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## QUARTERLY REPORT

GROUNDWATER MONITORING AND SAMPLING

at  
2896 Castro Valley Boulevard  
Castro Valley, Ca.

Submitted by

C-REM ENGINEERS  
1820 Gateway Drive, Suite 100  
San Mateo, Ca. 94404

Job No: 92020.02  
Ref No: 1052  
October 26, 1992

Mr. Robert M. Frost  
20980 Redwood Road, Ste. 260  
Castro Valley, CA 94546-5930

**SUBJECT: WELL MONITORING 2896 CASTRO VALLEY BOULEVARD**

Dear Robert:

Pursuant to our contract, we have had ground water samples taken in accordance with the January 10, 1992 letter from the Alameda County Health Care Services Agency for the 2896 Castro Valley Boulevard site. Samples were taken by Sequoia Analytical in Redwood City. The results of the tests are summarized below.

1. Samples taken from MW-1 and MW-3 show that the contamination level for [REDACTED] 0.082 mg/l and 0.059 mg/l respectively, are above the maximum contaminant level (0.05 mg/l) as specified in Section 64435 of Title 22 of the California Code of Regulations for drinking water. Selenium was not detected above the detection limits in MW-3. The amount of [REDACTED] in MW-1 has increased to levels above the allowable since the quarterly report of April 30, 1992 prepared by C-REM ENGINEERS from 0.0099, N.D., & N.D. to 0.13, 0.48, & 0.028 mg/l respectively. The amount of chromium has increased since the quarterly report of April 30, 1992 from N.D. to 0.40 mg/l. N.D.=Not present above stated limit of detection. The maximum contaminant level for drinking water per Section 64435 of Title 22 for lead, chromium, and selenium are 0.05, 0.05, & 0.01 mg/l respectively.
2. Samples taken from MW-1 and MW-3 show no recoverable oil and grease detected above the detection limits which is the same as that shown in the "Final Report of Methods and Findings for a Preliminary Site Investigation" dated February 22, 1991 by Aqua Science Engineers and is also the same as that shown in the April 30, 1992 quarterly report.
3. Sample taken from MW-2 shows no detectable materials above the detection limits for TPH-G and BTEX tests the same as that shown in the above report by Aqua Science Engineers and the April 30, 1992 quarterly report.
4. The sample taken from MW-3 shows no detectable benzene or toluene above the detection limits the same as that shown in the above report by Aqua Science Engineers and the same as that shown in the April 30, 1992 quarterly report. The sample taken for MW-3 shows detectable amounts of purgeable hydrocarbons (total petroleum hydrocarbons as gasoline, TPH-G), ethylbenzene, and xylenes. The detectable levels for ethylbenzene (17 µg/l) and xylenes (15 µg/l) are below the maximum contaminant level as listed in Section 64444.5 of Title 22 for primary drinking water (680 µg/l & 1750 µg/l, respectively) and also below the levels shown in the April 30, 1992 quarterly report. Purgeable hydrocarbons were not listed in the Title 22 regulations for water quality monitoring. Purgeable hydrocarbons (210 µg/l) were below the levels of the April 30, 1992 quarterly report (1600 µg/l).

Mr. Robert M. Frost

Page 2

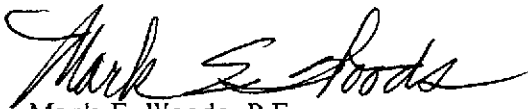
5. The sample taken from MW-1 shows detectable amounts for all materials listed under the TPH-G and BTEX tests and with the exception of toluene all levels are down from the April 30, 1992 quarterly report levels. The detectable levels for benzene(0.61  $\mu\text{g}/\text{l}$ ), ethylbenzene(1.8  $\mu\text{g}/\text{l}$ ) and xylenes(1.0  $\mu\text{g}/\text{l}$ ) are below the maximum contaminant levels as listed in Section 64444.5 of Title 22(1.0, 680, & 1750  $\mu\text{g}/\text{l}$  respectively) for primary drinking water. Purgeable hydrocarbons were not listed in the Title 22 regulations for water quality monitoring. Purgeable hydrocarbons (88ppb) were below the levels of the April 30, 1992 quarterly report(310ppb). Toluene levels increased from 0.76  $\mu\text{g}/\text{l}$  to 0.83  $\mu\text{g}/\text{l}$  but is below the level, 2  $\mu\text{g}/\text{l}$ , listed in Section 66264.801 of Title 22.
6. Semi-volatile organics levels of September 25, 1992 are down from the March 30, 1992 levels for MW-1 and MW-3. Levels for MW-1 for September 25, 1992 are all now listed as N.D. Levels for MW-3 for 2-Methylnaphthalene are down from 8.7  $\mu\text{g}/\text{l}$  to 2.8  $\mu\text{g}/\text{l}$  which is below the allowable limit of 10  $\mu\text{g}/\text{l}$  as listed in Section 66264.801 of Title 22. Levels for MW-3 for Naphthalene are down from 44  $\mu\text{g}/\text{l}$  to 9.1  $\mu\text{g}/\text{l}$  which is below the allowable limit of 10  $\mu\text{g}/\text{l}$  as listed in Section 66264.801 of Title 22.

From the results of these tests it would appear that there has been some change in the water contaminants tested. These changes appear to be minor and no additional investigative work appears to be necessary.

Also, pursuant to our contract, we have recorded the ground water level at all three monitoring wells. The results of these recordings are shown on the accompanying table and water level gradient contour maps.

Sincerely yours,

C-REM ENGINEERS INC.



Mark E. Woods, P.E.  
Project Engineer

MEW/ll

Enclosures

cc: Scott O. Seery, Alameda County Health Care Services Agency

# WATER LEVEL ELEVATION

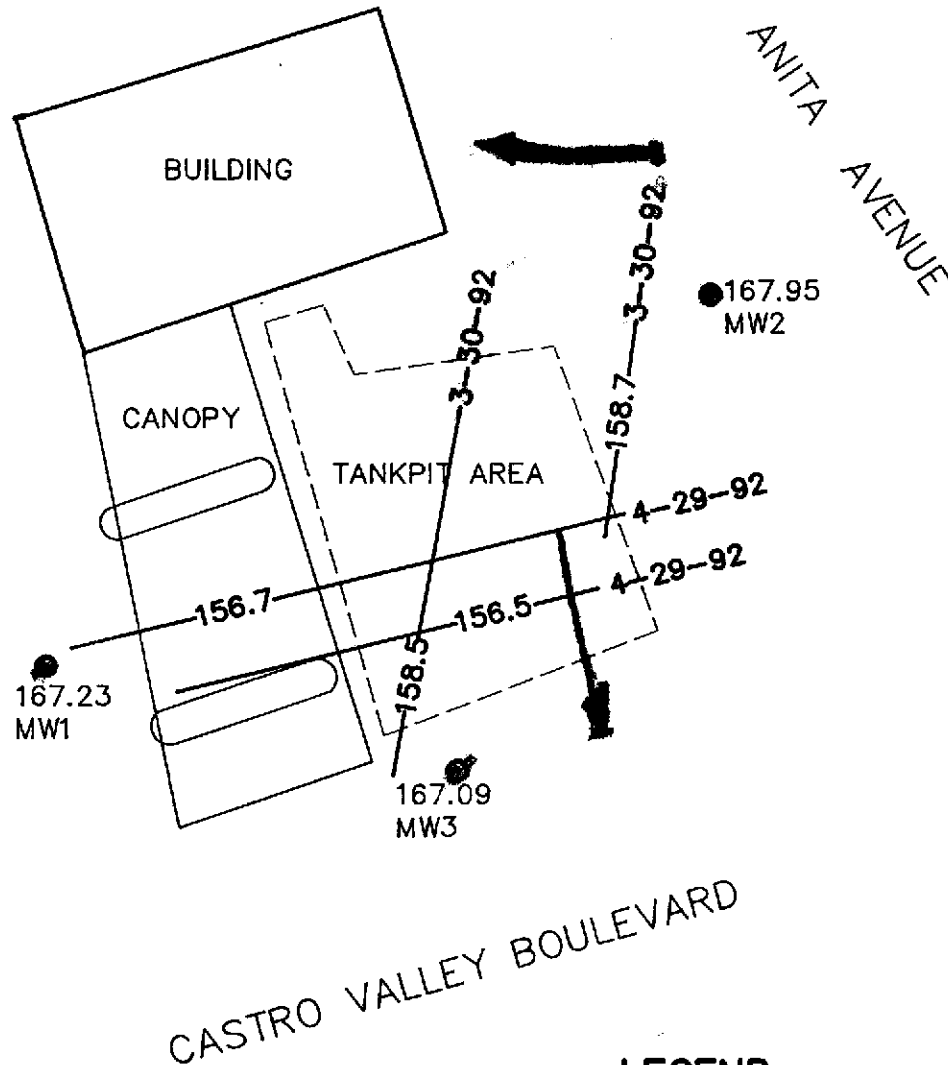
2896 Castro Valley Boulevard

Job No. 92020.02

October 27, 1992

<u>DATE</u>	<u>MW-1</u>	<u>MW-2</u>	<u>MW-3</u>
03-30-92	158.03	158.80	158.59
04-29-92	156.68	157.25	156.09
09-25-92	156.53	157.15	156.69
10-26-92	156.49	157.18	156.64

J:\92020\GWSELEV.TBL



### LEGEND

- 158.5— WATER LEVEL GRADIENT CONTOUR ELEVATION IN FEET
- 3-30-92 DATE WATER LEVEL MEASURED

## C-REM ENGINEERS

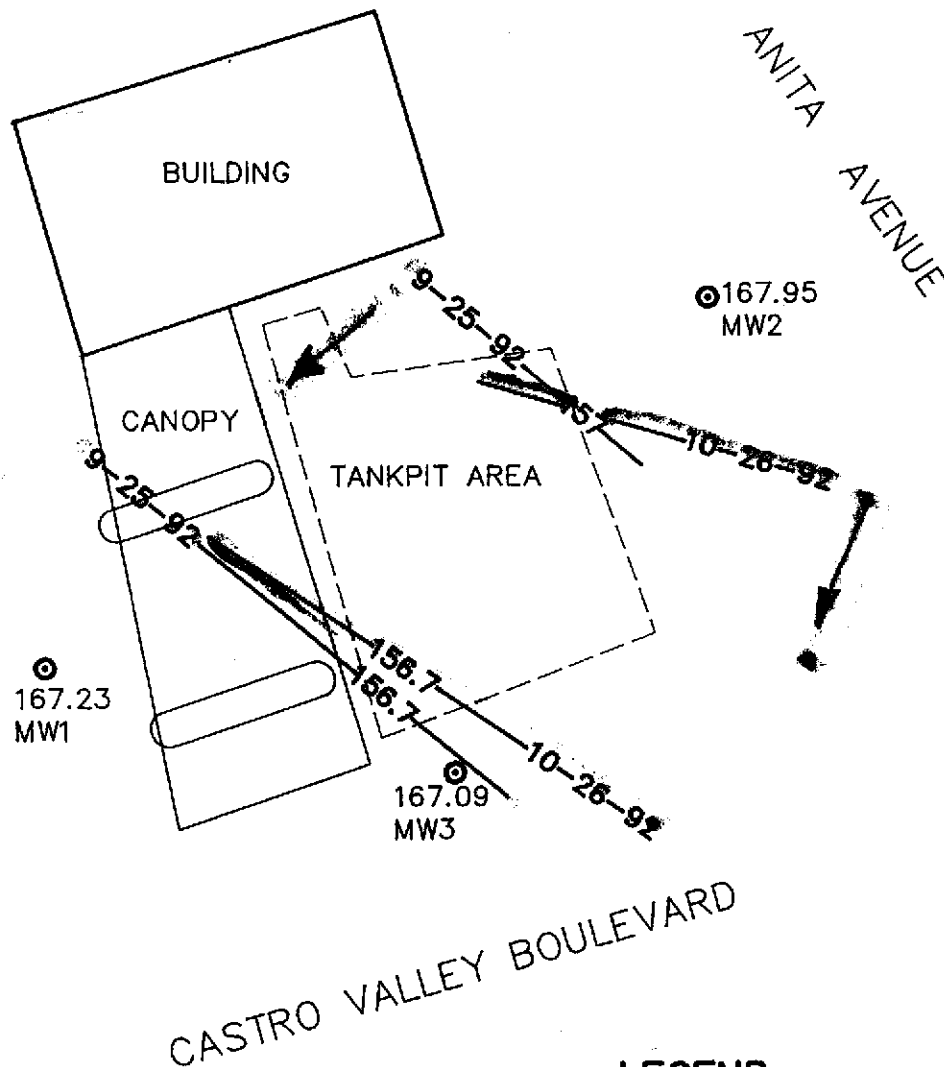
ENGINEERING • SURVEYING • PLANNING  
1820 GATEWAY DRIVE • SUITE 100 • SAN MATEO • CA 94404

Phone: (415) 571-8400 Fax: (415) 571-1029

Checked by: MW  
Drawn by: PC  
Designed by: MW  
Surveyed by:  
Scale: 1"=20'  
Date: 10-27-92  
Job No.: 92020.02

ROBERT M. FROST  
WATER LEVEL GRADIENT  
CONTOUR MAP  
FIGURE 1  
CASTRO VALLEY

SHEET  
1  
OF 1



**LEGEND**

- 158.5— WATER LEVEL GRADIENT CONTOUR ELEVATION IN FEET
- 9-25-92 DATE WATER LEVEL MEASURED

**C-REM ENGINEERS**

ENGINEERING • SURVEYING • PLANNING  
1820 GATEWAY DRIVE • SUITE 100 • SAN MATEO • CA 94404

Phone: (415) 571-6400 Fax: (415) 571-1029

Checked by: MW  
 Drawn by: PC  
 Designed by: MW  
 Surveyed by:  
 Scale: 1"=20'  
 Date: 0-27-92  
 Job No.: 92020.02

ROBERT M. FROST  
 WATER LEVEL GRADIENT  
 CONTOUR MAP  
 FIGURE 2  
 CASTRO VALLEY

SHEET  
1  
OF 1



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
 (415) 364-9600 • FAX (415) 364-9233

<b>C-Rem Engineers</b> 1820 Gateway Dr., Ste 100 San Mateo, CA 94404 Attention: Mark Woods	<b>Client Project ID:</b> 2896 Castro Valley Blvd., Castro Valley <b>Sample Descript:</b> Water, MW-1 <b>Analysis Method:</b> EPA 8270 <b>Lab Number:</b> 209-4238	<b>Sampled:</b> Sep 25, 1992 <b>Received:</b> Sep 25, 1992 <b>Extracted:</b> Sep 29, 1992 <b>Analyzed:</b> Oct 2, 1992 <b>Reported:</b> Oct 12, 1992
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## SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene.....	2.0	N.D.
Acenaphthylene.....	2.0	N.D.
Aniline.....	2.0	N.D.
Anthracene.....	2.0	N.D.
Benzidine.....	50	N.D.
Benzoic Acid.....	10	N.D.
Benzo(a)anthracene.....	2.0	N.D.
Benzo(b)fluoranthene.....	2.0	N.D.
Benzo(k)fluoranthene.....	2.0	N.D.
Benzo(g,h,i)perylene.....	2.0	N.D.
Benzo(a)pyrene.....	2.0	N.D.
Benzyl alcohol.....	2.0	N.D.
Bis(2-chloroethoxy)methane.....	2.0	N.D.
Bis(2-chloroethyl)ether.....	2.0	N.D.
Bis(2-chloroisopropyl)ether.....	2.0	N.D.
Bis(2-ethylhexyl)phthalate.....	10	N.D.
4-Bromophenyl phenyl ether.....	2.0	N.D.
Butyl benzyl phthalate.....	2.0	N.D.
4-Chloroaniline.....	2.0	N.D.
2-Chloronaphthalene.....	2.0	N.D.
4-Chloro-3-methylphenol.....	2.0	N.D.
2-Chlorophenol.....	2.0	N.D.
4-Chlorophenyl phenyl ether.....	2.0	N.D.
Chrysene.....	2.0	N.D.
Dibenz(a,h)anthracene.....	2.0	N.D.
Dibenzofuran.....	2.0	N.D.
Di-N-butyl phthalate.....	10	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.
3,3-Dichlorobenzidine.....	10	N.D.
2,4-Dichlorophenol.....	2.0	N.D.
Diethyl phthalate.....	2.0	N.D.
2,4-Dimethylphenol.....	2.0	N.D.
Dimethyl phthalate.....	2.0	N.D.
4,6-Dinitro-2-methylphenol.....	10	N.D.
2,4-Dinitrophenol.....	10	N.D.



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C-Rem Engineers  
 1820 Gateway Dr., Ste 100  
 San Mateo, CA 94404  
 Attention: Mark Woods

Client Project ID: 2896 Castro Valley Blvd., Castro Valley  
 Sample Descript: Water, MW-1  
 Analysis Method: EPA 8270  
 Lab Number: 209-4238

Sampled: Sep 25, 1992  
 Received: Sep 25, 1992  
 Extracted: Sep 29, 1992  
 Analyzed: Oct 2, 1992  
 Reported: Oct 12, 1992

## SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
2,4-Dinitrotoluene.....	2.0	N.D.
2,6-Dinitrotoluene.....	2.0	N.D.
Di-N-octyl phthalate.....	2.0	N.D.
Fluoranthene.....	2.0	N.D.
Fluorene.....	2.0	N.D.
Hexachlorobenzene.....	2.0	N.D.
Hexachlorobutadiene.....	2.0	N.D.
Hexachlorocyclopentadiene.....	2.0	N.D.
Hexachloroethane.....	2.0	N.D.
Indeno(1,2,3-cd)pyrene.....	2.0	N.D.
Isophorone.....	2.0	N.D.
2-Methylnaphthalene.....	2.0	N.D.
2-Methylphenol.....	2.0	N.D.
4-Methylphenol.....	2.0	N.D.
Naphthalene.....	2.0	N.D.
2-Nitroaniline.....	10	N.D.
3-Nitroaniline.....	10	N.D.
4-Nitroaniline.....	10	N.D.
Nitrobenzene.....	2.0	N.D.
2-Nitrophenol.....	2.0	N.D.
4-Nitrophenol.....	10	N.D.
N-Nitrosodiphenylamine.....	2.0	N.D.
N-Nitroso-di-N-propylamine.....	2.0	N.D.
Pentachlorophenol.....	10	N.D.
Phenanthrene.....	2.0	N.D.
Phenol.....	2.0	N.D.
Pyrene.....	2.0	N.D.
1,2,4-Trichlorobenzene.....	2.0	N.D.
2,4,5-Trichlorophenol.....	10	N.D.
2,4,6-Trichlorophenol.....	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Nokowhat D. Herrera  
 Project Manager





# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
(415) 364-9600 • FAX (415) 364-9233

C-Rem Engineers  
1820 Gateway Dr., Ste 100  
San Mateo, CA 94404  
Attention: Mark Woods

Client Project ID: 2896 Castro Valley Blvd., Castro Valley  
Sample Descript: Water, MW-3 \*  
Analysis Method: EPA 8270  
Lab Number: 209-4240

Sampled: Sep 25, 1992  
Received: Sep 25, 1992  
Extracted: Sep 29, 1992  
Analyzed: Oct 4, 1992  
Reported: Oct 12, 1992

## SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene.....	2.0	N.D.
Acenaphthylene.....	2.0	N.D.
Aniline.....	2.0	N.D.
Anthracene.....	2.0	N.D.
Benzidine.....	50	N.D.
Benzoic Acid.....	10	N.D.
Benzo(a)anthracene.....	2.0	N.D.
Benzo(b)fluoranthene.....	2.0	N.D.
Benzo(k)fluoranthene.....	2.0	N.D.
Benzo(g,h,i)perylene.....	2.0	N.D.
Benzo(a)pyrene.....	2.0	N.D.
Benzyl alcohol.....	2.0	N.D.
Bis(2-chloroethoxy)methane.....	2.0	N.D.
Bis(2-chloroethyl)ether.....	2.0	N.D.
Bis(2-chloroisopropyl)ether.....	2.0	N.D.
Bis(2-ethylhexyl)phthalate.....	10	N.D.
4-Bromophenyl phenyl ether.....	2.0	N.D.
Butyl benzyl phthalate.....	2.0	N.D.
4-Chloroaniline.....	2.0	N.D.
2-Chloronaphthalene.....	2.0	N.D.
4-Chloro-3-methylphenol.....	2.0	N.D.
2-Chlorophenol.....	2.0	N.D.
4-Chlorophenyl phenyl ether.....	2.0	N.D.
Chrysene.....	2.0	N.D.
Dibenz(a,h)anthracene.....	2.0	N.D.
Dibenzofuran.....	2.0	N.D.
Di-N-butyl phthalate.....	10	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.
3,3-Dichlorobenzidine.....	10	N.D.
2,4-Dichlorophenol.....	2.0	N.D.
Diethyl phthalate.....	2.0	N.D.
2,4-Dimethylphenol.....	2.0	N.D.
Dimethyl phthalate.....	2.0	N.D.
4,6-Dinitro-2-methylphenol.....	10	N.D.
2,4-Dinitrophenol.....	10	N.D.



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C-Rem Engineers  
 1820 Gateway Dr., Ste 100  
 San Mateo, CA 94404  
 Attention: Mark Woods

Client Project ID: 2896 Castro Valley Blvd., Castro Valley  
 Sample Descript: Water, MW-3  
 Analysis Method: EPA 8270  
 Lab Number: 209-4240

Sampled: Sep 25, 1992  
 Received: Sep 25, 1992  
 Extracted: Sep 29, 1992  
 Analyzed: Oct 4, 1992  
 Reported: Oct 12, 1992

## SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/L	Sample Results µg/L
2,4-Dinitrotoluene.....	2.0	N.D.
2,6-Dinitrotoluene.....	2.0	N.D.
Di-N-octyl phthalate.....	2.0	N.D.
Fluoranthene.....	2.0	N.D.
Fluorene.....	2.0	N.D.
Hexachlorobenzene.....	2.0	N.D.
Hexachlorobutadiene.....	2.0	N.D.
Hexachlorocyclopentadiene.....	2.0	N.D.
Hexachloroethane.....	2.0	N.D.
Indeno(1,2,3-cd)pyrene.....	2.0	N.D.
Isophorone.....	2.0	N.D.
2-Methylphenol.....	2.0	N.D.
4-Methylphenol.....	2.0	N.D.
2-Nitroaniline.....	10	N.D.
3-Nitroaniline.....	10	N.D.
4-Nitroaniline.....	10	N.D.
Nitrobenzene.....	2.0	N.D.
2-Nitrophenol.....	2.0	N.D.
4-Nitrophenol.....	10	N.D.
N-Nitrosodiphenylamine.....	2.0	N.D.
N-Nitroso-di-N-propylamine.....	2.0	N.D.
Pentachlorophenol.....	10	N.D.
Phenanthrene.....	2.0	N.D.
Phenol.....	2.0	N.D.
Pyrene.....	2.0	N.D.
1,2,4-Trichlorobenzene.....	2.0	N.D.
2,4,5-Trichlorophenol.....	10	N.D.
2,4,6-Trichlorophenol.....	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Nokowhat D. Herrera  
 Project Manager



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680 Chesapeake Drive • Redwood City, CA 94063  
 (415) 364-9600 • FAX (415) 364-9233

<b>C-Rem Engineers</b> 1820 Gateway Dr., Ste 100 San Mateo, CA 94404 Attention: Mark Woods	<b>Client Project ID:</b> 2896 Castro Valley Blvd., Castro Valley <b>Sample Matrix:</b> Water <b>Analysis Method:</b> EPA 5030/8015/8020 <b>First Sample #:</b> 209-4238	<b>Sampled:</b> Sep 25, 1992 <b>Received:</b> Sep 25, 1992 <b>Reported:</b> Oct 12, 1992
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## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit	Sample I.D. 209-4238 NW-1	Sample I.D. 209-4239 NW-2	Sample I.D. 209-4240 NW-3	Sample I.D.	Sample I.D.	Sample I.D.
Purgeable Hydrocarbons	50	88	N.D.	120			
Benzene	0.50	0.91	N.D.	N.D.			
Toluene	0.50	0.33	N.D.	N.D.			
Ethyl Benzene	0.50	1.8	N.D.	17			
Total Xylenes	0.50	1.0	N.D.	15			
Chromatogram Pattern:		Gas	--	Gas			

### Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Analyzed:	10/8/92	10/5/92	10/5/92
Instrument Identification:	GCHP-1	GCHP-1	GCHP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	89	102	106

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.  
 Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Nokowhat D. Herrera  
 Project Manager



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680 Chesapeake Drive • Redwood City, CA 94063  
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C-Rem Engineers  
 1820 Gateway Dr., Ste 100  
 San Mateo, CA 94404  
 Attention: Mark Woods

Client Project ID: 2896 Castro Valley Blvd., Castro Valley  
 Matrix Descript: Water  
 Analysis Method: SM 5520 B (Gravimetric)  
 First Sample #: 209-4238

Sampled: Sep 25, 1992  
 Received: Sep 25, 1992  
 Extracted: Sep 30, 1992  
 Analyzed: Sep 30, 1992  
 Reported: Oct 12, 1992

## TOTAL RECOVERABLE OIL & GREASE

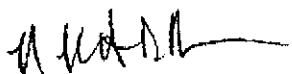
Sample Number	Sample Description	Oil & Grease mg/L
209-4238	MW-1	N.D.
209-4239	MW-3	N.D.

Detection Limits:

5.0

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

  
 Nokowhat D. Herrera  
 Project Manager

2094238.CCC <6>



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
 (415) 364-9600 • FAX (415) 364-9233

C-Rem Engineers	Client Project ID: 2896 Castro Valley Blvd., Castro Valley	Sampled: Sep 25, 1992
1820 Gateway Dr., Ste 100	Sample Descript: Water, <del>WATER</del>	Received: Sep 25, 1992
San Mateo, CA 94404	Lab Number: 209-4238	Analyzed: see below
Attention: Mark Woods		Reported: Oct 12, 1992

## LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit mg/L	Sample Result mg/L
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Asbestos	10/9/92	0.0050	0.002
Lead	10/9/92	0.010	
Chromium	10/9/92	0.010	
Selenium	10/9/92	0.0050	0.026

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Nokowhat D. Herrera  
 Project Manager

2094238.CCC <7>



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
(415) 364-9600 • FAX (415) 364-9233

C-Rem Engineers 1820 Gateway Dr., Ste 100 San Mateo, CA 94404 Attention: Mark Woods	Client Project ID: 2896 Castro Valley Blvd., Castro Valley Sample Descript: Water, <del>10/9/92</del> Lab Number: 209-4240	Sampled: Sep 25, 1992 Received: Sep 25, 1992 Analyzed: see below Reported: Oct 12, 1992
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## LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit mg/L	Sample Result mg/L
Arsenic.....	10/9/92	0.0050	0.059
Barium.....	10/9/92	0.0050	0.08
Cadmium.....	10/9/92	0.0050	0.08
Selenium.....	10/9/92	0.025 *	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Nokowhat D. Herrera  
Project Manager

Please Note:  
\* - Detection limit raised due to matrix Interferences.



# SEQUOIA ANALYTICAL

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C-Rem Engineers 1820 Gateway Dr., Ste 100 San Mateo, CA 94404 Attention: Mark Woods	Client Project ID: 2896 Castro Valley Blvd., Castro Valley Sample Descript: Water Analysis for: Water Table Level First Sample #: 209-4238	Sampled: Sep 25, 1992 Time: 10:45 am Analyzed: Reported: Oct 12, 1992
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## LABORATORY ANALYSIS FOR: Water Table Level

Sample Number	Sample Description	Sample Result feet
209-4238	MW-1	10.7'
209-4239	MW-2	10.8'
209-4240	MW-3	10.4'

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

  
 Nokowhat D. Herrera  
 Project Manager

2094238.CCC <9>



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
(415) 364-9600 • FAX (415) 364-9233

C-Rem Engineers  
1820 Gateway Dr., Ste 100  
San Mateo, CA 94404  
Attention: Mark Woods

Client Project ID: 2896 Castro Valley Blvd., Castro Valley  
Method: EPA 8270  
Analyst(s): E.Manuel  
QC Sample #: BLK092992

Q.C. Sample Dates  
Extracted: Sep 29, 1992  
Analyzed: Oct 5, 1992  
Reported: Oct 12, 1992

## QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike % Recovery	Relative % Difference
Phenol	N.D.	100	77	77	69	69	11
2-Chlorophenol	N.D.	100	70	70	66	66	5.9
1,4-Dichloro-benzene	N.D.	50	35	70	31	62	12
N-Nitroso-Di-N-propylamine	N.D.	50	33	66	32	64	3.1
1,2,4-Trichloro-benzene	N.D.	50	38	76	35	70	8.2
4-Chloro-3-Methylphenol	N.D.	100	70	70	66	66	5.9
Acenaphthene	N.D.	50	36	72	33	66	8.7
4-Nitrophenol	N.D.	100	65	65	64	64	1.6
2,4-Dinitro-toluene	N.D.	50	35	70	33	66	5.9
Pentachloro-phenol	N.D.	100	78	78	74	74	5.3
Pyrene	N.D.	50	40	80	42	84	4.9

SEQUOIA ANALYTICAL

*N. Herrera*  
Nokowhat D. Herrera  
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$





# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
 (415) 364-9600 • FAX (415) 364-9233

C-Rem Engineers Client Project ID: 2896 Castro Valley Blvd., Castro Valley  
 1820 Gateway Dr., Ste 100  
 San Mateo, CA 94404  
 Attention: Mark Woods QC Sample Group: 209-4238 Reported: Oct 12, 1992

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	C.Donohue	C.Donohue	C.Donohue	C.Donohue
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Oct 8, 1992	Oct 8, 1992	Oct 8, 1992	Oct 8, 1992
QC Sample #:	GBLK100892	GBLK100892	GBLK100892	GBLK100892
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	10	10	10	30
Matrix Spike % Recovery:	100	100	100	100
Conc. Matrix Spike Dup.:	8.7	9.0	8.9	27
Matrix Spike Duplicate % Recovery:	87	90	89	90
Relative % Difference:	14	10	12	10

SEQUOIA ANALYTICAL

*N. Herrera*  
 Nokowhat D. Herrera  
 Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
 (415) 364-9600 • FAX (415) 364-9233

C-Rem Engineers 1820 Gateway Dr., Ste 100 San Mateo, CA 94404 Attention: Mark Woods	Client Project ID: 2896 Castro Valley Blvd., Castro Valley	Reported: Oct 12, 1992
QC Sample Group: 2094239 - 40		

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl- Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	C.Donohue	C.Donohue	C.Donohue	C.Donohue
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Oct 5, 1992	Oct 5, 1992	Oct 5, 1992	Oct 5, 1992
QC Sample #:	GBLK100592	GBLK100592	GBLK100592	GBLK100592
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	8.9	8.8	9.0	27
Matrix Spike % Recovery:	89	88	90	90
Conc. Matrix Spike Dup.:	9.4	9.3	9.4	28
Matrix Spike Duplicate % Recovery:	94	93	94	93
Relative % Difference:	5.5	5.5	3.3	3.6

SEQUOIA ANALYTICAL

*[Signature]*  
 Nokowhat D. Herrera  
 Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$



# SEQUOIA ANALYTICAL

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 (415) 364-9600 • FAX (415) 364-9233

C-Rem Engineers  
 1820 Gateway Dr., Ste 100  
 San Mateo, CA 94404  
 Attention: Mark Woods

Client Project ID: 2896 Castro Valley Blvd., Castro Valley

QC Sample Group: 2094238, 40

Reported: Oct 12, 1992

## QUALITY CONTROL DATA REPORT

ANALYTE	Oil & Grease	Lead	Chromium	Arsenic	Selenium
Method:	SM5520B	EPA 239.2	EPA 200.7	EPA 206.2	EPA 206.2
Analyst:	M.Shkidt	S.Chin	M.Mistry	F.Contreras	F.Contreras
Reporting Units:	mg/L	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Sep 30, 1992	Sep 30, 1992	Oct 8, 1992	Oct 9, 1992	Oct 9, 1992
QC Sample #:	BLK093092	209-3952	#093092	BLK093092	BLK093092
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	0.0090
Spike Conc. Added:	30	0.050	1.0	0.050	0.050
Conc. Matrix Spike:	27	0.050	0.97	0.058	0.064
Matrix Spike % Recovery:	90	100	97	116	110
Conc. Matrix Spike Dup.:	29	0.051	1.1	0.056	0.064
Matrix Spike Duplicate % Recovery:	97	102	110	112	110
Relative % Difference:	7.1	2.0	13	3.5	0.0

SEQUOIA ANALYTICAL

*[Signature]*  
 Nokowhat D. Herrera  
 Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$



# SEQUOIA ANALYTICAL CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233  
 819 West Striker Ave. • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100  
 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689  
*\*TRAVEL TIME = 60min FROM SITE TIME = 100min*

Company Name: <b>FROST &amp; WRIGHT</b>		Project Name: <b>2896 CASTRO VALLEY BLVD, CASTRO VALLEY</b>	
Address: <b>20980 REDWOOD RD. SUITE 260</b>		Billing Address (if different):	
City: <b>CASTRO VALLEY</b> State: <b>CA</b> Zip Code: <b>94546</b>			
Telephone: <b>(510) 537-0800</b> FAX#: <b>(510) 637-8172</b>	P.O. #:		
Report To: <b>ROBERT FROST</b> Sampler: <i>[Signature]</i>	QC Data: <input checked="" type="checkbox"/> Level A (Standard) <input type="checkbox"/> Level B <input type="checkbox"/> Level C <input type="checkbox"/> CLP		

# COPY

Turnaround Time:  15 Working Days  3 Working Days  2 - 8 Hours  
 10 Working Days  2 Working Days  
 5 Working Days  24 Hours

### Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Analyses Requested							Comments
						O.F.G. 413.1	GCMS 8270	TPH-G/BTEX	ARSENIC	LEAD	CHROMIUM	SELENIUM	
1. MW-1	9-25-92 1145 1146 1147 1148	H <sub>2</sub> O	5	1-LT CLEAR H <sub>2</sub> SO <sub>4</sub> 1-LT AMBER PLAIN 2 - HCL 40ML VOAS	2094238	X	X	X	X	X	X		
2.													
3. MW-2	9-25-92/1045	H <sub>2</sub> O	2	40ML VOAS	2094239			X					
4.				X									
5. MW-3	9-25-92 1110 1112 1111 1113	H <sub>2</sub> O	5	1-LT CLEAR H <sub>2</sub> SO <sub>4</sub> 1-LT AMBER PLAIN 2 - HCL 40ML VOAS 1-LT METALS	2094240	X	X	X	X	X	X		
6.													
7.													
8.													
9.													
10.													

**PAID**  
 SEP 24 1992  
 SEQUOIA ANALYTICAL

Relinquished By: <i>[Signature]</i>	Date: <b>9-25-92</b> Time: <b>1335</b>	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:
Relinquished By:	Date:	Time:	Received By Lab: <i>[Signature]</i>	Date: <b>9/25/92</b> Time: <b>1335</b>