



BRACEWELL ENGINEERING, INC.

155 MAST STREET, UNIT 114, MORGAN HILL, CA 95037

(669) 258-5820 FAX (408) 498-7045

www.bracewellengineering.com

February 10, 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: January 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 and turbidity levels did not exceed 0.3 NTU when treating water for domestic use. The minimum disinfection CT ratio was 1.8 for a DDW required 1-log removal for Giardia.

The surface water plant was only run from January 27 to 31 due to high raw water turbidities. As a result, water was delivered during the end of the month. Per discussions with DDW, coliform samples were collected from the delivery truck during four deliveries and an additional sample was taken from the storage tank effluent. All coliform samples were non-detect.

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
01/01/23	0									
01/02/23	0									
01/03/23	0									
01/04/23	0									
01/05/23	0									
01/06/23	0									
01/07/23	0									
01/08/23	0									
01/09/23	0									
01/10/23	0									
01/11/23	0									
01/12/23	0									
01/13/23	0									
01/14/23	0									
01/15/23	0									
01/16/23	0									
01/17/23	0									
01/18/23	0									
01/19/23	0									
01/20/23	0									
01/21/23	0									
01/22/23	0									
01/23/23	0									
01/24/23	0									
01/25/23	0									
01/26/23	0									
01/27/23	34067	11.7	7.59	1.64	46.19	22.3	2.1	0.05	8.17	KB
01/28/23	34067	11.7	7.53	1.37	38.59	21.3	1.8	0.06	5.59	
01/29/23	34067	11.7	7.49	1.58	44.50	21.4	2.1	0.05	9.44	
01/30/23	34067	11.7	7.47	1.66	46.76	21.4	2.2	0.05	11.07	
01/31/23	34067	11.7	7.43	1.34	37.74	20.4	1.9	0.04	5.50	
Average:	5495	11.7	7.50	1.52	42.76	21.4	2.0	0.05	7.95	
High:	34067	11.7	7.59	1.66	46.76	22.3	2.2	0.06	11.07	
Low:	0	11.7	7.43	1.34	37.74	20.4	1.8	0.04	5.50	
Total:	170335									
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:				0/5			0/5	0/5		

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:	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 03/23	due 03/23	due 03/23	due 03/23	due 04/23	due 04/23	due 04/23	due 04/23
01/01/23											
01/02/23											
01/03/23											
01/04/23											
01/05/23											
01/06/23											
01/07/23											
01/08/23											
01/09/23											
01/10/23											
01/11/23											
01/12/23											
01/13/23											
01/14/23											
01/15/23											
01/16/23											
01/17/23											
01/18/23											
01/19/23											
01/20/23											
01/21/23											
01/22/23											
01/23/23											
01/24/23											
01/25/23	Other	< 1.0	< 1.0								
01/26/23											
01/27/23											
01/28/23											
01/29/23											
01/30/23											
01/31/23											
Average:		< 1.0	< 1.0								
High:		< 1.0	< 1.0								
Low:		< 1.0	< 1.0								
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

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:	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										
01/01/23	due 07/23	due 07/23	due 07/23	due 07/23					due 07/23	due 02/23
01/02/23										
01/03/23										
01/04/23										
01/05/23										
01/06/23										
01/07/23										
01/08/23										
01/09/23										
01/10/23										
01/11/23										
01/12/23										
01/13/23										
01/14/23										
01/15/23										
01/16/23										
01/17/23										
01/18/23										
01/19/23										
01/20/23										
01/21/23										
01/22/23										
01/23/23										
01/24/23										
01/25/23					Routine	Absence	Absence	0.24		
01/26/23										
01/27/23										
01/28/23										
01/29/23										
01/30/23										
01/31/23										
Average:						0	0	0.24		
High:						0	0	0.24		
Low:						0	0	0.24		
DL/RL:										
Method:		SM9223B-18	SM9223B-18	SM4500-C1 G		SM9223B-18	SM9223B-18	SM4500-C1 G	10/5 EPA 200.8	10/5 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		0/1	0/1	0/1		

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:	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				
01/01/23	due 02/23	due 02/23	due 02/23	due 02/23
01/02/23				
01/03/23				
01/04/23				
01/05/23				
01/06/23				
01/07/23				
01/08/23				
01/09/23				
01/10/23				
01/11/23				
01/12/23				
01/13/23				
01/14/23				
01/15/23				
01/16/23				
01/17/23				
01/18/23				
01/19/23				
01/20/23				
01/21/23				
01/22/23				
01/23/23				
01/24/23				
01/25/23				
01/26/23				
01/27/23				
01/28/23				
01/29/23				
01/30/23				
01/31/23				

Average:
 High:
 Low:

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:	0/0	0/0	0/0	0/0	0/0	0/0

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:	LHW	LHW	Raw Water	Raw Water	Raw Water	TreatedWtr	Raw Water
Test:	OPERATOR	ACTIONS	PH	ALKALINITY	IRON	IRON	NITRATE-N
Units:	units	comments	std units	mg/L-CaCO3	ug/L	ug/L	mg/L
Type:	observation	observation	grab	grab	grab	grab	grab
Frequency:	as needed	as needed	weekly	as needed	every 3 mo	every 3 mo	every 3 mo
Date							
01/01/23					due 02/23	due 02/23	
01/02/23							
01/03/23							
01/04/23							
01/05/23							
01/06/23							
01/07/23							
01/08/23							
01/09/23							
01/10/23							
01/11/23							
01/12/23							
01/13/23							
01/14/23							
01/15/23							
01/16/23							
01/17/23							
01/18/23							
01/19/23							
01/20/23							
01/21/23							
01/22/23							
01/23/23							
01/24/23							
01/25/23							< 0.4
01/26/23							
01/27/23	KB		8.65				
01/28/23							
01/29/23							
01/30/23							
01/31/23							
Average:			8.65				< 0.4
High:			8.65				< 0.4
Low:			8.65				< 0.4
DL/RL:				3/2	20/20	20/10	0.07/0.4
Method:			SM4500-H+ B	SM2320 B	EPA 200.8	EPA 200.8	SM4500-N03 D
Limit1:							mx d <= 10
Over/Total:							0/1

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:	DelTruck	DelTruck	DelTruck	DelTruck	MainStorEf	MainStorEf	MainStorEf	MainStorEf
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:	as needed	as needed	as needed	as needed	as needed	as needed	as needed	as needed
Date								
01/01/23								
01/02/23								
01/03/23								
01/04/23								
01/05/23								
01/06/23								
01/07/23								
01/08/23								
01/09/23								
01/10/23								
01/11/23								
01/12/23								
01/13/23								
01/14/23								
01/15/23								
01/16/23								
01/17/23								
01/18/23								
01/19/23								
01/20/23								
01/21/23								
01/22/23								
01/23/23								
01/24/23	Other	Absence	Absence	0.33				
01/25/23	Other	Absence	Absence	0.59				
01/26/23	Other	Absence	Absence	0.67				
01/27/23								
01/28/23								
01/29/23								
01/30/23								
01/31/23	Other	Absence	Absence	0.80	Other	Absence	Absence	0.55
Average:		0	0	0.60		0	0	0.55
High:		0	0	0.80		0	0	0.55
Low:		0	0	0.33		0	0	0.55
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:		0/4	0/4	0/4		0/1	0/1	0/1

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: January 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										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27	8.17						0.05	0.05	0.05	2.1
28	5.59					0.06	0.04	0.04	0.05	1.8
29	9.44		0.04	0.03		0.04	0.04	0.03	0.04	2.1
30	11.07		0.04	0.03				0.05	0.04	2.2
31	5.50		0.03	0.21		0.04			0.09	1.9
Ave.	7.95								0.05	

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

Total No. of Samples: 16 No. of Readings ≤ 0.3 NTU: 16

% 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 = 99%

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): 0.098

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

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

