



Amanda Fritz, Commissioner
 Michael Stuhr, P.E., Administrator

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DATE: April 15, 2020 WQ 0.10.14.4

TO: Oregon Health Authority, Drinking Water Services

**SUBJECT: Monthly Report for March 2020
 Bilateral Compliance Agreement
 Intake *Cryptosporidium* Results
 PWS # 4100657**

To Whom It May Concern:

Enclosed are results of laboratory analyses for *Cryptosporidium* from the Bull Run raw water intake for March. Monitoring for *Cryptosporidium* at the Bull Run intake is done to comply with the interim measures of the Bilateral Compliance Agreement (Oregon Health Authority, December 18, 2017).

Analyses for *Cryptosporidium* and *Giardia* were performed by the PWB Laboratory (see attached report). Also attached are copies of the monthly turbidity and raw coliform reports previously submitted to OHA in compliance with the SWTR. Results for the reporting month are summarized below:

***Cryptosporidium*, *Giardia*, Turbidity and Fecal Coliforms Data Summary for the Reporting Month**

<i>Cryptosporidium</i> and <i>Giardia</i> Field Samples				<i>Cryptosporidium</i> Recoveries		Fecal Coliforms	Turbidity
No. of Samples	Total Volume (L)	Total No. <i>Cryptosporidium</i> Oocysts	Total No. <i>Giardia</i> Cysts	No. of Matrix Spikes	Average Matrix Spike Recovery (%)	Highest Count (CFU/100 mL)	Highest Reading (NTU)
19	950	5	1	2	83.4	1	0.47

If you have any questions regarding these results, please contact me at 503-823-6135.

Sincerely,

Ann Levy
 Senior Environmental Program Manager

Transmitted: Four pages (including this transmittal memo) emailed to dwp.dmce@state.or.us on this date.



Portland Water Bureau Laboratory
2010 N Interstate Ave, Portland, OR 97227

Cryptosporidium and Giardia Laboratory Analysis Report

Water System Information			Sample Information		
PWS ID:	OR4100657		Collection Month & Year:	March 2020	
PWS Name:	Portland Water Bureau 1900 N Interstate Avenue Portland, Oregon 97227		Report Date:	April 7, 2020	
County:	Multnomah		Monitoring Regime:	Bilateral Compliance Agreement	
			Source Water:	Bull Run Intake - WTP-A	

PWB Sample ID	Loc ID	Sample Collection Date	Sample Type	Sample Volume Filtered (L)	Analysis Method	Cryptosporidium			Giardia		
						No. of Oocysts Spiked	No. of Oocysts Counted	Oocyst Matrix Spike Recovery (%)	No. of Cysts Spiked	No. of Cysts Counted	Cyst Matrix Spike Recovery (%)
BC35892	Intake 2PIS	3/1/2020	Field	50	1623.1	0	1		0.0	0	
BC35893	Intake 2PIS	3/2/2020	Field	50	1623.1	0	0		0.0	0	
BC35894	Intake 2PIS	3/2/2020	MS	50.75	1623.1	99	79	79.8	99	76	76.8
BC35895	Intake 2PIS	3/3/2020	Field	50	1623.1	0	1		0.0	1	
BC35896	Intake 2PIS	3/4/2020	Field	50	1623.1	0	1		0.0	0	
BC36174	Intake 2PIS	3/8/2020	Field	50	1623.1	0	0		0.0	0	
BC36175	Intake 2PIS	3/9/2020	Field	50	1623.1	0	0		0.0	0	
BC36176	Intake 2PIS	3/10/2020	Field	50	1623.1	0	0		0.0	0	
BC36177	Intake 2PIS	3/11/2020	Field	50	1623.1	0	0		0.0	0	
BC36414	Intake 2PIS	3/15/2020	Field	50	1623.1	0	0		0.0	0	
BC36415	Intake 2PIS	3/16/2020	Field	50	1623.1	0	1		0.0	0	
BC36416	Intake 2PIS	3/17/2020	Field	50	1623.1	0	0		0.0	0	
BC36417	Intake 2PIS	3/18/2020	Field	50	1623.1	0	0		0.0	0	
BC36492	Intake 2PIS	3/22/2020	Field	50	1623.1	0	0		0.0	0	
BC36493	Intake 2PIS	3/23/2020	Field	50	1623.1	0	0		0.0	0	
BC36494	Intake 2PIS	3/24/2020	Field	50	1623.1	0	0		0.0	0	
BC36495	Intake 2PIS	3/25/2020	Field	50	1623.1	0	0		0.0	0	
BC36506	Intake 2PIS	3/29/2020	Field	50	1623.1	0	0		0.0	0	
BC36753	Intake 2PIS	3/30/2020	Field	50	1623.1	0	0		0.0	0	
BC36754	Intake 2PIS	3/30/2020	MS	50.5	1623.1	99	86	86.9	99	78	78.8
BC36508	Intake 2PIS	3/31/2020	Field	50	1623.1	0	1		0.0	0	

Unless otherwise noted, all data were generated in accordance with EPA Method 1623/1623.1 and 100% of the filtered volume was examined for each sample.

Reviewed by Mark Ferry

Date Reviewed: 04/13/20

OHA - Drinking Water Services - Turbidity Monitoring Report Form

County: Multnomah

Slow Sand, Membrane, Diatomaceous Earth Filtration, or Unfiltered Systems

System Name: Portland Water Bureau

ID #: OR 4100657

WTP: WTP- A

Month/Year: 3/2020

DAY	12 AM (NTU)	4 AM (NTU)	8 AM (NTU)	NOON (NTU)	4 PM (NTU)	8 PM (NTU)	Highest Reading (NTU)
1	0.43	0.42	0.43	0.42	0.42	0.43	0.43
2	0.42	0.42	0.40	0.41	0.41	0.41	0.42
3	0.41	0.41	0.40	0.44	0.43	0.43	0.44
4	0.40	0.39	0.40	0.39	0.40	0.40	0.40
5	0.43	0.40	0.42	0.41	0.39	0.40	0.43
6	0.40	0.39	0.39	0.39	0.38	0.39	0.40
7	0.38	0.39	0.38	0.39	0.38	0.39	0.39
8	0.38	0.39	0.39	0.40	0.40	0.39	0.40
9	0.38	0.40	0.38	0.40	0.38	0.38	0.40
10	0.38	0.39	0.39	0.40	0.38	0.38	0.40
11	0.38	0.39	0.40	0.38	0.37	0.35	0.40
12	0.35	0.37	0.37	0.40	0.37	0.34	0.40
13	0.35	0.38	0.39	0.37	0.35	0.35	0.39
14	0.38	0.39	0.39	0.43	0.44	0.47	0.47
15	0.40	0.40	0.41	0.42	0.43	0.43	0.43
16	0.42	0.43	0.43	0.44	0.45	0.45	0.45
17	0.45	0.44	0.44	0.45	0.45	0.45	0.45
18	0.45	0.46	0.44	0.44	0.43	0.41	0.46
19	0.42	0.44	0.45	0.45	0.43	0.41	0.45
20	0.43	0.44	0.45	0.43	0.39	0.38	0.45
21	0.39	0.43	0.44	0.40	0.40	0.40	0.44
22	0.41	0.43	0.43	0.41	0.39	0.40	0.43
23	0.39	0.40	0.38	0.38	0.39	0.39	0.40
24	0.39	0.37	0.39	0.38	0.38	0.39	0.39
25	0.38	0.37	0.37	0.38	0.38	0.39	0.39
26	0.38	0.39	0.37	0.38	0.35	0.37	0.39
27	0.35	0.37	0.36	0.37	0.38	0.37	0.38
28	0.38	0.38	0.38	0.37	0.38	0.38	0.38
29	0.38	0.37	0.35	0.37	0.36	0.36	0.38
30	0.34	0.34	0.34	0.33	0.35	0.35	0.35
31	0.36	0.38	0.38	0.36	0.36	0.38	0.38

Slow Sand/Membrane/DE Filtration/Unfiltered		Monthly summary	
95% of daily turbidity readings ≤ 1 NTU? ¹	CT's met everyday?	Chlorine residual at entry point always ≥ 0.2 mg/L?	Chlorine residual measured in 95% of distribution samples?
N/A			
All daily turb readings ≤ 5 NTU? Yes	Yes	Yes	Yes

¹Filtered systems only

Printed Name: Anna Vosa, P.E.

Phone: (503) 823-7598

Signature: 

Date: 4/8/20

OHA Drinking Water Services - Raw Coliform Data (Unfiltered)

Portland Water Bureau

ID#: OR 4100657

Month/Year: 03/2020

Date	Fecal Coliform (CFU/100mL)	Comments
3/1/2020	<1	
3/2/2020	<1	
3/3/2020	<1	
3/4/2020	1	
3/5/2020	<1	
3/6/2020	<1	
3/7/2020	<1	
3/8/2020	<1	
3/9/2020	<1	
3/10/2020	<1	
3/11/2020	<1	
3/12/2020	<1	
3/13/2020	<1	
3/14/2020	1	
3/15/2020	<1	
3/16/2020	<1	
3/17/2020	1	
3/18/2020	<1	
3/19/2020	<1	
3/20/2020	1	
3/23/2020	<1	
3/24/2020	<1	
3/25/2020	<1	
3/26/2020	<1	
3/27/2020	<1	
3/30/2020	<1	
3/31/2020	<1	

Note: Fecal Coliform sampled at active Headworks Raw Water Intake (either 2P or 2PIS)

Six Month Summary:

# of Samples For Fecal Coliform:	179
# of Samples > 20 CFU/100mL:	0
Percent:	0.0%