

SUMMIT ENGINEERING

6045 Shirley Drive
Oakland, CA 94611
(415) 531-6655
570

- House Inspection
 - Soils Report
 - Surveying
 - Design
 - Hazardous Waste Studies
- Alex Lee
c/o Tim Chan
2718 Mendocino Court
Pinole, CA 94564

RO 654
closed

NO FILE 11-17-03

" " 12-9-03

February 20, 1993

RE: Preliminary Environmental Report on the Property at 1501-1515 14th Avenue, Oakland, California.

Dear Mr. Lee :

The attached environmental report is based on a detailed study by the undersigned of the above property, where a new condominium development is planned for the immediate future. We conclude that from an environmental standpoint, the land is suitable for the new construction, provided that our recommendations are implemented.

Special concerns for this site include the potential hazards of either, hydrocarbon contamination in the form of gasoline, or diesel, or heavy metal (chromium, lead, or zinc) contamination. A small amount of lead contamination has been found at one location. We provide recommendations for remediation, pending approval by Alameda County.

Please feel free to contact us if there are questions about this report, or we may be of further service.

Sincerely,

Al G. Masso

Al G. Masso
CE-30442



①

②

PRELIMINARY ENVIRONMENTAL INVESTIGATION OF
THE PROPERTY LOCATED AT
1501 THROUGH 1515 14TH AVENUE
OAKLAND, CALIFORNIA

FOR

ALEX LEE
2718 MENDOCINO COURT
PINOLE CA 94564

SUMMIT ENGINEERING
6045 SHIRLEY DRIVE
OAKLAND, CALIFORNIA 94611

FEBRUARY 20, 1993

INTRODUCTION

This report summarizes our findings during a preliminary environmental assessment of the site addressed as 1501 through 1515 14th Avenue, Oakland, California. The site is presently a fenced-in parking lot on the west side of 14th Avenue between East 15th Street and Foothill Boulevard. The site consists of the addition of two rectangular parcels with a total of 8,850 ft² or 0.20 acres of surface area, as shown in Figures 1 and 2. The current owner is planning a condominium development project on the subject site.

This study consists of the following items :

- Review of Title Report and Chain of Ownership.
- Site Inspection
- Search of City Fire Department Files.
- Search of Alameda County Health Department Files.
- Collection of representative soil samples and laboratory analysis for petroleum hydrocarbons and heavy metals.
- Proposed Tank Excavation and Site Remediation.

REVIEW OF TITLE REPORT AND CHAIN OF OWNERSHIP

A title report including a title search of each individual parcel for more than 50 years was prepared by Northwestern Title Company and made available to us. Our review of the available title report indicates that the property was used for commercial purposes as indicated by references to several partnerships and to Ashland Oil Corporation of California.

SITE INSPECTION

The subject site was inspected by our office on October 20, 1992 during the performance of boundary survey work. The site consists of a fenced-in, paved parking lot where used cars awaiting repairs are kept. The sole existing structure consists of a 20 ft x 20 ft wooden shed. It appears that the site has had other structures built on it such as several concrete slabs, and an island for vehicle refueling near the eastern boundary as shown in Figure 2.

Except for surface stains of car oil, no visible remains of contamination, or abandoned tanks, sumps, or similar installations were found.

SEARCH OF CITY FIRE DEPARTMENT FILES

The records kept by the City of Oakland Fire Department at 421 14th Street in Oakland include permits for underground tank removal and installation. These files may include permits for equipment installation related to tank contamination cleanup, such as groundwater treatment, vapor extraction, etc. A search of City records conducted on December 22, 1992, revealed the following :

- There is no permit application for the subject property or its immediate vicinity.
- A number of tank removal/ installation permits were found, the nearest being more than 500 feet away from the subject lot. The potential for health hazard from these sites is remote. A summary of findings is shown on Table 1.

SEARCH OF ALAMEDA COUNTY HEALTH DEPARTMENT FILES

The files maintained at the Alameda County Hazardous Materials Division (Department of Environmental Health) located at 80 Swan Way in Oakland include up-to-date reports of any significant environmental work being conducted in the county. These files may include remedial investigation studies as well as toxic remediation work on soil and/ or groundwater performed on either residential, commercial, or industrial installations. A search of these files conducted on February 19, 1993, revealed the following:

- There is a file on the subject property for cursory site inspection only.
- There is an extensive file on the property located at the intersection of 12th Street and 14th Avenue, which can be summarized as follows:

This site which covers a portion of the 12th Street and 14th Avenue intersection was recently used as a paved parking lot, consisted of two parcels one owned by the City of Oakland and the other by DWA Corp. The parcels were originally covered by homes which were demolished in the

1930's. The discovery of total petroleum hydrocarbons (TPH) triggered remedial work including soil excavation and groundwater treatment. The source of contamination is unknown, but it may be related to the storm drain conduit which crosses the site at depths of 15 to 16 feet.

Hydrocarbon contamination was found of 330 ppm of gasoline, 58 of diesel, as well as small amounts of BTEX compounds in water. The contaminated soil were removed; several wells were installed for contamination recovery as well as groundwater monitoring. The plume spread slightly towards the northeast, but it appeared to be confined to the site. The groundwater was monitored quarterly and did not show impairment. Finally, in a letter dated 6/21/92, the County of Alameda stated that remediation was completed, and granted site closure.

In conclusion, this site present a very small health hazard for the subject site due to considerable distance (about 450 feet), and to a relatively small volume of contamination which appears to be largely remediated.

RESULTS OF LABORATORY ANALYSIS ON SOIL SAMPLES

Six soil borings, B-1 to B-6, were drilled and samples were taken at 5- and 10-foot depths with a 2.5-inch split-spoon sampler lined with clean 2-in diameter x 6-in brass tubes. Boring locations were selected after performing a site survey using a magnetic metal detector, and marking the areas where either tanks or piping appears to have been detected (See Figure 2).

The samples were analyzed by Precision Analytical Laboratory, Inc. of Richmond, California. This facility is certified by the State of California Department of Health Services. Analyses were performed according to DHS or EPA methods. Hydrocarbon detection analyses for diesel and gasoline were performed. Heavy metal detection analyses for lead, chromium, and zinc were also performed. The results are shown in Tables 2 and 3.

Results of analysis shown on Table 2 indicate that hydrocarbons were detected in two 5-foot deep samples, specifically gasoline was found above the action level of 100 ppm; consequently the soil in those areas must be excavated. Table 3 shows that all heavy metal concentrations were below the TTLC values specified by the CCR Title 22. However, three samples show lead values above the maximum value of 200 ppm normally accepted by Alameda County for urban sites, are considered hazardous and that soil must be excavated.

PROPOSED TANK EXCAVATION AND SITE REMEDIATION PLAN

Phase I

Tank excavation must be carried out; as many as three tanks may exist at the site. Tanks must be properly disposed; soil and also water samples if possible, must be collected at the bottom of the tanks upon excavation. The volume of soil to be excavated will be determined by verification analysis of in-place soil. Two soil samples will be taken below tanks of 1,000-gal capacity or larger. In-place soil must show non-detectable amounts of benzene, amounts of TPH gasoline below 100 ppm, and amounts of heavy metals below levels determined by Alameda County for acceptable health risk. Groundwater must have benzene concentrations below 0.7 ppb. Installation of monitoring wells may be required depending of amount of contaminants found.

Phase II

The contaminated soil will be excavated and stockpiled on plastic sheeting for stabilization. The excavation will be backfilled with clean soil which will be thoroughly compacted by mechanical means. TPH contaminated soil may be treated on-site to rid it of either volatile compounds by aeration, or oil and grease by bio-remediation. Heavy-metal contaminated soil may be stabilized with the addition of 15% cement by weight and a small amount of water, according to the recommendations of the State of California Toxic Substances Control Branch. After the treatment is successfully completed, the soil may be either re-used as backfill, or placed and compacted in areas to be covered by asphalt in the proposed condominium project. Heavily contaminated soil may have to be disposed to an appropriate facility. Groundwater remediation in various degrees may still be required after soil remediation is completed.

REFERENCES

1. Northwestern Title Company, Preliminary Title Report. Order No. 717965. November 10, 1992.
2. City of Oakland Fire Department, 421 14th Street, 1st Floor, Oakland, CA 94612.
3. Alameda County Department of Environmental Health, Hazardous Materials Division, 80 Swan Way, Room 200, Oakland, CA 94621.
4. State of California, Leaking Underground Fuel Tank Field Manual, December 1987.
5. State of California, California Code of Regulations (CCR), Section 66699, Title 22.
6. Boundary and Topo Survey by SUMMIT ENGINEERING, November, 1992.

TABLE 1

VICINITY SITES WITH UNDERGROUND STORAGE TANK PERMITS

Site No.	Address ID	Tanks		Remedial Work Conducted ?	Date
		Removed/ (R)	Installed ? (I)		
1	1701 14th Ave (a) Standard Oil	Three 6,000 gal (R) One 3,200 gal (R)		Y	3/5/74
2	Foothill Blv & 14th Ave (a) Mobil Oil	Three 10,000 gal One 8,000, one 6,000 Piping Repaired		Y	3/29/76
3	1335 Foothill (a) Mobil Oil	Gasoline tanks (I) Piping repaired		N N	7/6/71 8/2/83
4	12th Street & 22nd Avenue (b) Shell Oil	Piping Repaired		N	6/21/73

(a) Location within 1/4 mile of subject site

(b) Location within 1/2 mile of subject site

TABLE 2

RESULTS OF TOTAL PETROLEUM HYDROCARBON LABORATORY ANALYSES
(DHS Extraction Method LUFT)

Sample ID	Depth (ft)	Gasoline (ppm)	Diesel (ppm)
B-1-1	5	ND(a)	ND(a)
B-1-2	10	ND	ND
B-2-1	5	ND	ND
B-2-2	10	ND	ND
B-3-1	5	190	88
B-3-2	10	ND	ND
B-4-1	5	18	ND
B-4-2	10	ND	ND
B-5-1	5	ND	ND
B-5-2	10	ND	ND
B-6-1	5	ND	ND
B-6-2	10	ND	ND

(a) Detection Limit = 10 ppm

TABLE 3

RESULTS OF HEAVY METALS LABORATORY ANALYSES
(EPA Method 6010, Preparation Method 3050)

Sample ID	Chromium (pp)	Lead (ppm)	Zinc (ppm)
B-1-1	13.5	8.5	8.5
B-1-2	16.8	13.1	ND
B-2-1	49.5	12.0	45.2
B-2-2	19.3	8.4	43.3
B-3-1	20.2	415.0	250.0
B-3-2	20.0	5.1	31.0
B-4-1	22.8	430.0	375.0
B-4-2	27.8	10.1	64.3
B-5-1	28.2	5.5	38.0
B-5-2	10.6	4.9	28.6
B-6-1	18.9	270.0	205.0
B-6-2	34.6	6.8	38.1

	Chromium (ppm)	Lead (ppm)	Zinc (ppm)
Detection Limit	0.10	0.38	0.02
Title 22 TTLC	500	1000	5000
Title 22 STLC (mg/l)	5	5	250



Ref: Thomas Brothers Map
Alameda County

- LEGEND**
- ③ Site w/ Undergr. Storage Tank Permit (See Table 1)

FIGURE 1 - SITE LOCATION

SUMMIT ENGINEERING

EAST 15TH STREET (5910 FT)

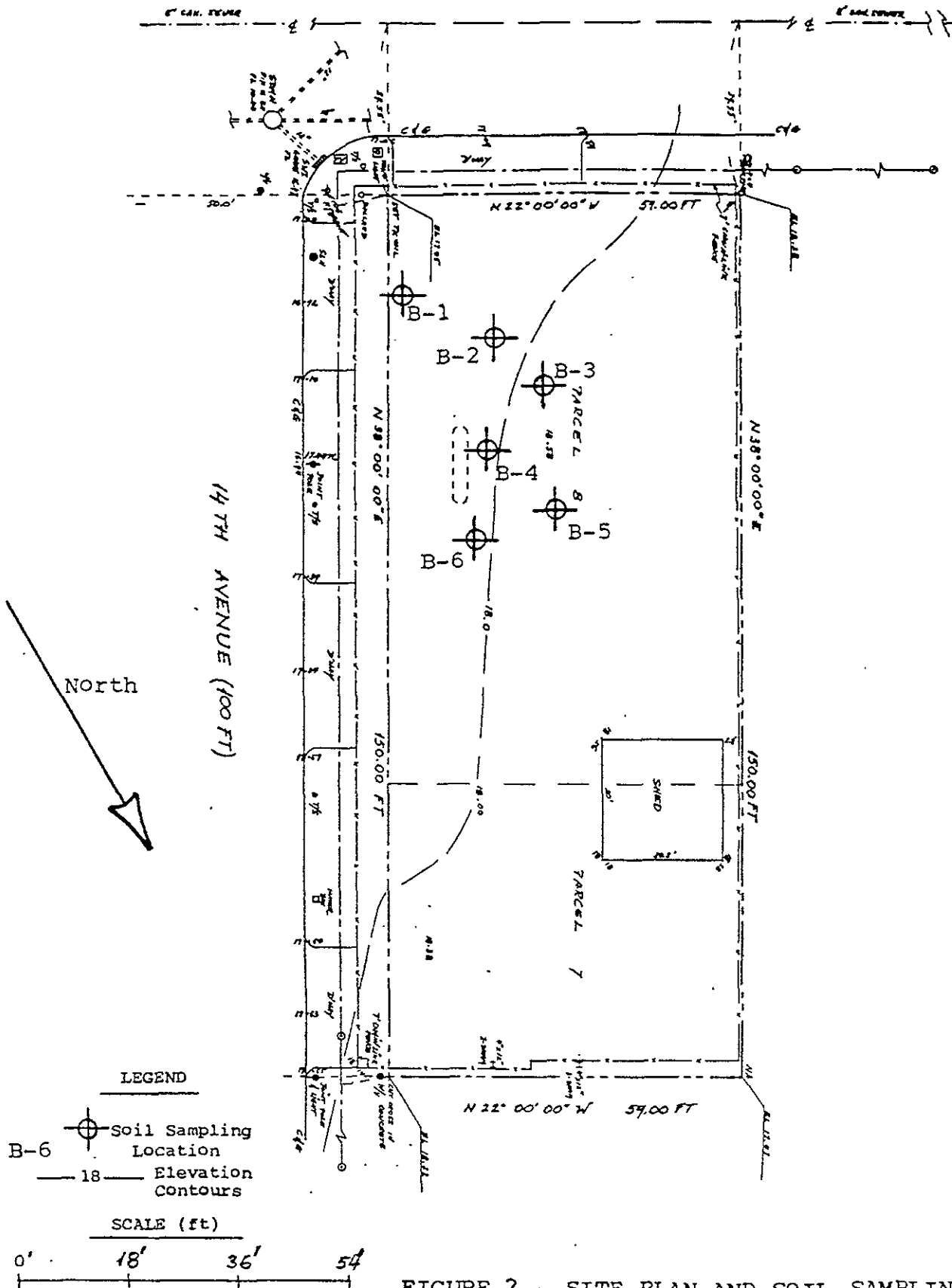


FIGURE 2 - SITE PLAN AND SOIL SAMPLING LOCATIONS

APPENDIX

SUMMIT ENGINEERING

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Received: 12/04/92
Extraction: 12/14/92
Reported: 01/14/93
Job #: 74198

Attn: Al Masso
Mapco/Summit Environmental
6045 Shirley Drive
Oakland, CA 94611

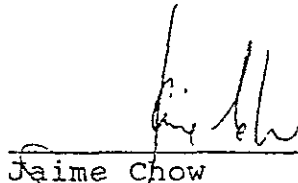
Project: 14th Avenue, Oakland
Matrix: Soil

Total Petroleum Hydrocarbon Analysis
DHS Extraction Method (LUFT)
mg/Kg

<u>Lab I.D.</u>	<u>Client I.D.</u>	<u>Gasoline</u>	<u>MDL</u>
74198-1	B-1-1	ND<10	10
74198-2	B-1-2	ND<10	10

QA/QC: Spike Recovery: 97%

MDL: Method Detection Limit. Compound below this level would not be detected.



Jaime Chow
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Received: 12/19/92
Extraction: 12/28/92
Reported: 01/04/93
Job #: 74278

Attn: Al Masso
Mapco/Summit Environmental
6045 Shirley Drive
Oakland, CA 94611

Project: 14th Avenue, Oakland
Matrix: Soil

Total Petroleum Hydrocarbon Analysis
DHS Extraction Method (LUFT)
mg/Kg

<u>Lab I.D.</u>	<u>Client I.D.</u>	<u>Gasoline</u>	<u>MDL</u>
74278-1	B-2-1	ND<10	10
74278-2	B-2-2	ND<10	10
74278-3	B-3-1	190 *	10
74278-4	B-3-2	ND<10	10
74278-5	B-4-1	18 *	10
74278-6	B-4-2	ND<10	10
74278-7	B-5-1	ND<10	10
74278-8	B-5-2	ND<10	10
74278-9	B-6-1	ND<10	10
74278-10	B-6-2	ND<10	10

* Total Petroleum Hydrocarbon in Gasoline Range

QA/QC: Spike Recovery: 127%

MDL: Method Detection Limit. Compound below this level would not be detected.

Jaime Chow

Jaime Chow
Laboratory Director

JC/td

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Received: 12/04/92
Extraction: 12/14/92
Reported: 01/14/93
Job #: 74198

Attn: Al Masso
Mapco/Summit Environmental
6045 Shirley Drive
Oakland, CA 94611

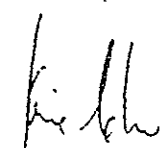
Project: 14th Avenue, Oakland
Matrix: Soil

Total Petroleum Hydrocarbon Analysis
DHS Extraction Method (LUFT)
mg/Kg

<u>Lab I.D.</u>	<u>Client I.D.</u>	<u>Diesel</u>	<u>MDL</u>
74198-1	B-1-1	ND<10	10
74198-2	B-1-2	ND<10	10

QA/QC: Spike Recovery: 104%

MDL: Method Detection Limit. Compound below this level would not be detected.



Jaime Chow
Laboratory Director

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Received: 12/19/92
Extraction: 12/28/92
Reported: 01/04/93
Job #: 74278

Attn: Al Masso
Mapco/Summit Environmental
6045 Shirley Drive
Oakland, CA 94611

Project: 14th Avenue, Oakland
Matrix: Soil

Total Petroleum Hydrocarbon Analysis
DHS Extraction Method (LUFT)
mg/Kg

<u>Lab I.D.</u>	<u>Client I.D.</u>	<u>Diesel</u>	<u>MDL</u>
74278-1	B-2-1	ND<10	10
74278-2	B-2-2	ND<10	10
74278-3	B-3-1	88 *	10
74278-4	B-3-2	ND<10	10
74278-5	B-4-1	ND<10	10
74278-6	B-4-2	ND<10	10
74278-7	B-5-1	ND<10	10
74278-8	B-5-2	ND<10	10
74278-9	B-6-1	ND<10	10
74278-10	B-6-2	ND<10	10

* Total Petroleum Hydrocarbon in Diesel Range

QA/QC: Spike Recovery: 100%

MDL: Method Detection Limit. Compound below this level would not be detected.

Jaime Chow

Jaime Chow
Laboratory Director

JC/td

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

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Received: 12/04/92

Reported: 12/14/93

Job #: 74198

Attn: Al Masso
Mapco/Summit Environmental
6045 Shirley Drive
Oakland, CA 94611

Project: 14th Avenue, Oakland
Matrix: Soil


EPA Method 6010
Preparation Method 3050
mg/Kg

Lab I.D.:	74198-1	74198-2		% Spike
<u>Client I.D.:</u>	<u>B-1-1</u>	<u>B-1-2</u>	<u>MDL</u>	<u>Recovery</u>

METAL

Chromium	13.5	16.8	0.10	86
Lead	8.50	13.1	0.38	93
Zinc	8.50	ND<0.02	0.02	105

MDL: Method Detection Limit. Compound below this level would not be detected.


Jaime Chow
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Received: 12/19/92

Reported: 01/04/93

Job #: 74278

Attn: Al Masso
Mapco/Summit Environmental
6045 Shirley Drive
Oakland, CA 94611

Project: 14th Avenue, Oakland
Matrix: Soil

EPA Method 6010
Preparation Method 3050
mg/Kg

Lab I.D.:	74278-1	74278-2	MDL	% Spike Recovery
Client I.D.:	<u>B-2-1</u>	<u>B-2-2</u>		
METAL				
Chromium	49.5	19.3	0.10	78
Lead	12.0	8.43	0.38	92
Zinc	45.2	43.3	0.02	84

MDL: Method Detection Limit. Compound below this level would not be detected.

Jaime Chow
Jaime Chow
Laboratory Director

JC/td

Precision Analytical Laboratory, Inc.

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FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Received: 12/19/92

Reported: 01/04/93

Job #: 74278

Attn: Al Masso
Mapco/Summit Environmental

Project: 14th Avenue, Oakland
Matrix: Soil

EPA Method 6010
Preparation Method 3050
mg/Kg

Lab I.D.:	74278-3	74278-4		% Spike
Client I.D.:	<u>B-3-1</u>	<u>B-3-2</u>	<u>MDL</u>	<u>Recovery</u>
METAL				
Chromium	20.2	20.0	0.10	78
Lead	415	5.10	0.38	92
Zinc	250	31.0	0.02	84

MDL: Method Detection Limit. Compound below this level would not be detected.

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

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FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Received: 12/19/92

Reported: 01/04/93

Job #: 74278

Attn: Al Masso
Mapco/Summit Environmental

Project: 14th Avenue, Oakland
Matrix: Soil

EPA Method 6010
Preparation Method 3050
mg/Kg

Lab I.D.:	74278-5	74278-6		% Spike
<u>Client I.D.:</u>	<u>B-4-1</u>	<u>B-4-2</u>	<u>MDL</u>	<u>Recovery</u>
METAL				
Chromium	22.8	27.8	0.10	78
Lead	430	10.1	0.38	92
Zinc	375	64.3	0.02	84

MDL: Method Detection Limit. Compound below this level would not be detected.

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Received: 12/19/92

Reported: 01/04/93

Job #: 74278

Attn: Al Masso
Mapco/Summit Environmental

Project: 14th Avenue, Oakland
Matrix: Soil

EPA Method 6010
Preparation Method 3050
mg/Kg

Lab I.D.:	74278-7	74278-8		% Spike
<u>Client I.D.:</u>	<u>B-5-1</u>	<u>B-5-2</u>	<u>MDL</u>	<u>Recovery</u>
METAL				
Chromium	28.2	10.6	0.10	78
Lead	5.54	4.90	0.38	92
Zinc	38.0	28.6	0.02	84

MDL: Method Detection Limit. Compound below this level would not be detected.

Precision Analytical Laboratory, Inc.

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PHONE (510) 222-3002

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Received: 12/19/92

Reported: 01/04/93

Job #: 74278

Attn: Al Masso
Mapco/Summit Environmental

Project: 14th Avenue, Oakland
Matrix: Soil

EPA Method 6010
Preparation Method 3050
mg/Kg

Lab I.D.:	74278-9	74278-10		% Spike
<u>Client I.D.:</u>	<u>B-6-1</u>	<u>B-6-2</u>	<u>MDL</u>	<u>Recovery</u>
METAL				
Chromium	18.9	34.6	0.10	78
Lead	270	6.80	0.38	92
Zinc	205	38.1	0.02	84

MDL: Method Detection Limit. Compound below this level would not be detected.

610 811

PROJECT NO.		SAMPLERS (Signature) <i>AGMasso</i>				ANALYSIS REQUESTED TPH - Gas <input checked="" type="checkbox"/> Diesel BTX - (8020) Halogenated (8010) Oil & Grease PCB - (8080) Metals (CAM-17) 76 G 8240								
PROJECT NAME AND ADDRESS: <i>14th AVE ORK</i>														
CROSS REFERENCE NUMBER	DATE	TIME	Soil	Water	STATION LOCATION								✓	
<i>B-2-1</i>			✓	✓		✓					✓			
<i>-2</i>			✓	✓		✓					✓			
<i>B-3-1</i>			✓	✓		✓					✓			
<i>-2</i>			✓	✓		✓					✓			
<i>B-4-1</i>			✓	✓		✓					✓			
<i>-2</i>			✓	✓		✓					✓			
<i>B-5-1</i>			✓	✓		✓					✓			
<i>-2</i>			✓	✓		✓					✓			
<i>B-6-1</i>			✓	✓		✓					✓			
<i>-2</i>			✓	✓		✓					✓			
RELINQUISHED BY: (Signature) <i>AGMasso</i>				DATE <i>12/19/92</i>	RECEIVED BY: (Signature) <i>Kulwinder Sidhu</i>				DATE <i>12/19/92</i>					
RELINQUISHED BY: (Signature)				TIME <i>2:30pm</i>	RECEIVED BY: (Signature)				TIME <i>2:00pm</i>					
RELINQUISHED BY: (Signature)				DATE	RECEIVED BY: (Signature)				DATE					
RELINQUISHED BY: (Signature)				TIME	RECEIVED BY: (Signature)				TIME					
RELINQUISHED BY: (Signature)				DATE	RECEIVED BY: (Signature)				DATE					
RELINQUISHED BY: (Signature)				TIME	RECEIVED BY: (Signature)				TIME					

Turnaround Time: * 24 hrs _____ * 2/3 days _____ * 4/5 _____ Normal * Surcharge Applies

Special Instructions: _____

Visible Sample Hazards: _____