



**centurywest**  
ENGINEERING CORPORATION

April 29, 1996

Barney Chan  
Alameda County Health Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502


# 4241

Subject: Second Quarterly Ground Water Sampling  
Fiesta Beverage UST Site  
966 8th Avenue *966 89th Ave*  
Oakland, California  
CWEC: 20591-001-01

Dear Mr. Chan,

In accordance with our verbal agreement I have enclosed all documents pertinent to the April 16, 1996, sampling activities of the three monitoring wells (MW-1, MW-2 and MW-3) at the project site. Laboratory analysis, ground water gradient (0.001 ft/ft) and ground water flow direction (to the northwest, see Figure 2) appear to be approximately consistent with the previous sampling activity of January 12, 1996. Two additional quarterly sampling activities will be conducted for a total of one year monitoring activity. Following the third sampling event, additional quarterly sampling documents will be sent to your office. After the final (fourth) quarterly sampling event, a final report will be submitted to your office and will include; four quarters of laboratory analytical results, four quarters of ground water gradient maps, ground water sampling records, and conclusions and recommendations.

Please call if you have questions or need additional information.



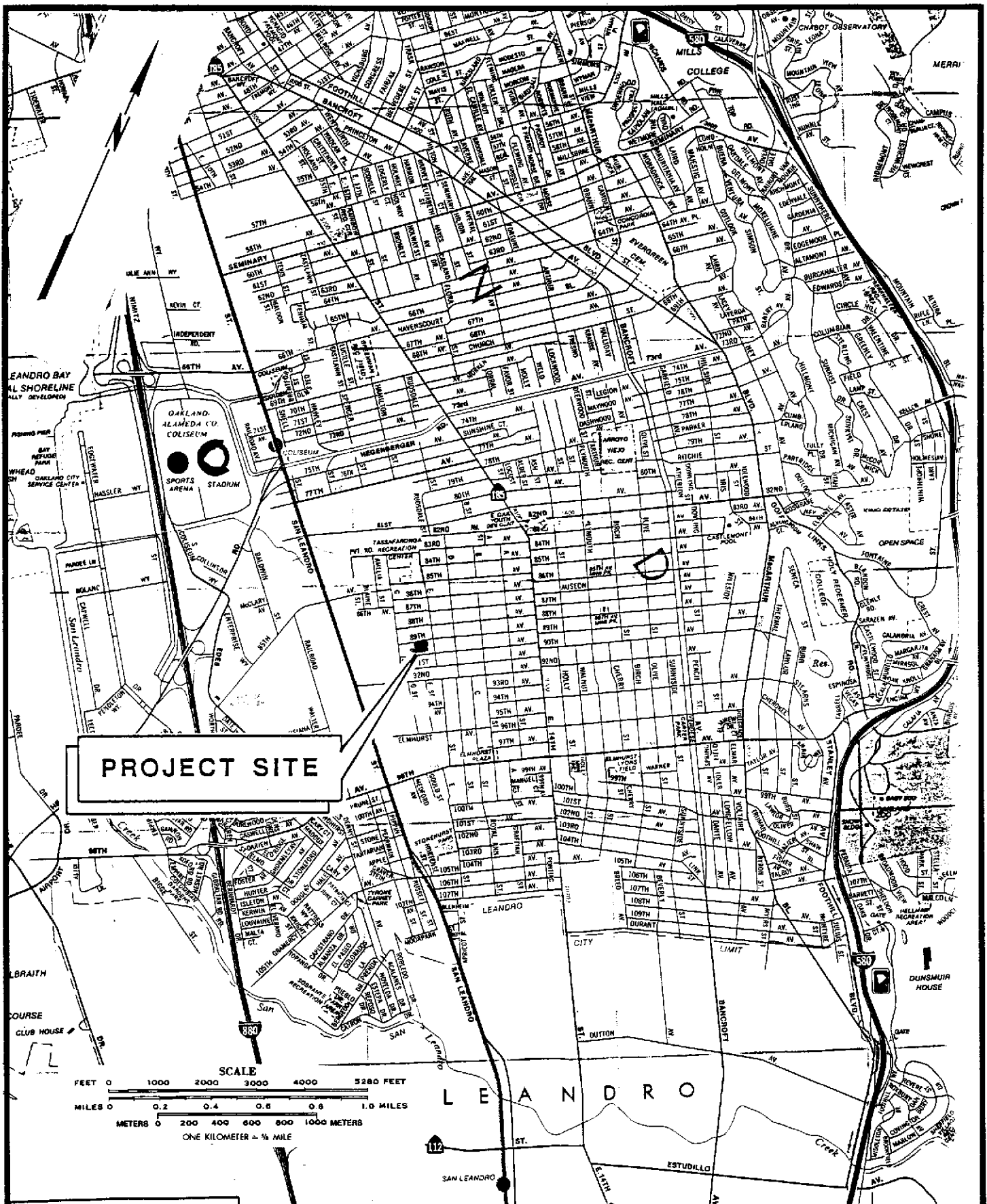
Robert S. Bogar  
Geologist



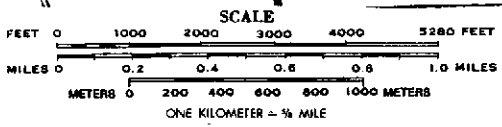
LEADING THROUGH EFFECTIVE SOLUTIONS

7950 Dublin Blvd., Suite 203 Dublin, California 94568 Phone: (510) 551-7774 FAX: (510) 551-7776

96 MAY -1 PM 2:12  
EARTH PROTECTION  
CORPORATION



**PROJECT SITE**

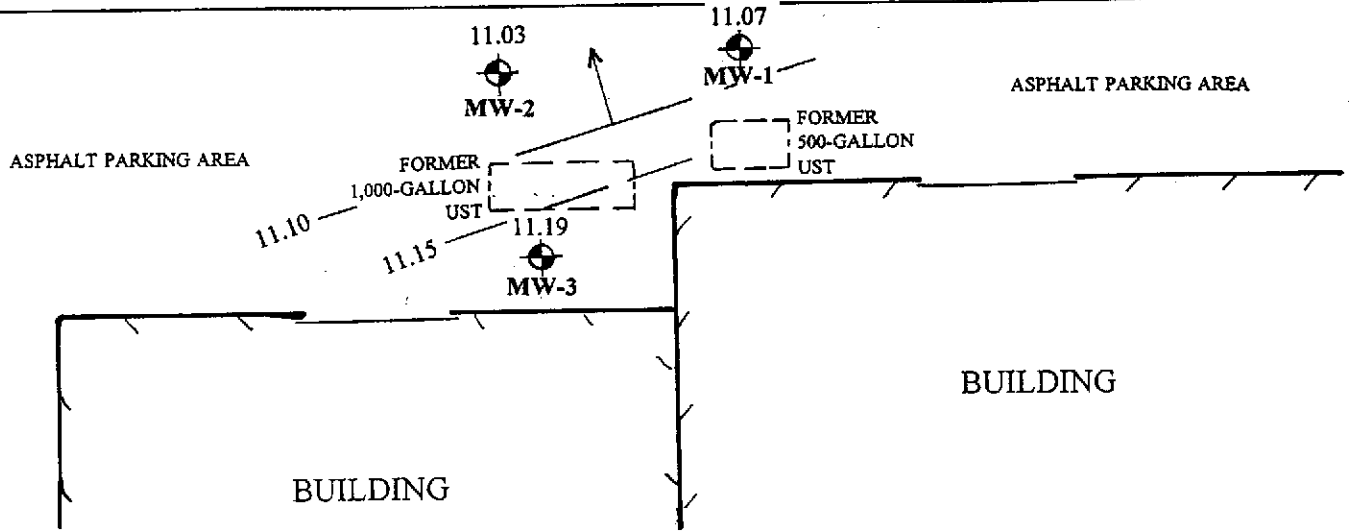


**FIGURE 1**  
**SITE VICINITY MAP**  
 CWEC: 20591-001-01

DATE: \_\_\_\_\_ FIGURE: \_\_\_\_\_  
 CENTURY WEST ENGINEERING

DESIGNED BY:	CHECKED BY:
DRAWN BY:	SCALE:
DWG. NO.:	


89TH AVENUE



0 10 20 30 40  
APPROXIMATE SCALE (ft)

DESIGNED BY:	CHECKED BY:
DRAWN BY:	SCALE:
DWG. NO.:	

**FIGURE 2**  
**SITE PLAN/GRADIENT MAP**  
(4/16/96)  
CWEC: 20591-001-01

DATE:	FIGURE:
CENTURY WEST  ENGINEERING	



NATIONAL  
ENVIRONMENTAL  
TESTING, INC.

Santa Rosa Division  
3636 North Laughlin Road  
Suite 110  
Santa Rosa, CA 95403-8226  
Tel: (707) 526-7200  
Fax: (707) 541-2333

Bob Bogar  
Century West Engineering  
7950 Dublin Blvd., Ste 210  
Dublin, CA 94568

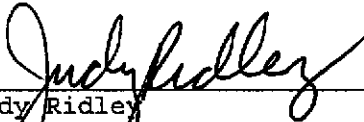
Date: 04/23/1996  
NET Client Acct. No: 75300  
NET Job No: 96.01342  
Received: 04/18/1996

Client Reference Information

Fiesta Beverage/Proj. No. 20591-001-01

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel free to call me at (707) 541-2307.

Submitted by:

  
\_\_\_\_\_  
Judy Ridley  
Project Coordinator

Enclosure(s)



Client Name: Century West Engineering  
Client Acct: 75300  
NET Job No: 96.01342

Date: 04/23/1996  
ELAP Cert: 1386  
Page: 2

Ref: Fiesta Beverage/Proj. No. 20591-001-01

SAMPLE DESCRIPTION: MW-1  
Date Taken: 04/16/1996  
Time Taken:  
NET Sample No: 263262

Parameter	Results	Flags	Reporting		Method	Date	Date	Run Batch No.
			Limit	Units		Extracted	Analyzed	
TPH (Gas/BTEX, Liquid)								
5030/M8015	--						04/19/1996	3627
DILUTION FACTOR*	20						04/19/1996	3627
as Gasoline	3.5		1.0	mg/L	5030		04/19/1996	3627
8020 (GC, Liquid)	--						04/19/1996	3627
Benzene	700		10	ug/L	8020		04/19/1996	3627
Toluene	55		10	ug/L	8020		04/19/1996	3627
Ethylbenzene	100		10	ug/L	8020		04/19/1996	3627
Xylenes (Total)	100		10	ug/L	8020		04/19/1996	3627
SURROGATE RESULTS	--						04/19/1996	3627
Bromofluorobenzene (SURR)	97			% Rec.	5030		04/19/1996	3627

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Century West Engineering  
Client Acct: 75300  
NET Job No: 96.01342

Date: 04/23/1996  
ELAP Cert: 1386  
Page: 3

Ref: Fiesta Beverage/Proj. No. 20591-001-01

SAMPLE DESCRIPTION: MW-2  
Date Taken: 04/16/1996  
Time Taken:  
NET Sample No: 263263

Parameter	Results	Flags	Reporting			Date	Date	Run
			Limit	Units	Method	Extracted	Analyzed	Batch
TPH (Gas/BTEXE, Liquid)								
5030/M8015	--						04/19/1996	3627
DILUTION FACTOR*	1						04/19/1996	3627
as Gasoline	0.19 <sup>a</sup>		0.050	mg/L	5030		04/19/1996	3627
8020 (GC, Liquid)	--						04/19/1996	3627
Benzene	39 *		0.50	ug/L	8020		04/19/1996	3627
Toluene	11		0.50	ug/L	8020		04/19/1996	3627
Ethylbenzene	10		0.50	ug/L	8020		04/19/1996	3627
Xylenes (Total)	14		0.50	ug/L	8020		04/19/1996	3627
SURROGATE RESULTS	--						04/19/1996	3627
Bromofluorobenzene (SURR)	98			% Rec.	5030		04/19/1996	3627

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Century West Engineering  
Client Acct: 75300  
NET Job No: 96.01342

Date: 04/23/1996  
ELAP Cert: 1386  
Page: 4

Ref: Fiesta Beverage/Proj. No. 20591-001-01

SAMPLE DESCRIPTION: MW-3  
Date Taken: 04/16/1996  
Time Taken:  
NET Sample No: 263264

Parameter	Results	Flags	Reporting		Method	Date	Date	Run Batch No.
			Limit	Units		Extracted	Analyzed	
TPH (Gas/BTEX, Liquid)								
5030/M8015	--						04/19/1996	3627
DILUTION FACTOR*	10						04/19/1996	3627
as Gasoline	5.4		0.50	mg/L	5030		04/19/1996	3627
8020 (GC, Liquid)	--						04/19/1996	3627
Benzene	370		5.0	ug/L	8020		04/19/1996	3627
Toluene	340		5.0	ug/L	8020		04/19/1996	3627
Ethylbenzene	160		5.0	ug/L	8020		04/19/1996	3627
Xylenes (Total)	580		5.0	ug/L	8020		04/19/1996	3627
SURROGATE RESULTS	--						04/19/1996	3627
Bromofluorobenzene (SURR)	101			% Rec.	5030		04/19/1996	3627

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Century West Engineering  
Client Acct: 75300  
NET Job No: 96.01342

Date: 04/23/1996  
ELAP Cert: 1386  
Page: 5

Ref: Fiesta Beverage/Proj. No. 20591-001-01

## CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV	CCV	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
	Standard % Recovery	Standard Amount Found					
TPH (Gas/BTXE, Liquid)							
as Gasoline	100.0	0.50	0.50	mg/L	04/19/1996	aal	3627
Benzene	89.4	4.47	5.00	ug/L	04/19/1996	aal	3627
Toluene	89.0	4.45	5.00	ug/L	04/19/1996	aal	3627
Ethylbenzene	90.8	4.54	5.00	ug/L	04/19/1996	aal	3627
Xylenes (Total)	90.0	13.5	15.0	ug/L	04/19/1996	aal	3627
Bromofluorobenzene (SURR)	87.0	87	100	% Rec.	04/19/1996	aal	3627

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Client Name: Century West Engineering  
Client Acct: 75300  
NET Job No: 96.01342

Date: 04/23/1996  
ELAP Cert: 1386  
Page: 6

Ref: Fiesta Beverage/Proj. No. 20591-001-01

## METHOD BLANK REPORT

Parameter	Method	Reporting	Flags	Units	Date	Analyst	Run
	Blank						
<hr/>							
Parameter	Found	Limit	Flags	Units	Analyzed	Initials	Number
TPH (Gas/BTEX, Liquid)							
as Gasoline	ND	0.050		mg/L	04/19/1996	aal	3627
Benzene	ND	0.50		ug/L	04/19/1996	aal	3627
Toluene	ND	0.50		ug/L	04/19/1996	aal	3627
Ethylbenzene	ND	0.50		ug/L	04/19/1996	aal	3627
Xylenes (Total)	ND	0.50		ug/L	04/19/1996	aal	3627
Bromofluorobenzene (SURR)	89			‡ Rec.	04/19/1996	aal	3627

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Century West Engineering  
 Client Acct: 75300  
 NET Job No: 96.01342

Date: 04/23/1996  
 ELAP Cert: 1386  
 Page: 7

Ref: Fiesta Beverage/Proj. No. 20591-001-01

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike				Sample Conc.	Matrix Spike				Units	Date Analyzed	Run Batch	Sample Spiked
	Spike % Rec.	Dup % Rec.	RPD	Spike Amount		Matrix Spike Conc.	Dup. Conc.	Flags	Conc.				
TPH (Gas/BTXE,Liquid)													263263
as Gasoline	94.0	92.0	2.2	0.50	0.19	0.66	0.65		mg/L	04/19/1996	3627		263263
Benzene	--	--	--	5.90	39	--	--	NI2	ug/L	04/19/1996	3627		263263
Toluene	103.9	101.6	2.2	22.8	11	34.7	34.17		ug/L	04/19/1996	3627		263263
Bromofluorobenzene (SURR)	108.0	108.0	0.0	100	98	108	108		% Rec.	04/19/1996	3627		263263

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



## KEY TO RESULT FLAGS

- \* : RPD between sample duplicates exceeds 30%.
- \*M : RPD between sample duplicates or MS/MSD exceeds 20%.
- + : Correlation coefficient for the Method of Standard Additions is less than 0.995.
- < : Sample result is less than reported value.
- B-I : Value is between Method Detection Limit and Reporting Limit.
- B-0 : Analyte found in blank and sample.
- C : The result confirmed by secondary column or GC/MS analysis.
- CNA : Cr+6 not analyzed; Total Chromium concentration below Cr+6 regulatory level.
- COMP : Sample composited by equal volume prior to analysis.
- D- : The result has an atypical pattern for Diesel analysis.
- DI : The result for Diesel is an unknown hydrocarbon which consists of a single peak.
- DH : The result appears to be a heavier hydrocarbon than Diesel.
- DL : The result appears to be a lighter hydrocarbon than Diesel.
- DR : Elevated Reporting Limit due to Matrix.
- DS : Surrogate diluted out of range.
- DX : The result for Diesel is an unknown hydrocarbon which consists of several peaks.
- FA : Compound quantitated at a 2X dilution factor.
- FB : Compound quantitated at a 5X dilution factor.
- FC : Compound quantitated at a 10X dilution factor.
- FD : Compound quantitated at a 20X dilution factor.
- FE : Compound quantitated at a 50X dilution factor.
- FF : Compound quantitated at a 100X dilution factor.
- FG : Compound quantitated at a 200X dilution factor.
- FH : Compound quantitated at a 500X dilution factor.
- FI : Compound quantitated at a 1000X dilution factor.
- FJ : Compound quantitated at a greater than 1000x dilution factor.
- FK : Compound quantitated at a 25X dilution factor.
- FL : Compound quantitated at a 250X dilution factor.
- G- : The result has an atypical pattern for Gasoline.
- G1 : The result for Gasoline is an unknown hydrocarbon which consists of a single peak.
- GH : The result appears to be a heavier hydrocarbon than Gasoline.
- GL : The result appears to be a lighter hydrocarbon than Gasoline.
- GX : The result for Gasoline is an unknown hydrocarbon which consists of several peaks.
- HX : Peaks detected within the quantitation range do not match standard used.
- J : Value is estimated.
- MI : Matrix Interference Suspected.
- MSA : Value determined by Method of Standard Additions.
- MSA\* : Value obtained by Method of Standard Additions; Correlation coefficient is <0.995.
- NI1 : Sample spikes outside of QC limits; matrix interference suspected.
- NI2 : Sample concentration is greater than 4X the spiked value; the spiked value is considered insignificant.
- NI3 : Matrix Spike values exceed established QC limits, post digestion spike is in control.
- P7 : pH of sample > 2; sample analyzed past 7 days.
- RSC : Refer to subcontract laboratory report for QC data.
- S2 : Matrix interference confirmed by repeat analysis.
- SCN : Thiocyanate not analyzed separately; total value is below the Reporting Limit for Free Cyanide.
- UMDL : Undetected at the Method Detection Limit.