

# CITY OF OAKLAND



DALZIEL BUILDING · 250 FRANK H. OGAWA PLAZA, SUITE 5301 · OAKLAND, CALIFORNIA 94612-2034

Public Works Agency Environmental Services FAX (510) 238-7286 TDD (510) 238-7644

April 3, 2001

Susan Hugo Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 APR 1 2 2001

Roff 1870 | 83

Subject:

655 12th Street (Preservation Park Residential Development)

Dear Ms. Hugo:

Please find enclosed a packet of information for the subject site. I believe that this information adequately addresses all the concerns enumerated in your "comfort letter" dated February 6, 2001.

The Oakland Redevelopment Agency has contracted with Preservation Park, LLC, to redevelop the subject site as a two-to-four story, 92-unit residential structure with a first-level garage one-half story below grade. In preparation for this development, Preservation Park, LLC, is ready to excavate the upper eight feet of soil across the entire site. The soil will be removed and disposed of in the manner described in the enclosed Risk Management Plan (RMP). Please confirm as soon as possible that the RMP meets your stated requirements.

Once the aforementioned soil has been removed and disposed of appropriately, the City/ORA, as current owner of the subject site, requests the immediate issuance of the "no further action" letter referenced in your February 6<sup>th</sup> communication. The timing of the issuance of this letter would be consistent with those issued recently for other downtown Oakland redevelopment sites, such as 9<sup>th</sup> and Broadway, and will allow for the complete transaction of the property to take place.

Please let me know if you have any questions regarding the enclosed materials. I look forward to a speedy and successful resolution to this matter.

Sincerely.

Mark Gomez

Environmental Program Specialist

RISK MANAGEMENT PLAN
PRESERVATION PARK RESIDENTIAL
REDEVELOPMENT
655 12<sup>TH</sup> STREET (AKA, MLK JR. WAY
BETWEEN 11<sup>TH</sup> AND 12<sup>TH</sup> STREET)
OAKLAND, CALIFORNIA
SCI 272.054

# Prepared for:

Mr. Mark Gomez City of Oakland Public Works Agency Environmental Services Division 250 Frank H. Ogawa Plaza, Suite 5301 Oakland, California 94612-2034

By:



Subsurface Consultants, Inc.

Staff Engineer

Glenn S. Young, RG Associate Geologist

April 2, 2001



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Plate 3 Sample Locations

# DISTRIBUTION:

6 copies: Mr. Mark Gomez

City of Oakland Public Works Agency Environmental Services Division 250 Frank H. Ogawa Plaza, Suite 5301

Oakland, California 94612

### 1.0 INTRODUCTION

Subsurface Consultants, Inc. (SCI) has prepared this Risk Management Plan (RMP) on behalf of the City of Oakland, Public Works Agency, Environmental Services Division (City). This RMP describes soil management procedures for the anticipated excavation work at the subject site (Site), which is located at 655 12<sup>th</sup> Street, on the western side of Martin Luther King Jr. Way between 11<sup>th</sup> and 12<sup>th</sup> Street in Oakland, California (Plates 1 through 3). The Site is currently owned by the Oakland Redevelopment Agency (ORA), which plans to sell the Site to Preservation Park, LLC for development.

# 1.1 Redevelopment Plan

The Site is currently fenced and vacant with no surface improvement features. ORA has contracted with Preservation Park, LLC to redevelop the Site as a 2- to 4-story, 92-unit residential structure with a parking structure extending one-half story below ground across the entire property. Planned construction activities will involve excavation of the upper 8 feet of soil across the Site, as well as excavation of soil to a depth of 12 feet at the location of the proposed elevator shaft. The parking structure will include ventilation consistent with City building requirements. Soil excavated from the Site will not be reused onsite. Based on investigations at this and nearby properties, excavation is not expected to reach groundwater, which is documented to occur at approximately 25 feet below ground surface (bgs).

# 1.2 Background

The Site is the former location of a gasoline service station, including 5 underground storage tanks (USTs). Results of previous investigations identified the presence of relatively low concentrations of total petroleum hydrocarbons and lead in soil; grab groundwater samples collected within and immediately adjacent to the former UST location contained petroleum hydrocarbons, including benzene, toluene, ethylbenzene, and xylenes (BTEX). Results of previous investigations are presented in the following reports:

- Draft Soil Contamination Assessment, dated June 17, 1991 by SCI,
- Preliminary Environmental Assessment, dated June 19, 1991 by SCI,
- Draft Phase 1 Site Assessment for Preservation Park 3 dated October 13, 1998 by Tetra Tech EM, Inc., and
- Phase II Environmental Site Assessment Summary Report dated June 23, 2000, by Tetra Tech EM, Inc.

Plate 2 presents a compilation of the sampling locations from the investigations listed above. A summary of the previous analytical results is presented on Tables 1 and 2.

SCI recently completed additional sampling and analyses to evaluate soil to be excavated during the redevelopment project and to evaluate groundwater quality beneath and downgradient of the Site. Results of chemical analyses as well as a Tier 3 RBCA evaluation are presented in SCI's letter report, dated April 2, 2001, and summarized in Section 2.0

### 2.0 SUMMARY OF ENVIRONMENTAL CONDITIONS

The primary environmental concern at the Site during construction is the presence of total petroleum hydrocarbons and lead in excavation-zone soils. BTEX and volatile organic compounds (VOCs) are also present in deeper soils and in groundwater; however, these concentrations are anticipated to not impact the proposed construction activities.

# 2.1 Results of Chemical Analyses

Based on the results of chemical analyses (Table 3), soil from 0 to 1 foot below ground surface (bgs) across the Site as well as from 1 to 4 feet bgs in the northern quarter of the Site exceeds Soluble Threshold Limit Concentration (STLC) criteria for lead and is therefore subject to disposal as a California hazardous waste. Analyses detected no soil exceeding Toxicity Characteristic Leaching Procedure (TCLP) criteria.

Analyses on soil samples collected from the remaining area to be excavated generally detected total lead concentrations consistent with anticipated background conditions. Therefore, that soil is suitable for disposal as nonhazardous material and may be suitable for unrestricted reuse.

#### 2.2 Results of Human Health Risk Assessment

The Tier 3 RBCA evaluation compiled previous and current environmental data; calculated the 95% upper confidence level (UCL) for lead, BTEX, and other VOCs; and analyzed potential health risks to future site users. The BTEX and VOC concentrations detected during environmental testing were evaluated under a residential scenario using the City's Urban Land Redevelopment (ULR) Program RBCA spreadsheet. The potentially complete exposure pathways considered were inhalation of indoor and outdoor air impacted by chemicals volatilizing from the soil and groundwater. Results for total lead were compared to the residential Preliminary Remedial Goal (PRG) established by Region IX of the USEPA.

Assuming removal of the upper 8 feet of soil during the proposed development, results of the Tier 3 evaluation concluded that BTEX and VOC concentrations in soil and groundwater pose estimated excess cancer risks for both indoor and outdoor air of less than 1E-05, and noncancer hazards of less than a value of 1 for the residential scenario, which are below the City's respective target cancer risk level of 1E-05 and noncancer hazard of 1. The calculated 95% UCL for total lead in the remaining soil is 27 mg/kg, with a maximum concentration of 91 mg/kg. These total lead concentrations are well below the PRG criterion for a residential scenario of 400 mg/kg.

# 3.0 MANAGEMENT OF SOIL DURING CONSTRUCTION

Preservation Park, LLC will contract the planned excavation work, and will notify the City, Alameda County, and SCI of the schedule to perform said work in advance. The City, Preservation Park, LLC, and SCI will coordinate activities to oversee soil management and disposal practices during construction.

# 3.1 Health and Safety Plan

The contractor (Contractor) for Preservation Park, LLC will prepare and implement a Health and Safety Plan to notify and protect workers during construction activities at the Site, including the excavation and handling of impacted soils. Where applicable, the Health and Safety Plan will consider any and all environmental data collected from the Site.

### 3.2 Excavation Activities

It is anticipated that the first stage of construction will involve the excavation and offsite disposal of impacted soil from the upper one foot of soil across the Site, followed by excavation and offsite disposal of soil from 1 to 4 feet bgs in the northern quarter of the Site. SCI personnel will delineate and mark off the limits of the excavation zones, as necessary, prior to excavation work. The Contractor will have a grade-checker onsite to confirm that excavation occurs within the designated zones. Soil will be removed by the Contractor using an excavator. To the extent practical, soil will be loaded directly into trucks to minimize double handling.

### 3.3 Dust Control

The Contractor will prepare and implement standard dust control practices to prevent the generation of dust during soil handling activities. Dust control measures may include, but are not limited to, using water spray to mitigate dust during excavation, loading, and hauling. Excavated soil that is not directly loaded onto trucks will be stockpiled onsite and covered with plastic sheeting as a dust prevention measure. If visible dust is observed leaving the Site, the Contractor will implement additional dust mitigation measures, such as increased watering for dust suppression.

#### 3.4 Stormwater Runoff Control

The Contractor will prepare and implement standard stormwater runoff control practices to minimize the migration of soils to the storm drains. Stormwater runoff control measures may include, but are not limited to, grading for internal drainage and the placement of erosion and sediment control devices, as necessary. If soil is stockpiled onsite, runoff will be controlled to reduce sediment loading using silt fences, hay bales, or other available techniques.

# 3.5 Soil Transportation and Disposal

Soil will be transported with trucks that are licensed and permitted to carry materials with the appropriate waste classifications. Trucking will be conducted in compliance with California Department of Transportation (DOT) and other applicable state and local regulations. The Contractor will minimize the tracking of impacted soil from the Site by cleaning wheels upon leaving the Site and sweeping the exit area.

The City will be responsible for signing all hazardous waste manifests and non-hazardous waste bills-of-lading. These shipping documents will accompany the materials to the disposal facility, and fully-executed copies will be returned to the City.

# 3.6 Contingency Plan for Unexpected Conditions

The Contractor will immediately notify the City and SCI upon encountering any unexpected or previously unknown tanks, associated piping, or other identifiable environmental conditions posing a risk to health, safety, or the environment. The Contractor will immediately implement any provisions of the Health and Safety Plan that may be triggered by encountering these conditions. The City and SCI will notify Alameda County of the conditions found, conduct any sampling and analysis that may be warranted, and make recommendations for addressing the conditions so that construction can proceed. In coordination with Alameda County, the City will authorize any additional work deemed necessary by that regulatory body to remediate or remove conditions posing a risk to human health or the environment.

### 3.7 Documentation

Upon completion of the excavation and offhaul activities, SCI will prepare a brief report documenting the soil disposal and results of sampling, if any, conducted during construction.

#### 4.0 REFERENCES

Subsurface Consultants, Inc., Draft Soil Contamination Assessment, June 17, 1991.

Subsurface Consultants, Inc., Preliminary Environmental Assessment, June 19, 1991.

Subsurface Consultants, Inc., Soil Investigation and Tier 3 RBCA Evaluation, MLK, Jr. Way between 11<sup>th</sup> and 12<sup>th</sup> Street, April 2, 2001.

Tetra Tech EM, Inc., Draft Phase 1 Site Assessment for Preservation Park 3, October 13, 1998.

Tetra Tech EM, Inc., Phase II Environmental Site Assessment Summary Report, June 23, 2000.

#### 5.0 LIMITATIONS

SCI has prepared this report in a professional manner, using that degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants. SCI shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the report was prepared. SCI also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report. SCI believes that conclusions stated herein to be factual, but no guarantee is made or implied. This report has been prepared for the benefit of the City of Oakland. The information contained in this report, including all exhibits and attachments, may not be used by any party other than the City of Oakland, without the express written consent of SCI.

TABLES

Table 1: Summary of Previous Results - 1991 SCI Soil Investigation Martin Luther King Jr. Way, Between 11th and 12th Street Oakland, California

Sample ID   Depth	<del></del> -					Oil and		
4	Sample ID	Depth	Units	ТЕН	TVH		Lead	Other Detections
4	1	1.5	mg/kg		ND		31.0	
S.5   mg/kg						-		
2		5.5				-		
3	2	1	mg/kg					
S					_			
7				_	_			
6.5 mg/kg 51 1,2-Dichloroethane (330 ug/kg				ND	ND	ND		
6.5 mg/kg	3	3	mg/kg		2,300			
20.5 mg/kg ND 980 ND - 1,2-Dichloroethane (330 ug/kg		6.5			51	_	**	
20.5   mg/kg   ND   980   ND   - 1,2-Dichloroethane (330 ug/kg   4   24   mg/kg   -   ND   -   -		15.5	mg/kg		4,000		_	
mg/kg		20.5	mg/kg	ND	-	ND		1,2-Dichloroethane (330 ug/kg)
mg/kg	4	24	mg/kg		ND			
27.5   mg/kg   ND   ND		· · · · · · · · · · · · · · · · · · ·						
27.5   mg/kg   ND   ND	6	26	mg/kg	ND	ND			
S.5				ND			-	
S.5   mg/kg	7	3	mg/kg	••			ND	
21		5.5						
26         mg/kg         ND         ND             8         2         mg/kg         ND           363         Wet Lead (8,350 ug/l)           4         mg/kg           ND           5.5         mg/kg           ND           9         1.5         mg/kg           ND           10         1         mg/kg           598           3         mg/kg         ND          58         ND           5.5         mg/kg         ND           ND           11         16.5         mg/kg         620         54             20.5         mg/kg           ND            12         20.5         mg/kg         1,800         2,000             12         mg/kg         1,300         650           Chlorobenzene (280 ug/kg)           22.5         mg/kg         ND         ND             13         21         mg/kg		21		ND	ND			
4 mg/kg ND 5.5 mg/kg ND  9 1.5 mg/kg ND 7 mg/kg ND 10 1 mg/kg ND 3 mg/kg ND 58 ND 5.5 mg/kg ND  11 16.5 mg/kg ND 11 16.5 mg/kg 620 54 ND 12 20.5 mg/kg ND 12 mg/kg 1,800 2,000 12 20.5 mg/kg ND 12 mg/kg 1,300 650 Chlorobenzene (280 ug/kg) 22.5 mg/kg ND ND Chlorobenzene (280 ug/kg) 22.5 mg/kg ND ND 13 21 mg/kg ND ND 14 26 mg/kg ND ND 15 14 24 mg/kg ND ND 15 15 19.5 mg/kg ND		26						
4     mg/kg       ND       9     1.5     mg/kg       ND       10     1     mg/kg       ND       10     1     mg/kg     ND      58     ND       3     mg/kg     ND      58     ND       5.5     mg/kg       ND       11     16.5     mg/kg     620     54         20.5     mg/kg       ND        21     mg/kg     1,800     2,000         12     20.5     mg/kg       ND        21     mg/kg     1,300     650       Chlorobenzene (280 ug/kg)       22.5     mg/kg     ND     ND         13     21     mg/kg     ND     ND         14     24     mg/kg     ND     ND         15     19.5     mg/kg       ND        15     19.5     mg/kg       ND	8	2	mg/kg	ND			363	Wet Lead (8.350 ng/l)
5.5         mg/kg           ND           9         1.5         mg/kg           ND           7         mg/kg           ND           10         1         mg/kg           598           3         mg/kg         ND          58         ND           5.5         mg/kg           ND           11         16.5         mg/kg         620         54             20.5         mg/kg          ND             12         20.5         mg/kg          ND            21         mg/kg         1,300         650           Chlorobenzene (280 ug/kg)           22.5         mg/kg         ND         ND             13         21         mg/kg         ND         ND             14         24         mg/kg         ND         ND             15         19.5         mg/kg           ND								Wor Load (0,550 agr)
10		5.5			-			
7	9	1.5	mg/kg				ND	
3 mg/kg ND - 58 ND 5.5 mg/kg ND  11 16.5 mg/kg 620 54 20.5 mg/kg - ND - ND - 21 mg/kg 1,800 2,000 21 mg/kg 1,300 650 Chlorobenzene (280 ug/kg) 22.5 mg/kg ND ND 26 mg/kg ND ND 27 ND 28 ND ND 19 ND	<del></del>	7	-					
3     mg/kg     ND      58     ND       5.5     mg/kg       ND       11     16.5     mg/kg     620     54         20.5     mg/kg       ND        21     mg/kg     1,800     2,000         21     mg/kg     1,300     650       Chlorobenzene (280 ug/kg)       22.5     mg/kg     ND     ND         26     mg/kg     ND     ND         13     21     mg/kg     ND     ND         14     24     mg/kg     ND     ND         15     19.5     mg/kg      ND     ND	10	1	mg/kg				598	
11   16.5   mg/kg   620   54       ND				ND		58		
20.5 mg/kg		5.5						
20.5 mg/kg	11	16.5	mg/kg	620	54		-	
21     mg/kg     1,800     2,000     -     -       12     20.5     mg/kg     -     -     ND     -       21     mg/kg     1,300     650     -     -     Chlorobenzene (280 ug/kg)       22.5     mg/kg     ND     ND     -     -       26     mg/kg     ND     ND     -     -       13     21     mg/kg     ND     ND     -     -       26     mg/kg     ND     ND     -     -       14     24     mg/kg     ND     ND     -     -       15     19.5     mg/kg     -     ND     -     ND						ND		
21       mg/kg       1,300       650         Chlorobenzene (280 ug/kg)         22.5       mg/kg       ND       ND           26       mg/kg       ND       ND           13       21       mg/kg       ND       ND           26       mg/kg       ND       ND           14       24       mg/kg       ND       ND           26       mg/kg       ND       ND           15       19.5       mg/kg        ND					2,000			•
21       mg/kg       1,300       650         Chlorobenzene (280 ug/kg)         22.5       mg/kg       ND       ND           26       mg/kg       ND       ND           13       21       mg/kg       ND       ND           26       mg/kg       ND       ND           14       24       mg/kg       ND       ND           26       mg/kg       ND       ND           15       19.5       mg/kg        ND	12	20.5	mg/kg			ND		
22.5 mg/kg ND ND 26 mg/kg ND ND 13 21 mg/kg ND ND / 26 mg/kg ND ND / 14 24 mg/kg ND ND 26 mg/kg ND ND 26 mg/kg ND ND 15 19.5 mg/kg ND								Chlorobenzene (280 ng/kg)
26     mg/kg     ND     ND         13     21     mg/kg     ND     ND         26     mg/kg     ND     ND         14     24     mg/kg     ND     ND         26     mg/kg     ND     ND         15     19.5     mg/kg      ND							_	
26         mg/kg         ND         ND         't             14         24         mg/kg         ND         ND             26         mg/kg         ND         ND             15         19.5         mg/kg           ND		26						
26         mg/kg         ND         ND         't             14         24         mg/kg         ND         ND             26         mg/kg         ND         ND             15         19.5         mg/kg           ND	13	21	mg/kg	ND	ND	./		
26 mg/kg ND ND 15 19.5 mg/kg ND						•		
26 mg/kg ND ND 15 19.5 mg/kg ND	14	24	mg/kg	ND	ND			
		26						
	15	19.5	mg/kg			ND		
			mg/kg	ND	ND	••		1,2-Dichloroethane (52 ug/kg)

# Table 1: Summary of Previous Results - 1991 SCI Soil Investigation Martin Luther King Jr. Way, Between 11th and 12th Street Oakland, California

					Oil and	٠.	
Sample ID	Depth	Units	TEH	TVH	Grease	Lead	Other Detections
16	21	mg/kg	ND	ND			
	26	mg/kg	ND	ND		<del>-</del>	
17	25	mg/kg	ND	ND			
	30	mg/kg	ND	ND			
S-1	1.0	mg/kg	7.6	ND	ND		
S-2	0.5	mg/kg		_		118	
S-4	0.5	mg/kg	ND		ND		
S-6	0.5	mg/kg	ND	_	ND		
S-8	0.5	mg/kg	ND		52		
S-10	0.5	mg/kg	ND		ND		
S-13	0.5	mg/kg	ND		82		

#### Notes

TEH: Total Extractable Hydrocarbons as diesel TVHg: Total Volatile Hydrocarbons as gasoline

VOCs: Volatile Organic Compounds mg/kg: milligrams per kilogram ug/l: micrograms per liter

Detected concentrations shown in bold

--: Sample not analyzed

Reference: Soil Contamination Assessment, dated June 17, 1991 by SCI

### Table 2: Summary of Previous Results - 1998 Tetra Tech Investigation Martin Luther King Jr. Way, Between 11th and 12th Street Oakland, California

Boring ID	Depth	Units	TPH Extractables	TPH Purgeables	Benzene	Toluene	Ethyl benzene	Xylenes	Lead	Detectable VOCs
oil Samples					· <u></u>					
SB1	9.5	mg/kg	480.0	1,000.0	0.021	0.096	2.9	12.8	6.6	
	16.5	mg/kg	53.0	38.0	ND	0.03	0.12	1.0	27.4	
	23.5	mg/kg	1,400.0	1,800.0	3.2	26.0	19.0	156.0	4.9	
SB2	9.5	mg/kg	ND	ND	ND	ND	ND	ND	2.9	
	16.5	mg/kg	ND	ND	ND	ND	0.01	0.03	78.6	
	23.5	mg/kg	4.6	190.0	23.5	24.0	14.0	89.0	2.3	
SB3	9.0	mg/kg	ND	ND	ND	ND	ND	ND	2.4	
	16.0	mg/kg	ND	ND	ND	ND	ND	ND	2.3	
	23.5	mg/kg	ND	ND	ND	ND	ND	ND	0.88	
rab Groundwa	ter Samples									
SB1		mg/L,	17.0	33.0	0.35	1.8	0.64	ND	0.43	
SB2	-	mg/L	0.09	0.11	0.02	0.026	0.0031	0.02	0.18	1,2,4-Trimethylbenzene (0.0056 mg/L) 1,2-Dichlorethane (0.0014 mg/L), 1,3,5-Trimethylbenzene (0.0017 mg/L) and Napthalene (0.0014 mg/L)
SB3		mg/L	ND	ND	ND	ND	ND	ND	6.04	

#### Notes:

TPH: Total Petroleum Hydrocarbons
VOCs: Volatile Organic Compounds
mg/kg: milligrams per kilogram
mg/l: milligrams per liter
--: Sample not analayzed
ND: Not Detected

Detected concentrations shown in bold

Reference: Final Phase II - Environmental Site Assessment Report, dated June 23, 2000 by Tetra Tech EM, Inc.

## Table 3: Results for Test Pit Samples Martin Luther King Jr. Way, Between 11th and 12th Street Oakland, California

	<del></del>						Ethyl			WET	TCLP
Sample ID	Units	TEHd *	ТЕНо *	TVHg	Benzene	Toluene	benzene	Xylenes	Lead	Lead	Lead
TP-1@0.0	mg/kg		-		-	-		-	160		
TP-1@2.0	mg/kg	-	-	-	_	-	-		3.1	_	
TP-1@5.0	mg/kg	</td <td>&lt;5</td> <td>&lt;0.97</td> <td>&lt;4.9</td> <td>&lt;4.9</td> <td>&lt;4.9</td> <td>&lt;4.9</td> <td>3.6</td> <td><u> </u></td> <td>-</td>	<5	<0.97	<4.9	<4.9	<4.9	<4.9	3.6	<u> </u>	-
TP-2@0.0	mg/kg					_			20		
TP-2@2.0	mg/kg	<1	<5	<0.97	<4.9	<4.9	<4.9	<4.9	1.6	_	_
TP-2@5.0	mg/kg			-					2.1		-
TP-3@0.0	mg/kg	-		_		_	_	-	160		
TP-3@3.0	mg/kg		••		_	_		_	1.8		_
TP-3@6.0	mg/kg	< 99	<5	<0.95	<4.8	<4.8	<4.8	<4.8	7.0		
TP-4@0.0	mg/kg	_	~~	-					170		
TP-4@2.5	mg/kg	6.3	46	< 0.97	<4.9	<4.9	<4.9	<4.9	86	_	-
TP-4@6.0	mg/kg				-				91		
TP - 5@0.0	mg/kg	<del>-</del>		-	-				110		
TP-5@2.0	mg/kg	<1	<5	< 0.93	<4.7	<4.7	<4.7	<4.7	4.5		
TP-5@6.0	mg/kg	-					_		2.4		-
TP-6@0.0	mg/kg			_				-	190		
TP-6@2.5	mg/kg	_		_	-	_	_	_	1.9	_	_
TP-6@6.0	mg/kg	<1	<5	<0.92	<4.6	<4.6	<4.6	<4.6	2.0	_	
TP-7@0.0	mg/kg			_				-	220		
TP-7@2.0	mg/kg	<1	<5	< 0.93	<4.7	<4.7	<4.7	<4.7	2.1	_	_
TP-7@6.0	mg/kg	_	-	_					2.5	_	-
TP-8@0.0	mg/kg	***	-			-			220		
TP-8@2.5	mg/kg	4.6	36	< 0.95	<4.8	<4.8	<4.8	<4.8	180	_	
TP-8@6.0	mg/kg	-				-			1.7		
TP-9@0.0	mg/kg				-	·		-	220		
TP-9@2.0	mg/kg	***					_		1.4	_	_
TP-9@5.0	mg/kg	<1	<5	< 0.95	<4.8	<4.8	<4.8	<4.8	1.3	_	_
TP- 10@0.0	mg/kg	-				_			150		
TP- 10@2.0	mg/kg	 <1	 <5	<0.94	<4.7	<4.7	 <4.7	- <4.7	1.9	_	-
TP-10@5.0	mg/kg		-		~ <del>~</del> .,,		-		2.2	_	-
TP-11@0.0	mg/kg	444									
TP-11@2.0	mg/kg mg/kg					-	_		200 15	_	-
TP-11@5.0	mg/kg	- <1	- <5	<0.97	<4.9	 <4.9	 <4.9	 <4.9	1.9		_
TP- 12@0.0	mg/kg										
TP - 12@2.0	mg/kg mg/kg	6.6	81	<0.94	 <4.7	- <4.7	 <4.7	<4.7	72 110		
TP- 12@5.0	mg/kg		-		~ <del>1</del> .,	~ <del>4</del> .1		<del>-</del> -	110	_	-
COMP-I	mg/l									· · · · · · · · · · · · · · · · · · ·	
COMP-2	mg/l	_	_	<del>-</del>			_	-	-	3.6 7.7	_
			· ·	-		**				7.7	
Q1 though Q5	mg/l					<del>-</del>	-	_	-		<0.5
	<del></del>									<del>,</del>	

#### Notes:

Soil samples collected on August 4, 2000
Detected concentrations shown in bold
TEHd. Total Extractable Hydrocarbons as diesel
TEHo Total Extractable Hydrocarbons as motor oil
TVHg. Total Volatile Hydrocarbons as gasoline
\*: Using silica gel cleanup

WET: Waste Extraction Test

TCLP Toxic Characteristic Leachability Procedure

mg/kg milligrams per kilogram mg/l. milligrams per liter

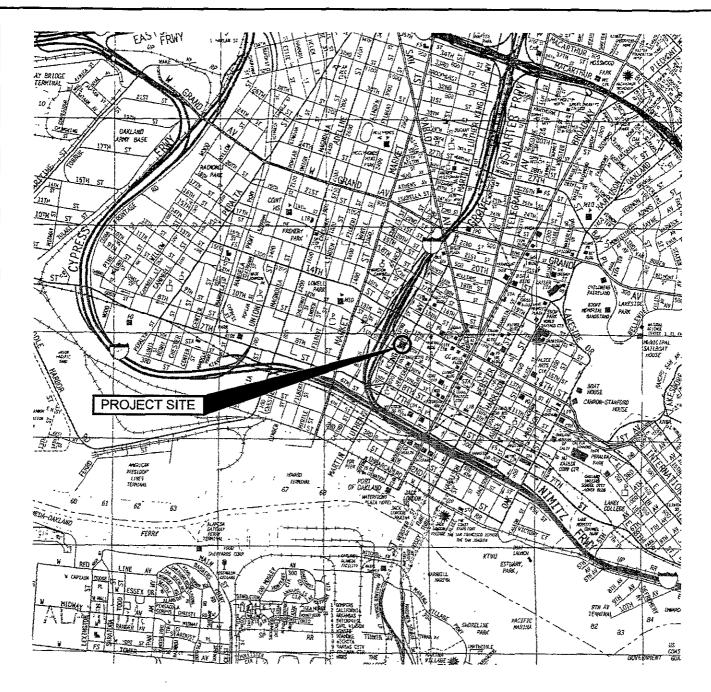
-: Sample not analyzed

Solution of the state of the

COMP - 1 is a composite of TP-4@6', TH-8@6', and TP-12@5'

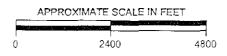
COMP - 2 is a composite of TP-4@2 5', TH-8@2 5', and TP-12@2'

**PLATES** 



# NOTE:

THIS VICINITY MAP IS BASED ON A THOMAS GUIDE MAP FOR SAN FRANCISCO, ALAMEDA AND CONTRA COSTA COUNTIES, CALIFORNIA, MAP 649, YEAR 2000





# **VICINITY MAP**

12TH STREET AND MARTIN LUTHER KING JR. WAY OAKLAND, CALIFORNIA



Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

OFAYN BY DATE 3/8/01

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PLATE

