



BRACEWELL ENGINEERING, INC.

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March 9, 2022

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

Re: February 2022 Monthly Report to the Office of Drinking Water
La Honda Water System (County Service Area No. 7), No. W4100509

Dear Mr. Lacy:

Attached are the Monthly Summary of Distribution System Coliform Monitoring and the Monthly Summary of Monitoring for Surface Water Treatment Regulations, and the Coliform Reporting Form 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 and turbidity levels did not exceed 0.3 NTU when treating water for domestic use. The minimum disinfection CT ratio was 1.4 for a DDW required 1-log removal for Giardia. The treated water was monitored for aluminum and iron and the results will be reported with next month's report, as the laboratory results have not been received.

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

WATER SYSTEM MONITORING REPORT

La Honda Water System (CSA No. 7)
 555 County Center, 5th Floor
 Redwood City, CA 94063
 System No. 4100509

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

Station: Test: Units: Type: Frequency: Date	Finish Wtr FLOW gal/day calculated daily	Finish Wtr TEMP deg C grab weekly	Finish Wtr PH std units grab weekly	Finish Wtr CL2 RESID mg/L continuous daily	ContctPipe CT VALUE min-mg/L calculated daily	Finish Wtr CT REQUIRD min-mg/L calculated daily	ContctPipe CT RATIO ratio calculated daily	Finish Wtr TURBIDITY NTU continuous daily	Raw Water TURBIDITY NTU continuous daily	Finish Wtr TRB/PH/CL2 initials calib check weekly
02/01/22	2900	10.0	7.90	1.31	36.90	27.0	1.4	0.04	1.52	
02/02/22	0									
02/03/22	13000	10.0	7.40	1.28	36.05	22.6	1.6	0.04	0.91	
02/04/22	25000	10.0	7.72	1.89	53.23	26.9	2.0	0.05	0.95	RC
02/05/22	0									
02/06/22	0									
02/07/22	30000	10.0	7.75	1.71	48.16	26.7	1.8	0.04	1.35	
02/08/22	30000	10.0	7.60	1.61	45.35	25.1	1.8	0.04	0.81	
02/09/22	30000	10.0	7.57	1.65	46.47	25.0	1.9	0.04	0.61	
02/10/22	0									
02/11/22	27700	10.0	7.67	1.41	39.71	25.3	1.6	0.04	0.95	
02/12/22	27700	12.6	7.66	1.36	38.31	20.9	1.8	0.04	1.01	
02/13/22	0									
02/14/22	52000	12.6	7.70	2.19	61.68	22.8	2.7	0.04	0.74	KB
02/15/22	52000	12.6	7.83	2.01	56.61	23.5	2.4	0.04	1.30	
02/16/22	30550	12.6	7.68	1.55	43.66	21.5	2.0	0.04	1.77	
02/17/22	30550	12.6	7.50	2.00	56.33	20.9	2.7	0.04	1.92	
02/18/22	0									
02/19/22	0									
02/20/22	0									
02/21/22	0									
02/22/22	0									
02/23/22	41300	13.5	7.80	1.89	43.38	21.7	2.0	0.04	0.82	KB
02/24/22	52400	13.5	8.28	1.91	53.80	25.5	2.1	0.05	0.89	
02/25/22	31150	13.5	7.90	1.81	50.98	22.3	2.3	0.04	0.75	
02/26/22	31150	13.5	7.61	1.41	39.71	19.4	2.0	0.04	0.59	
02/27/22	0									
02/28/22	38250	13.5	7.68	1.70	47.88	20.4	2.3	0.03	0.87	KB
Average:	19488	11.8	7.72	1.69	46.95	23.4	2.0	0.04	1.04	
High:	52400	13.5	8.28	2.19	61.68	27.0	2.7	0.05	1.92	
Low:	0	10.0	7.40	1.28	36.05	19.4	1.4	0.03	0.59	
Total:	545650									

Method: SM2550B SM4500-H+ B SM4500-C1 G SM2130B SM2130B

Limit1: mn d >= 0.20 mn d >= 1.0 mx d <= 0.3
 Over/Total: 0/17 0/17 0/17

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

Station:	Raw Water	Raw Water	Raw Water	APN 240070	APN 240070	APN 240070	APN 240070	01dC12Sta	01dC12Sta	01dC12Sta	01dC12Sta
Test:	SAMPL TYPE	COLIFORM	E. COLI	SAMPL TYPE	COLIFORM	E. COLI	CL2 RESID	SAMPL TYPE	COLIFORM	E. COLI	CL2 RESID
Units:	TYPE	MPN/100mL	MPN/100mL	TYPE	pres./abs.	pres./abs.	mg/L	TYPE	pres./abs.	pres./abs.	mg/L
Type:	observation	grab	grab	observation	grab	grab	grab	observation	grab	grab	grab
Frequency:	as needed	monthly	monthly	Mar/May/Oct	Mar/May/Oct	Mar/May/Oct	Mar/May/Oct	Apr/Jun/Nov	Apr/Jun/Nov	Apr/Jun/Nov	Apr/Jun/Nov
Date				due 03/22	due 03/22	due 03/22	due 03/22	due 04/22	due 04/22	due 04/22	due 04/22
02/01/22											
02/02/22											
02/03/22											
02/04/22											
02/05/22											
02/06/22											
02/07/22											
02/08/22											
02/09/22											
02/10/22											
02/11/22											
02/12/22											
02/13/22											
02/14/22											
02/15/22	Other	96.0	7.4								
02/16/22											
02/17/22											
02/18/22											
02/19/22											
02/20/22											
02/21/22											
02/22/22											
02/23/22											
02/24/22											
02/25/22											
02/26/22											
02/27/22											
02/28/22											
Average:		96.0	7.4								
High:		96.0	7.4								
Low:		96.0	7.4								
DL/RL:		1.0/1.0	1.0/1.0								
Method:		SM9223 B-18	SM9223 B-18	SM9223B-18	SM9223B-18	SM4500-C1 G		SM9223B-18	SM9223B-18	SM4500-C1 G	
Limit1:				mx d < 1	mx d < 1	mn d >= 0.05		mx d < 1	mx d < 1	mn d >= 0.05	
Over/Total:				0/0	0/0	0/0		0/0	0/0	0/0	

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Station:	251 PescCr	251 PescCr	251 PescCr	251 PescCr	460 Pescdr	460 Pescdr	460 Pescdr	460 Pescdr	Raw Water	TreatedWtr
Test:	SAMPL TYPE	COLIFORM	E. COLI	CL2 RESID	SAMPL TYPE	COLIFORM	E. COLI	CL2 RESID	ALUMINUM	ALUMINUM
Units:	TYPE	pres./abs.	pres./abs.	mg/L	TYPE	pres./abs.	pres./abs.	mg/L	ug/L	ug/L
Type:	observation	grab	grab	grab	observation	grab	grab	grab	grab	grab
Frequency:	Jul/Dec	Jul/Dec	Jul/Dec	Jul/Dec	Jan/Aug	Jan/Aug	Jan/Aug	Jan/Aug	every 12 mo	every 3 mo
Date										
02/01/22	due 07/22	due 07/22	due 07/22	due 07/22	due 08/22	due 08/22	due 08/22	due 08/22	due 07/22	
02/02/22										
02/03/22										
02/04/22										
02/05/22										
02/06/22										
02/07/22										
02/08/22										
02/09/22										
02/10/22										
02/11/22										
02/12/22										
02/13/22										
02/14/22										
02/15/22										
02/16/22										
02/17/22										
02/18/22										
02/19/22										
02/20/22										
02/21/22										
02/22/22										
02/23/22										
02/24/22										
02/25/22										
02/26/22										
02/27/22										
02/28/22										

Average:
 High:
 Low:

DL/RL:									10/5	10/5
Method:	SM9223B-18	SM9223B-18	SM4500-C1 G		SM9223B-18	SM9223B-18	SM4500-C1 G	EPA 200.8	EPA 200.8	
Limit1:	mx d < 1	mx d < 1	mn d >= 0.05		mx d < 1	mx d < 1	mn d >= 0.05			
Over/Total:	0/0	0/0	0/0		0/0	0/0	0/0			

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Station:	400 Ranch	400 Ranch	400 Ranch	400 Ranch	LaHondaRd	LaHondaRd	LaHondaRd	LaHondaRd
Test:	SAMPL TYPE	COLIFORM	E. COLI	CL2 RESID	SAMPL TYPE	COLIFORM	E. COLI	CL2 RESID
Units:	TYPE	pres./abs.	pres./abs.	mg/L	TYPE	pres./abs.	pres./abs.	mg/L
Type:	observation	grab	grab	grab	observation	grab	grab	grab
Frequency:	Feb/Sep	Feb/Sep	Feb/Sep	Feb/Sep	as needed	as needed	as needed	as needed
Date								
02/01/22								
02/02/22								
02/03/22								
02/04/22								
02/05/22								
02/06/22								
02/07/22								
02/08/22								
02/09/22								
02/10/22								
02/11/22								
02/12/22								
02/13/22								
02/14/22								
02/15/22	Routine	Absence	Absence	0.21				
02/16/22								
02/17/22								
02/18/22								
02/19/22								
02/20/22								
02/21/22								
02/22/22								
02/23/22								
02/24/22								
02/25/22								
02/26/22								
02/27/22								
02/28/22								
Average:		0	0	0.21				
High:		0	0	0.21				
Low:		0	0	0.21				
Method:		SM9223B-18	SM9223B-18	SM4500-C1 G		SM9223B-18	SM9223B-18	SM4500-C1 G
Limit1:		mx d < 1	mx d < 1	mn d >= 0.05		mx d < 1	mx d < 1	mn d >= 0.05
Over/Total:		0/1	0/1	0/1		0/0	0/0	0/0

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Station:	LHW OPERATOR	LHW ACTIONS	Raw Water PH	Raw Water ALKALINITY	Raw Water IRON	TreatedWtr IRON	Raw Water NITRATE-N
Test:	units	comments	std units	mg/L-CaCO3	ug/L	ug/L	mg/L
Units:	observation	observation	grab	grab	grab	grab	grab
Type:	as needed	as needed	weekly	as needed	every 3 mo	every 3 mo	every 3 mo
Frequency:							
Date							due 04/22
02/01/22							
02/02/22							
02/03/22							
02/04/22	RC						
02/05/22							
02/06/22							
02/07/22							
02/08/22							
02/09/22							
02/10/22							
02/11/22							
02/12/22							
02/13/22							
02/14/22	KB		8.39				
02/15/22							
02/16/22							
02/17/22							
02/18/22							
02/19/22							
02/20/22							
02/21/22							
02/22/22							
02/23/22	KB		8.34				
02/24/22							
02/25/22							
02/26/22							
02/27/22							
02/28/22							
Average:			8.37				
High:			8.39				
Low:			8.34				
DL/RL:				3/2	20/20	20/10	0.030/0.40
Method:			SM4500-H+ B	SM2320 B	EPA 200.8	EPA 200.8	SM4500-N03 D
Limit1:							mx d <= 10
Over/Total:							0/0

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

Date of Report: 3/9/2022

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

System Number: 4100509

Laboratory: BEI Analytical Laboratory

Elap No: 3019

Signature of Lab Director: *Gregory W. Bracewell*

Report Period from: 2/1/2022

to

2/28/2022

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
2/15/2022			400 Ranch	1	A	A	SM 9223B-18
2/15/2022			Raw Water	4	96	7.4	SM 9223 B-18 (MPN)

1 = Routine
 2 = Repeat
 3 = Replacement
 4 = Other

P = Present
 A = Absent

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: February Year: 2022

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	1.52					0.05	0.04		0.05	1.4
2										
3	0.91					0.04			0.04	1.6
4	0.95				0.04	0.04	0.04	0.04	0.04	2.0
5										
6										
7	1.35					0.04	0.04	0.04	0.04	1.8
8	0.81		0.04	0.04	0.04	0.04	0.04	0.04	0.04	1.8
9	0.61		0.04	0.04	0.04				0.04	1.9
10										
11	0.95					0.04			0.04	1.6
12	1.01					0.04			0.04	1.8
13										
14	0.74					0.04	0.04	0.04	0.04	2.7
15	1.30		0.04	0.04	0.04	0.04	0.04	0.04	0.04	2.4
16	1.77		0.04	0.04	0.04	0.04	0.04	0.04	0.04	2.0
17	1.92		0.03	0.03	0.04	0.03			0.03	2.7
18										
19										
20										
21										
22										
23	0.82						0.04	0.04	0.04	2.0
24	0.89		0.04	0.04	0.04	0.04	0.03	0.03	0.04	2.1
25	0.75		0.03	0.03	0.04	0.04	0.04	0.03	0.04	2.3
26	0.59		0.03	0.04	0.04				0.04	2.0
27										
28	0.87					0.03	0.03	0.03	0.03	2.3
29										
30										
31										
Ave.	1.04								0.04	

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

Total No. of Samples: 60 No. of Readings ≤ 0.3 NTU: 60

% 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 = $\frac{(\text{Average Raw NTU} - \text{Average Effluent NTU})}{(\text{Average Raw NTU})} \times 100 =$ 96%

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

95th Percentile Value of all turbidity readings (95% of all turbidity readings are less than this value): 0.040

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)
7/15/2019	Hach, raw wtr	0/20 Formazin	7/15/2019	Hach, treated	0/20 Formazin
10/17/2019	Hach, raw wtr	0/20 Formazin	10/17/2019	Hach, treated	0/20 Formazin
4/3/2020	Hach, raw wtr	0/20 Formazin	4/3/2020	Hach, treated	0/20 Formazin
7/2/2020	Hach, raw wtr	0/20 Formazin	7/2/2020	Hach, treated	0/20 Formazin
10/28/2020	Hach, raw wtr	0/20 Formazin	10/28/2020	Hach, treated	0/20 Formazin
1/29/2021	Hach, raw wtr	0/20 Formazin	1/29/2021	Hach, treated	0/20 Formazin
4/22/2021	Hach, raw wtr	0/20 Formazin	4/22/2021	Hach, treated	0/20 Formazin
7/28/2021	Hach, raw wtr	0/20 Formazin	7/28/2021	Hach, treated	0/20 Formazin
10/27/2021	Hach, raw wtr	0/20 Formazin	10/27/2021	Hach, treated	0/20 Formazin
1/28/2022	Hach, raw wtr	0/20 Formazin	1/28/2022	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:

Alfred W. Bascamelli

Date:

3/9/2022