

James P. Bowers, PE
R. William Rudolph, Jr., PE

✓
4/30/93

April 29, 1993
SCI 827.001

Ms. Eva Chu
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

93 APR 30 10 19

**Analytical Test Results
Preliminary Fuel Oil Contamination Assessment
4629 Martin Luther King, Jr. Way
Oakland, California 94609**

Dear Ms. Chu:

Presented herein are the results of the preliminary soil contamination assessment conducted by Subsurface Consultants, Inc. (SCI) for the referenced site. On March 10, 1993, three test borings were drilled to depths of about 25 feet at the locations shown on Plate 1. Selected soil samples were analyzed for total extractable hydrocarbons (TEH) and oil and grease (O&G). The analytical results are summarized on Plate 2. Analytical test reports are attached.

Diesel and oil and grease were detected in the soil below the previous fuel oil tanks at concentrations up to 1700 and 760 mg/kg, respectively. Hydrocarbons were detected in soil at depths up to 25 feet. Based on the results, we propose to perform additional investigation to define the lateral and vertical extent of soil contamination. During this next phase of study, five (5) test borings will be drilled to depths of 30 feet at the locations shown on Plate 1. The borings will be drilled in the manner described in the work plan (dated March 4, 1993) submitted to you previously. The results of our investigation efforts will be recorded in a report at the completion of the next phase of study.

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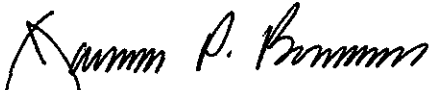
Ms. Eva Chu
Alameda County Health Care Services Agency
SCI 827.001
April 29, 1993
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■ Subsurface Consultants, Inc.

We look forward to your favorable response to our proposal. If you have any questions, please call.

Yours very truly,

Subsurface Consultants, Inc.



James P. Bowers
Geotechnical Engineer 157 (expires 3/31/96)

MK:JPB:egh

cc: Ms. Lynn Nightingale
c/o Miller & Miller

Mr. Richard Hiett
Regional Water Quality Control Board

Attachments: Plate 1 - Site Plan
Plate 2 - Hydrocarbon Concentrations in Soil
Analytical Test Reports

47TH STREET

TELEPHONE POLE

SIDEWALK

VENT PIPE

VENT PIPE

EXISTING BUILDING

SIDEWALK

MARTIN LUTHER KING JR. WAY

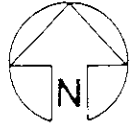
⊕ PROPOSED TEST BORING

● TEST BORING

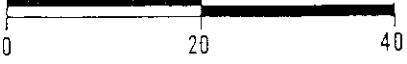
□ APPROXIMATE LOCATION OF PREVIOUS HEATING OIL FUEL TANKS

□ APPROXIMATE LOCATION OF PREVIOUS GASOLINE TANK

--- EXTENT OF TANK EXCAVATION



APPROXIMATE SCALE (feet)



SITE PLAN

Subsurface Consultants

NIGHTINGALE TANKS - OAKLAND, CA

JOB NUMBER
827 001

DATE
3/19/93

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PLATE
1

47TH STREET



● TELEPHONE POLE

1 11(5ND,ND)
20(6,ND)

2 15(14,ND)
23(570,ND)

3 18(310,380)
21(1700,760)
25(180,NA)

SIDEWALK

● VENT PIPE

● VENT PIPE

EXISTING BUILDING



15(1700,400)

┌ OIL & GREASE IN mg/kg
├ TEH, AS DIESEL IN mg/kg
└ SAMPLE DEPTH (feet)

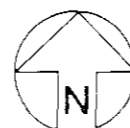
⊕ PROPOSED TEST BORING

● TEST BORING

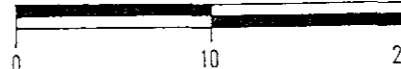
--- EXTENT OF TANK EXCAVATION

□ APPROXIMATE LOCATION OF PREVIOUS HEATING OIL FUEL TANKS

□ APPROXIMATE LOCATION OF PREVIOUS GASOLINE TANK



APPROXIMATE SCALE (feet)



HYDROCARBON CONCENTRATIONS
IN SOIL

Subsurface Consultants

NIGHTINGALE TANKS - OAKLAND, CA

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DATE
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PLATE

2



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

DATE RECEIVED: 03/12/93

DATE REPORTED: 03/19/93

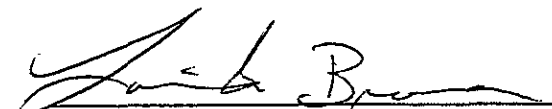
LABORATORY NUMBER: 110314


CLIENT: SUBSURFACE CONSULTANTS

PROJECT ID: 827.001

LOCATION: 4629 MLK JR WAY

RESULTS: SEE ATTACHED


Reviewed by


Reviewed by

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Client: Subsurface Consultants

Laboratory Login Number: 110314

 Project Name: 4629 MLK Jr. Way
 Project Number: 827.001

Report Date: 19 March 93

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) METHOD: SMWW 17:5520EF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
110314-001	1 @ 11.5	Soil	10-MAR-93	12-MAR-93	17-MAR-93	ND	mg/Kg	50	TR	8602
110314-002	1 @ 20	Soil	10-MAR-93	12-MAR-93	17-MAR-93	ND	mg/Kg	50	TR	8602
110314-003	2 @ 15	Soil	10-MAR-93	12-MAR-93	17-MAR-93	ND	mg/Kg	50	TR	8602
110314-004	2 @ 23	Soil	10-MAR-93	12-MAR-93	17-MAR-93	ND	mg/Kg	50	TR	8602
110314-005	3 @ 18	Soil	10-MAR-93	12-MAR-93	17-MAR-93	380	mg/Kg	50	TR	8602
110314-006	3 @ 21	Soil	10-MAR-93	12-MAR-93	17-MAR-93	760	mg/Kg	50	TR	8602

ND = Not Detected at or above Reporting Limit (RL).

Q C B a t c h R e p o r t

 Client: Subsurface Consultants
 Project Name: 4629 MLK Jr. Way
 Project Number: 827.001

 Laboratory Login Number: 110314
 Report Date: 19 March 93

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 8602

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520EF	17-MAR-93

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	96%	SMWW 17:5520EF	17-MAR-93
BSD	87%	SMWW 17:5520EF	17-MAR-93

		Control Limits
Average Spike Recovery	91%	80% - 120%
Relative Percent Difference	10.0%	< 20%

LABORATORY NUMBER: 110314
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 827.001
 LOCATION: 4629 MLK JR WAY

DATE SAMPLED: 03/10/93
 DATE RECEIVED: 03/12/93
 DATE EXTRACTED: 03/15/93
 DATE ANALYZED: 03/16/93
 DATE REPORTED: 03/19/93

Extractable Petroleum Hydrocarbons in Soils & Wastes
 California DOHS Method
 LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
110314-1	1@11.5	**	ND	1
110314-2	1@20	**	6	1
110314-3	2@15	**	14	1
110314-4	2@23	**	570	10
110314-5	3@18	**	310	10
110314-6	3@21	**	1,700	10

ND = Not Detected at or above reporting limit.

* Reporting limit applies to all analytes.

**Kerosene range not reported due to overlap of hydrocarbon ranges.

QA/QC SUMMARY

RPD, %	1
RECOVERY, %	116



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2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 03/22/93

DATE REPORTED: 03/24/93

LABORATORY NUMBER: 110408

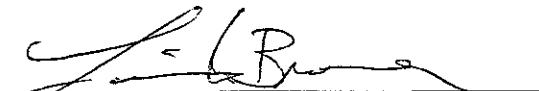


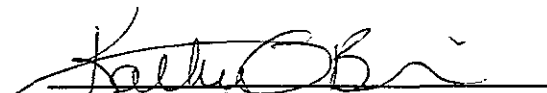
CLIENT: SUBSURFACE CONSULTANTS

PROJECT ID: 827.001

LOCATION: 4629 MARTIN LUTHER KING JR. WAY

RESULTS: SEE ATTACHED


Reviewed by


Reviewed by

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LABORATORY NUMBER: 110408
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 827.001
LOCATION: 4629 MARTIN LUTHER KING JR. WAY

DATE SAMPLED: 03/10/93
DATE RECEIVED: 03/22/93
DATE EXTRACTED: 03/22/93
DATE ANALYZED: 03/24/93
DATE REPORTED: 03/24/93

Extractable Petroleum Hydrocarbons in Soils & Wastes
California DOHS Method
LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
110408-1	3 @ 25	**	190	1

** Quantitated as diesel range due to overlap in hydrocarbon ranges.

ND = Not Detected at or above reporting limit.

* Reporting limit applies to all analytes.

QA/QC SUMMARY: Laboratory Control Sample

RECOVERY, %	111
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CHAIN OF CUSTODY FORM

PAGE 1 OF 1

PROJECT NAME: 4629 MUK JR WAY
 JOB NUMBER: 821.001 LAB: CURTIS + TOMPKINS
 PROJECT CONTACT: MORE KAWAKAMI TURNAROUND: NORMAL
 SAMPLED BY: CHARUE PEARSON REQUESTED BY: MORE KAWAKAMI

ANALYSIS REQUESTED

LABORATORY ID NUMBER	SCI SAMPLE NUMBER	MATRIX				CONTAINERS				METHOD PRESERVED					SAMPLING DATE				NOTES		
		WATER	SOIL	WASTE	AIR	VOA	LITER	PINT	TUBE	HCL	H ₂ SO ₄	HNO ₃	ICE	NONE	MONTH	DAY	YEAR	TIME			
	1011.5	X	X					X				X		03	10	93				X	TEH
	1020	X	X					X				X								X	OHG
	2015	X						X				X								X	
	2023	X						X				X								X	
	3018	X						X				X								X	
	3021	X						X				X		03	10	93				X	

CHAIN OF CUSTODY RECORD				COMMENTS & NOTES:
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	
<i>Joy L. Smith</i>	3/12/93 9:00	<i>Joanne R. Smith</i>	3/12/93 9:00	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME	
<p>Subsurface Consultants, Inc. 171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607 (510) 268-0461 • FAX: 510-268-0137</p>				

CHAIN OF CUSTODY FORM

PROJECT NAME: 4629 MARTIN LUTHER KING JR. WAY
 JOB NUMBER: 827.001 LAB: CURTIS + TOMPKINS
 PROJECT CONTACT: MARK KAWAKAMI TURNAROUND: RAPID (48 Hours)
 SAMPLED BY: CHARLIE PEARSON REQUESTED BY: MARK KAWAKAMI

ANALYSIS REQUESTED											

LABORATORY ID NUMBER	SCI SAMPLE NUMBER	MATRIX				CONTAINERS				METHOD PRESERVED					SAMPLING DATE				NOTES										
		WATER	SOIL	WASTE	AIR	VOA	LITER	PINT	TUBE	HCL	H ₂ SO ₄	HNO ₃	ICE	NONE	MONTH	DAY	YEAR	TIME											
	3025		X					X					X		0	3	1	0	9	3							X	TEH	

CHAIN OF CUSTODY RECORD			
RELEASED BY: (Signature) 	DATE / TIME 3/22/03 3:40	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature) 	DATE / TIME 3/22/03 3:40

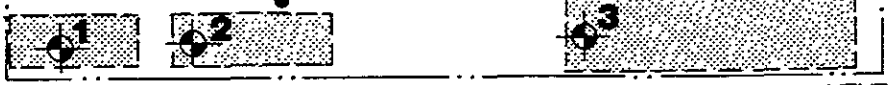
COMMENTS & NOTES:

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 171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607
 (510) 268-0461 • FAX: 510-268-0137

47TH STREET



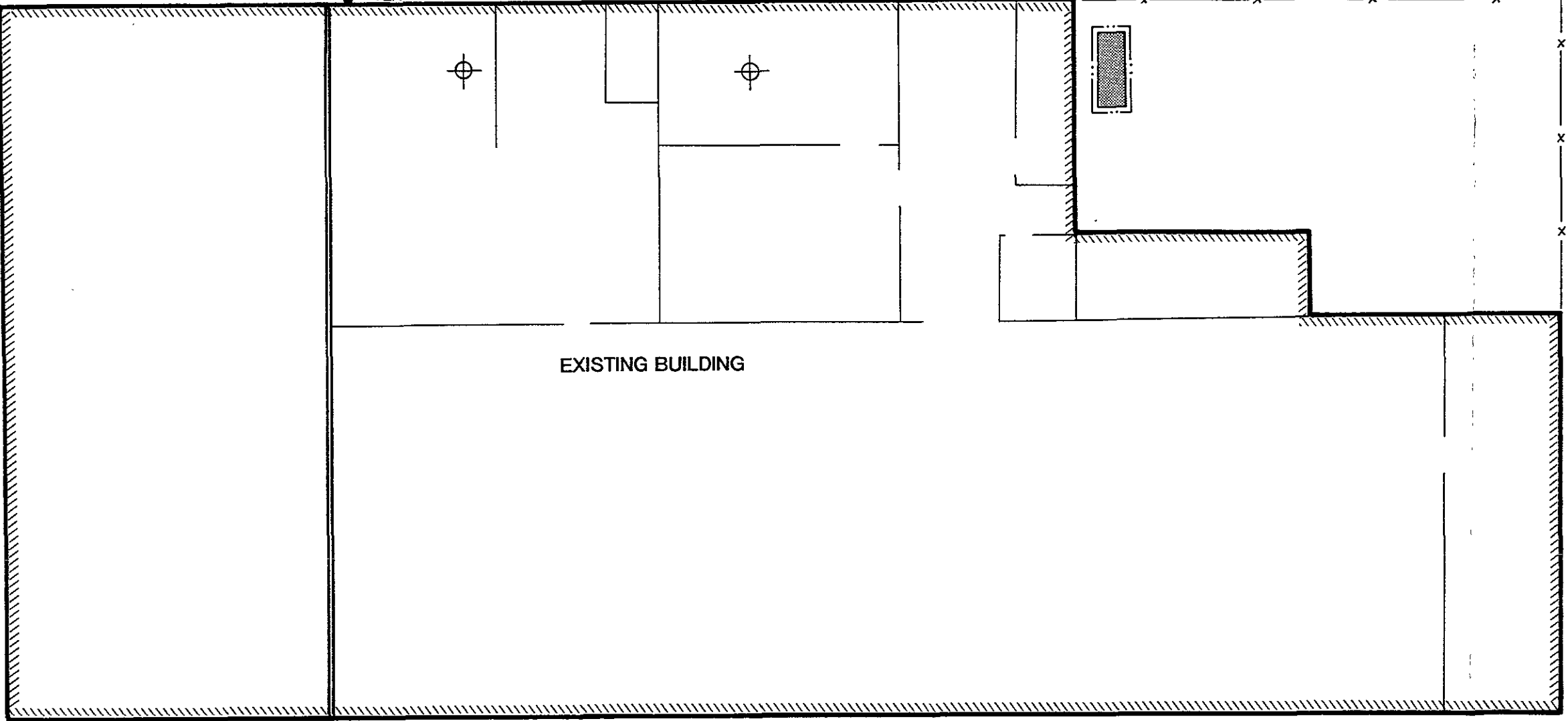
TELEPHONE POLE



VENT PIPE

VENT PIPE

SIDEWALK



EXISTING BUILDING

SIDEWALK

MARTIN LUTHER KING JR. WAY

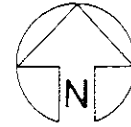
⊕ PROPOSED TEST BORING

● TEST BORING

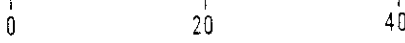
⌚ APPROXIMATE LOCATION OF PREVIOUS HEATING OIL FUEL TANKS

□ APPROXIMATE LOCATION OF PREVIOUS GASOLINE TANK

--- EXTENT OF TANK EXCAVATION



APPROXIMATE SCALE (feet)



SITE PLAN

Subsurface Consultants

NIGHTINGALE TANKS - OAKLAND, CA

JOB NUMBER
827 001

DATE
3/19/93

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PLATE

1