/L μg/L %R μg/L %R RPD!	%R
*Diesel 8015M <50.0 9501 ND; 8041 851 8621 911 7	sel	ND: 804: 85: 862: 91: 7 : 25 :	50-150

Definition of Terms:

na: Not Analyzed in QC batch

MB: Method Blank SA: Spike Added SR: Sample Result

RPD(%): Duplicate Analysis - Relative Percent Difference

SP: Spike Result
SP (%R) Spike % Recovery
SPD: Spike Duplicate Result
SPD (%R) Spike Duplicate % Recovery

NC: Not Calculated

525 Del Rey Avenue, Suite E Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG5980126

Date Analyzed: 01/26/98

Matrix: Water

Quality Control Sample: Blank Spike

Units: µg/L

PARAMETER	Method #	MB μg/L	SA μg/L	SR μg/L	SP μg/L	SP % R	SPD μg/L	SPD %R	RPD	: `	LIMITS VISORY) %R
Benzene	8020	< 0.50	10.0	ND	10.2	102	10.6	106	3.5	25	50-150
Toluene	8020	< 0.50	10.0	ND	10.1	101	10.2	102	0.8	25	50-150
Ethyl Benzene	8020	< 0.50	10.0	ND	9.7	97	10.5	105	7.9	25	50-150
Xylenes	8020	< 0.50	30	ND	i 30	100	31	104	4. I	25	50-150
Gasoline	8015	<50.0	625	ND	709	113	694	111	2.1	25	50-150

Definition of Terms:

na: Not Analyzed in QC batch

MB: Method Blank SA: Spike Added SR: Sample Result

RPD(%): Duplicate Analysis - Relative Percent Difference

SP: Spike Result
SP (%R): Spike % Recovery
SPD: Spike Duplicate Result
SPD (%R): Spike % Recovery

NC: Not Calculated

Unain-or Custody Number.

	SECOR	Chain-of	Custod	ly Reco	rd		
Field Office 299 Francisco Address 90 New Montgomery Si San Francisco CA 9	4/05	(2 <i>C</i>)	Joh Nor	ne: <u>(11)</u>		tached, and are a part of this Reco イャムイー Hoいぶいいとか M q. hy CA	
Project # 70/00 01 4Task #			An	alysis Requ	uest		
Project Manager Cars Desctio Laboratory Superior Turnaround Time Standard / * Hold*		atiles nics C/MS)	Organics C/MS) CBs	tant			Number of Containers
Sampler's Signature Sample ID Date Time Matrix	HCID TPHS/ FYA 5:157 TPH9/BTEXWT 8015 (modified) TPHd/MTPH-D 8015 (modified)	I PH 418.1/W IPH 411 Aromatic Volatiles 602/8020 Volatile Organics 624/8240 (GC/MS) Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS) Pesticides/PCBs 608/8080	Total Lead 7421 Priority Pollutant Metals (13)	TCLP Metals	Comments/ Instructions	Number of
EF 7 122-98 15;20 water	7.2.3.					C-2210	
5F 8 1 13:00	XX					E340G	4
GP-9 17:20	XX					62707	4
5 f 6 1-23.48 11:00	XX					G2708	4
GP-10 13:00	XX					e.2209	4
6f-5 1550 V						<i>82711</i>	7
6P-7, 5 1-22-48 Soil GP-7, 10 GP-7, 15 GP-7, 20						* 32724	1
GP-7 10'						* 6325	1
EP-715	XX					じょコレ	1
5P-7.20						* 82326	1
Special Instructions/Comme nts:	Relinquished by	1.///			(600) 400 to be	COCOLOCO ON Beceipt	
* Hold pending instructions	Sign	es Melane	Sig	n E	neilez	Total no. of containers:	<u> </u>
		5 /X/6/446	E SA Prii	mnany (A)	noid Cou	Chain of custody seals:	.
	Time 15:46		-48 Tim	ne 340 pt	Date 1	Rec'd. in good condition/cold: -23-62 Conforms to record:	
	Relinquished by SignPrint	y: ine T pex d Coox	Re- Sig Prid	ceived by: or nt _Dicut mpany _E	e Gott	Client:	
11 (U × 20 1 m) (10 x 1 m x	Time 5	Date <u>(* 2</u>	276 Tim	ne <u>60:45</u>	Date _	23/9 Client Phone:	

Date: 1 /23 / 98 Page 1 of 4

Chain-of Custody wumber.

		SECC)R	Cha	in-of	Cus	tod	ly R	ecc	ord			ļ
Field Office San Francis Address 96 New Montage San Francisco	10 10 10 10 10 10 10 10 10 10 10 10 10 1	S.;	tr 6	20		Joh	o Nar	ne: 🔇	ity	of C		, and are a part of this Recor Housew, ves 14mv/fr	
Project # 70/00 - 0/9Task Project Manager Chills Prese Laboratory Softing Turnaround Time Standard Sampler's Name Child Colors Sampler's Signature	* Hold*	HCID TP# 5% ~ 1 F / A Sc / 5 (1 m c d) TPH9/BTEXMTPH-G 8015 (modified)/8020 TPHd/WTPH-D	8015 (modified) TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS) Halogenated Volatiles	601/8010 Semi-volatile Organics 625/8270 (GC/MS)			Priority Pollutant BU Metals (13)	TCLP Metals 60		Comments/	Number of Containers
6P7, 21.5 1.22-78 6P-8, 5 6P-8, 10 6P-8, 15 6P-8, 20 6P-8, 21 6P-8, 23 6P-7, 5	ime Matrix So//		80	A. 60	0,00 1,000 1	09 % 28	9 09	To To To To To To To To To To To To To T	ÄÄ	27	***	Instructions	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Special Instructions/Comments: * Hold fruiting insy	I-vetjous	Relinquish Sign Print Company Time 15 Relinquish Sign Print Company Time 15	ed by:	Dat	16/23	-98	Sign Prir Cor Tim Red Sig Prir Cor	n Empan mpan ne Empe n D nt B mpar	d by:	neve Sicor Dist	Date 1-23-9	Client:	

Date: 123/95 Page 2 of 24

Chain-of Custody Number: SECOR Chain-of Custody Record Additional documents are attached, and are a part of this Record. Field Office Syn Francisco Job Name: City of Oakland Housewives Market **Analysis Request** Project # 70/00 - 614 Task # Project Manager Chris Pesadio Turnaround Time Standard / * Hold * Number of Containers Sampler's Name Children Markenson Sampler's Signature Comments/ Sample ID Matrix Instructions 12248 62233 62217 62134 C-2235 1.2348 E2236 B2118 62137 B2219 E2138 62239 Relinquished by: Received by: Sample Receipt * Hold finding instructions Sign E Total no. of containers: Chain of custody seals: Company SECUR Company 1. - 2012 1cl CEN RICE | Rec'd, in good condition/cold: Time 3/10 pt- Date 1-23-Cip Time 15:40 Date 1-23 98 Conforms to record: Relinquished by: _ Received by: __

Date 1-23-98

Sign Print Elimenez

Company Woo IA
Time Dat

SCOREGIALL 105 195

Date: 1 123, 98 Page	3_of	34
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Client:

Company Entech

Date 1 23/90

Time 5 45

Client Contact: _____

Client Phone:

Chain-of Custogy Number: SECOR Chain-of Custody Record Additional documents are attached, and are a part of this Record. Field Office San Francisco Job Name: Eity of Outland Housewives Market Address 10 New Montgomery St. Sije 620 Analysis Request Project # 70,00 014 Task # Project Manager 647, & Posotic Laboratory Sofice Communications Standard Terral Attold & Number of Containers Sampler's Name Change Melan rom
Sampler's Signature Change Melan rom Comments/ Matrix Instructions 02140 1-23-035 13220 6224/ (322) 62242 22413 (323) L B2244 62223 Special Instructions Comments: Relinquished by: Received by: Sample Receipt * Hold Fending instructions Sign _____ Total no. of containers: Print & Timerie Chain of custody seals: Company SETOR Time 15.40 Date 1-23-48 Company weld Cooler Rec'd. in good condition/cold:
Time Date 1-33-9 Conforms to record: Conforms to record: Received by: ∠ Relinquished by: Print Brucha COFF Client Contact: Company Entech Company world Time 4 45 2.3 Client Phone: STOROUS RECRES STO

Date: 1 / 23 / 78 Page 4 of 4