



BRACEWELL ENGINEERING, INC.

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June 9, 2023

Mr. Eric Lacy
State Water Resources Control Board-Division of Drinking Water
850 Marina Bay Parkway, Building P, 2nd Floor
Richmond, CA 94804

Re: May 2023 Monthly Report to the Office of Drinking Water
La Honda Water System (County Service Area No. 7), No. CA4100509

Dear Mr. Lacy:

Attached are the Monthly Summary of Distribution System Coliform Monitoring and the Monthly Summary of Monitoring for Surface Water Treatment Regulations for the La Honda Water System.

- The monthly distribution system treated water bacteriological sample showed an absence of total coliforms and E. coli.
- Chlorine residuals were maintained as required.
- The minimum Disinfection CT ratio was 2.8 for a DDW required 1- log removal for Giardia.

Please do not hesitate to contact me if you have any questions.

Respectfully submitted,
BRACEWELL ENGINEERING, INC.

Lloyd W. Bracewell, PhD., RCE
Water System Engineer

cc: San Mateo County, CSA #7
BEI Office

La Honda Water System (CSA No. 7)
 555 County Center, 5th Floor
 Redwood City, CA 94063
 System No. CA4100509

WATER SYSTEM MONITORING REPORT

Water Resources Control Board
 Division of Drinking Water
 850 Marina Bay Parkway, Bldg P
 Richmond, CA 98804

Location	Raw Water	Raw Water	Raw Water	Treated Water	Backwash
Parameter	Tank	Tank	Flow	Meter	Meter
frequency	daily	daily	calculation	daily	daily
Units	ft	ft	gal/d	100 gal	100 gal
Type	level	level	flow	read	read
High Limit					
Low Limit					
Date					
5/1/2023			34,720		
5/2/2023			34,720		
5/3/2023	13.22	27.55	34,720	358,263	189,561
5/4/2023			19,397		
5/5/2023			19,397		
5/6/2023			19,397		
5/7/2023			19,397		
5/8/2023			19,397		
5/9/2023			19,397		
5/10/2023	13.89	28.42	19,397	359,510	189,754
5/11/2023			2,483		
5/12/2023			2,483		
5/13/2023			2,483		
5/14/2023			2,483		
5/15/2023			2,483		
5/16/2023			2,483		
5/17/2023			2,483		
5/18/2023			2,483		
5/19/2023			2,483		
5/20/2023			2,483		
5/21/2023			2,483		
5/22/2023			2,483		
5/23/2023			2,483		
5/24/2023			2,483		
5/25/2023			2,483		
5/26/2023			2,483		
5/27/2023			2,483		
5/28/2023			2,483		
5/29/2023			2,483		
5/30/2023			2,483		
5/31/2023			2,483		

Min	13.22	27.55	2,483	358,263	189,561
Max	13.89	28.42	34,720	359,510	189,754
Average	13.56	27.99	9,422	358,887	189,658
Total			292,088		

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Location	Contact Pipe	Contact Pipe	Contact Pipe	Contact Pipe	Contact Pipe
Parameter	CL2 Residual	pH	Turbidity	Temp	CL2
frequency	daily	weekly	weekly	weekly	weekly
Units	mg/L	units	ntu	C	mg/L
Type	Analyzer	Grab	Grab	Grab	Grab
High Limit					
Low Limit					
Date					
5/1/2023					
5/2/2023					
5/3/2023	2.3	7.43	0.15	14.4	2.21
5/4/2023					
5/5/2023					
5/6/2023					
5/7/2023					
5/8/2023					
5/9/2023					
5/10/2023	1.27	7.38	0.16	13.7	1.43
5/11/2023					
5/12/2023					
5/13/2023					
5/14/2023					
5/15/2023					
5/16/2023					
5/17/2023					
5/18/2023					
5/19/2023					
5/20/2023					
5/21/2023					
5/22/2023					
5/23/2023					
5/24/2023					
5/25/2023					
5/26/2023					
5/27/2023					
5/28/2023					
5/29/2023					
5/30/2023					
5/31/2023					

Min	1.27	7.38	0.15	13.70	1.43
Max	2.30	7.43	0.16	14.40	2.21
Average	1.79	7.41	0.16	14.05	1.82
Total					

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WATER SYSTEM MONITORING REPORT

Water Resources Control Board
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Location		TW Storage Tank	TW Storage Tank	TW Storage Tank	TW Storage Tank	Aeration System	Aeration System
Parameter		Level	Temp	pH	cl2 residual	TTHM	UV Absorbance
frequency		weekly	weekly	weekly	weekly	weekly	weekly
units		ft	C	Units	ppm	mg/L	Au
Type		Visual					
High Limit			17.0	8.50	2.00		
Low Limit			6.5	7.50	0.30		
Date	Oper. Initials						
5/1/2023							
5/2/2023							
5/3/2023	KB	27.6	14.1	8.15	1.55		
5/4/2023							
5/5/2023							
5/6/2023							
5/7/2023							
5/8/2023							
5/9/2023							
5/10/2023	KB	28.4	13.8	7.7	0.7		
5/11/2023							
5/12/2023							
5/13/2023							
5/14/2023							
5/15/2023							
5/16/2023							
5/17/2023	KB	26.8	14.9	8.13	0.36		
5/18/2023							
5/19/2023							
5/20/2023							
5/21/2023							
5/22/2023							
5/23/2023	KB	22.5	16.8	8.31	0.25		
5/24/2023							
5/25/2023							
5/26/2023							
5/27/2023							
5/28/2023							
5/29/2023							
5/30/2023							
5/31/2023							

Min	-	22.5	13.8	7.70	0.25	-	-
Max	-	28.4	16.8	8.31	1.55	-	-
Average		26.3	14.9	8.07	0.72		
Total							

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WATER SYSTEM MONITORING REPORT

Water Resources Control Board
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Location	Old Chlorination Station
Parameter	Cl2 Residual
frequency	weekly
units	ppm
Type	
High Limit	2
Low Limit	0.3
Date	
5/1/2023	
5/2/2023	
5/3/2023	
5/4/2023	
5/5/2023	
5/6/2023	
5/7/2023	
5/8/2023	
5/9/2023	
5/10/2023	
5/11/2023	
5/12/2023	
5/13/2023	
5/14/2023	
5/15/2023	
5/16/2023	
5/17/2023	
5/18/2023	
5/19/2023	
5/20/2023	
5/21/2023	
5/22/2023	
5/23/2023	
5/24/2023	
5/25/2023	
5/26/2023	
5/27/2023	
5/28/2023	
5/29/2023	
5/30/2023	
5/31/2023	

Min	-
Max	-
Average	
Total	

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WATER SYSTEM MONITORING REPORT

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Location		Routine Sample Site	Water Tank (Weekly)
Parameter		Cl2 Residual	Cl2 Residual
frequency		as needed	weekly
units		mg/L	mg/L
Type		grab	grab
High Limit			
Low Limit			
Date	Oper. Initials		
5/1/2023			
5/2/2023			
5/3/2023	KB	1.29	
5/4/2023			
5/5/2023			
5/6/2023			
5/7/2023			
5/8/2023			
5/9/2023	KB	1.12	
5/10/2023			
5/11/2023			
5/12/2023			
5/13/2023			
5/14/2023			
5/15/2023			
5/16/2023			
5/17/2023	KB	0.29	
5/18/2023			
5/19/2023			
5/20/2023			
5/21/2023			
5/22/2023			
5/23/2023	KB	0.26	
5/24/2023			
5/25/2023			
5/26/2023			
5/27/2023			
5/28/2023			
5/29/2023			
5/30/2023			
5/31/2023			

Min	-	0.26	-
Max	-	1.29	-
Average		0.74	
Total			

LHW

May

La Honda Water System (W4100509)

CHLORINE RESIDUAL	SAMPLE POINT	SAMPLE ID	DATE	RESULT	UNIT	LIMIT	METHOD	DL	RL	TYPE	FREQUENCY
	APN 240070	AA04402	5/9/23	1.2	mg/L		SM 4500-CI G		0.02	Routine	LHW_BAC
COLIFORM MPN	SAMPLE POINT	SAMPLE ID	DATE	RESULT	UNIT	LIMIT	METHOD	DL	RL	TYPE	FREQUENCY
	ALPINE CREEK - RAW	AA04275	5/9/23	35.0	MPN/100mL		SM9223B-18		1.0		LHW_BAC
COLIFORM PA	SAMPLE POINT	SAMPLE ID	DATE	RESULT	UNIT	LIMIT	METHOD	DL	RL	TYPE	FREQUENCY
	APN 240070	AA04402	5/9/23	A	P/A		SM9223B-18			Routine	LHW_BAC
E COLI MPN	SAMPLE POINT	SAMPLE ID	DATE	RESULT	UNIT	LIMIT	METHOD	DL	RL	TYPE	FREQUENCY
	ALPINE CREEK - RAW	AA04275	5/9/23	2.0	MPN/100mL		SM9223B-18		1.0		LHW_BAC
E COLI PA	SAMPLE POINT	SAMPLE ID	DATE	RESULT	UNIT	LIMIT	METHOD	DL	RL	TYPE	FREQUENCY
	APN 240070	AA04402	5/9/23	A	P/A		SM9223B-18			Routine	LHW_BAC
UV254	SAMPLE POINT	SAMPLE ID	DATE	RESULT	UNIT	LIMIT	METHOD	DL	RL	TYPE	FREQUENCY
	ALPINE CREEK - RAW	AA04276	5/1/23	0.084	Abs/Tran		SM 5910B				LHW_MISC
	ALPINE CREEK - RAW	AA04391	5/9/23	0.114	Abs/Tran		SM 5910B				LHW_MISC
	ALPINE CREEK - RAW	AA04445	5/17/23	0.103	Abs/Tran		SM 5910B				LHW_MISC
	ALPINE CREEK - RAW	AA04470	5/24/23	.093	Abs/Tran		SM 5910B				LHW_MISC
			HIGH 0.11	AVG 0.10	LOW 0.08						
	TREATMENT PLANT - TREATED	AA04277	5/1/23	0.041	Abs/Tran		SM 5910B				LHW_MISC
	TREATMENT PLANT - TREATED	AA04392	5/9/23	0.044	Abs/Tran		SM 5910B				LHW_MISC
	TREATMENT PLANT - TREATED	AA04446	5/17/23	0.042	Abs/Tran		SM 5910B				LHW_MISC
	TREATMENT PLANT - TREATED	AA04471	5/24/23	.036	Abs/Tran		SM 5910B				LHW_MISC
			HIGH 0.04	AVG 0.04	LOW 0.04						

State of California
 Water Resources Control Board
 Division of Drinking Water
 Coliform Reporting Form

Date of Report: 6/9/2023

System Name: La Honda Water System (CSA #7)

System Number: CA4100509

Laboratory: BEI Analytical Laboratory

Elap No: 3019

Signature of Lab Director: *Robert W. Bracewell*

Report Period from: 5/1/2023 to 5/31/2023

Sampler: Keefe Brennan

Employed by: Bracewell Engineering, Inc.

Collection Date	Laboratory Number	Bottle Number	Site Name or Street Address	Sample Type	Total Coliform	E. Coli	Remarks
5/9/2023			Old Chlorination Station	1	A	A	SM 9223B-18
5/9/2023			Raw Water	4	35.0	2.0	SM 9223 B-18 (MPN)

1 = Routine P = Present
 2 = Repeat A = Absent
 3 = Replacement
 4 = Other

Monthly Summary of Monitoring For Surface Water Treatment Regulations

System Name: La Honda Water System (CSA #7)

System Number: 4100509

Treatment Plant Name: La Honda Water System (CSA #7)

Month: May Year: 2023

Treated Water Turbidities Every Four Hours (NTU)*

Date	Peak Raw Water Turbidity	Peak Settled Water Turbidity	Midnight to 0400	0400 to 0800	0800 to Noon	Noon to 1600	1600 to 2000	2000 to Midnight	Average Treated Water	Minimum Ct. Ratio
1	0.67		0.09	0.05	0.05		0.05	0.05	0.06	3.3
2	6.42		0.05	0.05	0.05	0.05	0.07	0.05	0.05	3.2
3	1.89		0.05			0.06	0.05	0.14	0.07	3.2
4	9.18		0.06	0.07		0.06	0.05		0.06	3.2
5	2.24		0.06	0.05	0.06	0.06	0.05	0.05	0.05	3.3
6	1.09		0.06						0.06	3.4
7										
8	1.53					0.06	0.05		0.05	2.8
9	1.38					0.06	0.05	0.05	0.05	3.1
10	1.01					0.06	0.05	0.05	0.05	3.4
11	0.71		0.06	0.05	0.05	0.06	0.05	0.05	0.05	3.5
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Ave.									0.06	

*If a continuous monitoring turbidimeter is used, determine discrete turbidity value for the same times during each 24-hour period

Total No. of Samples: 40 No. of Readings ≤ 0.3 NTU: 40

% Readings ≤ 0.3 NTU = [(No. Readings ≤ 0.3 NTU) / (Total No. Samples)] x 100 = 100%

Meets Standard (i.e. more than 95% of readings are ≤ 0.3 NTU) (Y/N)? Y

Percent reduction during the month = [(Average Raw NTU - Average Effluent NTU) / (Average Raw NTU)] x 100 = #DIV/0!

Meets Standard (i.e. reduction is greater than 80%) (Y/N)? #DIV/0!

95th Percentile Value of all turbidity readings (95% of all turbidity readings are less than this value) 0.068

Incidents of turbidity greater than 1.0 NTU

Date of Incident				
Value				
Duration				

Total Number of incidents where turbidity is > 1.0 NTU: 0
 Total Number of incidents where turbidity is > 5.0 NTU: 0
 Meets Standards (i.e. NTU is not > 1.0 for more than eight consecutive hours) (Y/N)? Y

After placing a filter back into service after any interruption (e.g. backwashing), did the filter effluent comply with the following criteria:

a. < 2.0 NTU after all events (Y/N)? Y
 b. < 1.0 NTU after 90% of events (Y/N)? Y
 c. < 0.5 NTU after 4 hours (Y/N)? Y

Indicate the date that the turbidimeters that are used for regulatory monitoring purposes were calibrated

Date	Which Turbidimeter	Standard used (primary/secondary)	Date	Which Turbidimeter	Standard Used (primary/secondary)
1/28/2022	Hach, raw wtr	0/20 Formazin	1/28/2022	Hach, treated	0/20 Formazin
4/28/2022	Hach, raw wtr	0/20 Formazin	4/28/2022	Hach, treated	0/20 Formazin
7/22/2022	Hach, raw wtr	0/20 Formazin	7/22/2022	Hach, treated	0/20 Formazin
10/26/2022	Hach, raw wtr	0/20 Formazin	10/26/2022	Hach, treated	0/20 Formazin
1/27/2023	Hach, raw wtr	0/20 Formazin	1/27/2023	Hach, treated	0/20 Formazin
6/2/2023	Hach, raw wtr	0/20 Formazin	6/2/2023	Hach, treated	0/20 Formazin

Disinfection Process Data

Disinfectant residual type: free chlorine: X combined chlorine: _____ other (specify) _____

Incidents of chlorine residuals less than 0.2 ppm at the plant effluent:

Date of Incident			
Duration			
Date Dept. Notified			

Total number of incidents where residual is < 0.2 ppm: 0
 Meets standard (i.e. not less than 0.2 ppm for more than four hours) (Y/N)? Y

No. of distribution system residual samples collected:	1
No of distribution system samples for HPC only:	
Total No. residual and/or HPC samples collected:	1
No. of samples with no detectable residual and HPC is not measured:	0
No. of samples with no residual and HPC > 500 CFU/ml:	
No. of samples for HPC only and HPC > 500 CFU/ml:	
Total No. Samples with no residual and/or HPC > 500 CFU/ml:	0

Compute V where $V = [1 - (\text{Total number of samples with no residual and/or HPC} > 500) / (\text{Total number of residual and/or HPC samples collected})] \times 100 =$ 100%

Meets Standard (i.e V > 95%) (Y/N) Y

Summary of Water Quality Complaints

General Complaints

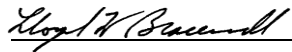
Type of Complaint	Number	Corrective Actions Taken
Taste/Odor	0	
Color	0	
Turbidity	0	
Suspended Solids	0	
Other (describe)	0	

Reports of Gastrointestinal Illness (Attach additional sheets if necessary):

Person Reporting	Date	Corrective Actions Taken

Attach explanation of any failure of the performance standards or operating criteria and corrective action taken or planned

Signature:



Date:

6/9/2023

