

October 9, 1992
SCI 430.015

920710 11 2:26

3623

Mr. William Meckel
East Bay Municipal Utility District
Mail Slot #702
P.O. Box 24055
Oakland, California 94623-1055

Quarterly Monitoring Report 10
Wastewater Discharge Permit Account #502-29091
1330 Martin Luther King Jr. Way
Oakland, California

94612

Dear Mr. Meckel:

This letter presents quarterly monitoring results from the groundwater treatment plant at 1330 Martin Luther King Jr. Way. Monitoring of treated effluent has been performed in accordance with criteria specified in the EBMUD wastewater discharge permit account #502-29091, issued to the Oakland Redevelopment Agency for remediation of hydrocarbon contaminated groundwater.

During the tenth quarter of operation (July 10, 1992 through October 8, 1992) approximately 403,720 gallons of treated water were discharged into the EBMUD sanitary sewer system. Treatment plant performance remains excellent. The analytical results from 43 sampling events indicate that total volatile hydrocarbons (TVH), benzene, toluene, xylene, and ethylbenzene (BTEX) have been reduced to nondetectable concentrations before discharge into the EBMUD sanitary sewer. No indications of breakthrough have occurred in the primary carbon column. Results of the water quality data generated during the tenth quarter are presented in Table 1. Analytical test reports and Chain-of-Custody documents are also attached.

The analytical test results indicate that biologic activity within the primary holding tank is ongoing. During this quarter, hydrocarbon concentrations up to approximately 130 ug/l entered the primary holding tank and no detectable concentrations of hydrocarbons were recorded leaving the tank before passing through the carbon treatment system. Consequently, hydrocarbon loading of the carbon treatment system has been minimal.

■ Subsurface Consultants, Inc.

Mr. William Meckel
East Bay Municipal Utility District
SCI 430.015
October 9, 1992
Page 2

■ Subsurface Consultants, Inc.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

If you have any questions, please call.

Yours very truly,

Subsurface Consultants, Inc.



Sean O. Carson
Civil Engineer 45074 (expires 3/31/94)



James P. Bowers
Geotechnical Engineer 157 (expires 3/31/95)

SOC:JPB:egh

Attachments: Table 1 - Contaminant Concentrations in Water
Analytical Test Reports
Chain-of-Custody Documents

cc: Ms. Lois Parr
Oakland Redevelopment Agency

Ms. Julie Carver
Oakland Redevelopment Agency

Ms. Jennifer Eberle
ACHCSA

Mr. Eddy So
RWQCB

Mr. Donnell Choy
City of Oakland

TABLE 1. CONTAMINANT CONCENTRATIONS IN WATER

<u>Sample</u>	<u>Sampling Date</u>	<u>TVH (ug/L)</u>	<u>Benzene (ug/L)</u>	<u>Toluene (ug/L)</u>	<u>Ethyl-Benzene (ug/L)</u>	<u>Total Xylenes (ug/L)</u>
EW-1-41	07/28/92	130	3.3	3.1	2.3	12
EW-2-41		78	4.5	ND	0.9	2.3
A-41		ND	ND	ND	ND	ND
B-41		ND	ND	ND	ND	ND
SS#1-41 ✓		ND	ND	ND	ND	ND
EW-1-42	09/04/92	90	0.5	0.5	2.3	4.9
EW-2-42		70	2.6	ND	1.1	1.4
A-42		ND	ND	ND	ND	ND
B-42		ND	ND	ND	ND	ND
SS#1-42 ✓		ND	ND	ND	ND	ND
EW-1-43	09/28/92	ND	1.6	ND	ND	ND
EW-2-43		80	4.2	ND	1.5	1.8
A-43		ND	ND	ND	ND	ND
B-43		ND	ND	ND	ND	ND
SS#1-43 ✓		ND	ND	ND	ND	ND

TVH = Total volatile hydrocarbons, EPA 8015/5030

BTEX, Analyses by EPA 8020/5030

ug/L = micrograms per liter or parts per billion (ppb)

ND = None detected, chemicals not present at concentrations above the detection limits; see test reports for detection limits

EW-1 = indicates sample from Extraction Well #1

A = influent at primary carbon vessel

B = Between carbon vessels

SS#1 = side sewer #1, (effluent sample)



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

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

DATE RECEIVED: 7/28/92

DATE REPORTED: 7/31/92

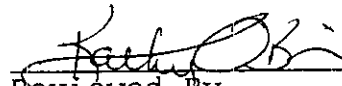
LABORATORY NUMBER: 108082

CLIENT: SUBSURFACE CONSULTANTS

PROJECT ID: 430.015

LOCATION: MLK GW EXTRACTION

RESULTS: SEE ATTACHED


Reviewed By _____


Reviewed _____

LABORATORY NUMBER: 108082
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 430.015
 LOCATION: MLK GW EXTRACTION

DATE SAMPLED: 7/28/92
 DATE RECEIVED: 7/28/92
 DATE ANALYZED: 7/29/92
 DATE REPORTED: 7/31/92

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
108082-001	EW-1-41	130	3.3	3.1	2.3	12
108082-002	EW-2-41	78	4.5	ND(0.5)	0.9	2.3
108082-003	A-41	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
108082-004	B-41	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
108082-005	SS#1-41	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

=====
 RPD, % 8
 RECOVERY, % 109
 =====



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

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

DATE RECEIVED: 09/08/92

DATE REPORTED: 09/16/92

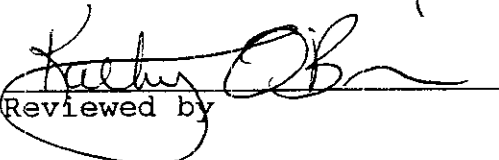
LABORATORY NUMBER: 108571

CLIENT: SUBSURFACE CONSULTANTS

PROJECT ID: 430.015

LOCATION: MLK GW EXTRACTION

RESULTS: SEE ATTACHED


Reviewed by

LABORATORY NUMBER: 108571
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 430.015
 LOCATION: MLK GW EXTRACTION

DATE SAMPLED: 09/04/92
 DATE RECEIVED: 09/08/92
 DATE ANALYZED: 09/10/92
 DATE REPORTED: 09/16/92

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
108571-1	EW-1-42	90	0.5	0.5	2.3	4.9
108571-2	EW-2-42	70	2.6	ND(0.5)	1.1	1.4
108571-3	A-42	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
108571-4	B-42	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
108571-5	SS1-42	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit
 indicated in parentheses.

QA/QC SUMMARY

RPD, % 10
 RECOVERY, % 112



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

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

DATE RECEIVED: 09/28/92

DATE REPORTED: 10/07/92

LABORATORY NUMBER: 108777

CLIENT: SUBSURFACE CONSULTANTS

PROJECT ID: 430.015

LOCATION: MLK GW EXTRACTION

RESULTS: SEE ATTACHED

Reviewed by 

Reviewed by 

LABORATORY NUMBER: 108777
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 430.015
 LOCATION: MLK GW EXTRACTION

DATE SAMPLED: 09/28/92
 DATE RECEIVED: 09/28/92
 DATE ANALYZED: 09/30/92
 DATE REPORTED: 10/07/92

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
108777-1	EW-1-43	ND(50)	1.6	ND(0.5)	ND(0.5)	ND(0.5)
108777-2	EW-2-43	80	4.2	ND(0.5)	1.5	1.8
108777-3	A-43	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
108777-4	B-43	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
108777-5	SS#1-43	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

=====
 RPD, % 2
 RECOVERY, % 110
 =====

CHAIN OF CUSTODY FORM

PROJECT NAME: MLK GW Treatment Plant
 JOB NUMBER: 430.015 LAB: Curtis + Tompkins Ltd
 PROJECT CONTACT: Sean Carson TURNAROUND: Normal
 SAMPLED BY: F. UGLEZ, J. BERNHARDT REQUESTED BY: Sean Carson

ANALYSIS REQUESTED											
5030											
TVH											
BTX											
PAH											
803											

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX				CONTAINERS				METHOD PRESERVED					SAMPLING DATE				NOTES		
		WATER	SOIL	WASTE	AIR	VOA	LITER	PINT	TUBE	Glass	HCL	H2SO4	HNO3	ICE	NONE	MONTH	DAY	YEAR		TIME	
																				HR	MIN
	EW-1-41	X	X						X	X			X			07	28	92	11	00	X
	EW-2-41	X	X						X	X			X			07	28	92	11	00	X
	A-41	X	X						X	X			X			07	28	92	11	00	X
	B-41	X	X						X	X			X			07	28	92	11	00	X
	SS#1-41	X	X						X	X			X			07	28	92	11	00	X

COMMENTS & NOTES:
 All samples are "grab samples"
 Containers not sealed "tamper proof"

CHAIN OF CUSTODY RECORD			
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
<i>[Signature]</i>	7/28/92 1400	<i>[Signature]</i>	
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
<i>[Signature]</i>		<i>[Signature]</i>	
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
<i>[Signature]</i>		<i>[Signature]</i>	7/28/92 1400

Subsurface Consultants, Inc.

CHAIN OF CUSTODY FORM

PROJECT NAME: MLK GW Treatment Plant
 JOB NUMBER: 430.015 LAB: Curtis + Tompkins Ltd
 PROJECT CONTACT: Sean Carson TURNAROUND: Normal
 SAMPLED BY: _____ REQUESTED BY: Sean Carson

ANALYSIS REQUESTED									

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX				CONTAINERS				METHOD PRESERVED					SAMPLING DATE				NOTES	
		WATER	SOIL	WASTE	AIR	VOA	LITER	PINT	TUBE	Glass	HCL	H2SO4	HNO3	ICE	NONE	MONTH	DAY	YEAR		TIME
	EW-1-42	X	X			W			X	X			X		09	04	92		X	
	EW-2-42	X	X			W			X	X			X						X	
	A-42	X	X			W			X	X			X						X	
	B-42	X	X			W			X	X			X						X	
	SS#1-42	X				W			X				X						X	

PAGE 5030 TVH/BTXE EPA 8015/8022

COMMENTS & NOTES:

All samples are "grab samples"
 Containers not sealed "tamper proof"

CHAIN OF CUSTODY RECORD			
RELEASED BY: (Signature) <i>Trish...</i>	DATE/TIME 11:52 PM	RECEIVED BY: (Signature)	DATE/TIME
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature) <i>Trish...</i>	DATE/TIME 07/92 1:52 PM

CHAIN OF CUSTODY FORM

PROJECT NAME: MLK GW Treatment Plant
 JOB NUMBER: 430.015 LAB: Curtis + Tompkins Ltd
 PROJECT CONTACT: Sean Carson TURNAROUND: Normal
 SAMPLED BY: C. Pearson D. DeLuchi REQUESTED BY: Sean Carson

ANALYSIS REQUESTED											
TVH	STX	E	EPA	8215	802E						
5030											

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX					CONTAINERS				METHOD PRESERVED					SAMPLING DATE				NOTES			
		WATER	SOIL	WASTE	AIR		VOA	LITER	PINT	TUBE	Glass	HCL	H2SO4	HNO3	ICE	NONE	MONTH	DAY	YEAR		TIME		
	EW-1-43	X					W			X	X	X	X		09	28	92			X	X	X	X
	EW-2-43	X					W			X	X	X	X							X	X	X	X
	A-43	X					W			X	X	X	X							X	X	X	X
	B-43	X					W			X	X	X	X							X	X	X	X
	SS#1-43	X					W			X	X	X	X							X	X	X	X

COMMENTS & NOTES:
 All samples are "grab samples"
 Containers not sealed "tamper proof"

CHAIN OF CUSTODY RECORD			
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
<i>D. DeLuchi</i>	9/28 2:53		
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
RELEASED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
		<i>T. Carson</i>	9/28