



Mingus Mapps, Commissioner
 Gabriel Solmer, Director

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 www.portlandoregon.gov/water



DATE: February 12, 2021

WQ 0.10.14.4

TO: Oregon Health Authority, Drinking Water Services

**SUBJECT: Monthly Report for January 2021
 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 January. 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)
17	850	32	8	1	71.7	2	1.74

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

Sincerely,

Ann Levy
 Sr. 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

<u>Water System Information</u>				<u>Sample Information</u>			
PWS ID:	OR4100657			Collection Month & Year:	January 2021		
PWS Name:	Portland Water Bureau 1900 N Interstate Avenue Portland, Oregon 97227			Report Date:	February 4, 2021		
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	<u>Cryptosporidium</u>			<u>Giardia</u>		
						No. of Oocysts Spiked	No. of Oocysts Counted	Oocyst Matrix Spike Recovery (%)	No. of Cysts Spiked	No. of Cysts Counted	Cyst Matrix Spike Recovery (%)
BC49315	Intake 2PIS	1/3/2021	Field	50	1623.1	0	0		0	0	
BC49316	Intake 2PIS	1/4/2021	Field	50	1623.1	0	0		0	0	
BC49317	Intake 2PIS	1/4/2021	MS	51	1623.1	99	71	71.7	101	57	56.4
BC49318	Intake 2PIS	1/5/2021	Field	50	1623.1	0	1		0	0	
BC49319	Intake 2PIS	1/6/2021	Field	50	1623.1	0	2		0	0	
BC49684	Intake 2PIS	1/10/2021	Field	50	1623.1	0	0		0	0	
BC49685	Intake 2PIS	1/11/2021	Field	50	1623.1	0	2		0	4	
BC49686	Intake 2PIS	1/12/2021	Field	50	1623.1	0	2		0	1	
BC49687	Intake 2PIS	1/13/2021	Field	50	1623.1	0	1		0	0	
BC50013	Intake 2PIS	1/17/2021	Field	50	1623.1	0	2		0	0	
BC50014	Intake 2PIS	1/18/2021	Field	50	1623.1	0	3		0	0	
BC50015	Intake 2PIS	1/19/2021	Field	50	1623.1	0	1		0	1	
BC50016	Intake 2PIS	1/20/2021	Field	50	1623.1	0	3		0	1	
BC50165	Intake 2PIS	1/24/2021	Field	50	1623.1	0	4		0	0	
BC50166	Intake 2PIS	1/25/2021	Field	50	1623.1	0	2		0	1	
BC50167	Intake 2PIS	1/26/2021	Field	50	1623.1	0	2		0	0	
BC50168	Intake 2PIS	1/27/2021	Field	50	1623.1	0	2		0	0	
BC50613	Intake 2PIS	1/31/2021	Field	50	1623.1	0	5		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 D. Ottilia Dem

Date Reviewed: 02.08.2021

OHA - Drinking Water Services - Turbidity Monitoring Report Form

County: Multnomah

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

Portland Water Bureau

ID #: OR 4100657


WTP-A

Month/Year: 01/2021

DAY	12 AM (NTU)	4 AM (NTU)	8 AM (NTU)	NOON (NTU)	4 PM (NTU)	8 PM (NTU)	Highest Reading (NTU)
1	1.45	1.47	1.47	1.48	1.43	1.43	1.48
2	1.33	1.31	1.30	1.22	1.19	1.18	1.33
3	1.17	1.15	1.08	1.10	1.06	1.08	1.17
4	1.07	1.09	1.07	1.00	0.98	0.97	1.09
5	0.97	0.93	0.95	0.98	0.98	0.91	0.98
6	0.89	0.80	0.79	0.80	0.80	0.79	0.89
7	0.80	0.80	0.82	0.82	0.76	0.72	0.82
8	0.74	0.74	0.74	0.74	0.74	0.74	0.74
9	0.74	0.72	0.71	0.71	0.71	0.70	0.74
10	0.69	0.68	0.67	0.66	0.67	0.66	0.69
11	0.66	0.66	0.65	0.65	0.65	0.64	0.66
12	0.63	0.63	0.61	0.61	0.61	0.61	0.63
13	0.63	0.73	0.81	0.71	0.87	1.03	1.03
14	0.95	0.87	0.82	0.81	0.90	1.08	1.08
15	1.13	1.14	1.18	1.13	1.14	1.07	1.18
16	1.18	1.47	1.64	1.74	1.41	1.24	1.74
17	1.47	1.44	1.40	1.43	1.39	1.49	1.49
18	1.47	1.52	1.53	1.54	1.53	1.44	1.54
19	1.58	1.57	1.66	1.66	1.57	1.58	1.66
20	1.61	1.57	1.57	1.58	1.49	1.50	1.61
21	1.53	1.49	1.46	1.42	1.44	1.59	1.59
22	1.60	1.59	1.58	1.54	1.54	1.53	1.60
23	1.52	1.49	1.48	1.47	1.48	1.49	1.52
24	1.47	1.45	1.43	1.43	1.40	1.38	1.47
25	1.36	1.33	1.33	1.31	1.29	1.28	1.36
26	1.27	1.25	1.25	1.25	1.29	1.28	1.29
27	1.23	1.23	1.21	1.20	1.20	1.18	1.23
28	1.18	1.17	1.16	1.17	1.16	1.16	1.18
29	1.16	1.13	1.13	1.13	1.12	1.08	1.16
30	1.07	1.05	1.05	1.06	1.06	1.04	1.07
31	1.02	1.02	1.01	1.00	1.00	0.98	1.02

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

¹Filtered systems only

Signature: 
 Anna Vosa, P.E.

Date: 2/9/21

OHA Drinking Water Services - Raw Coliform Data (Unfiltered)

Portland Water Bureau

ID#: OR 4100657

Month/Year: 01/2021

Date	Fecal Coliform (CFU/100mL)	Comments
1/1/2021	1	
1/2/2021	1	
1/3/2021	1	
1/4/2021	1	
1/5/2021	2	
1/6/2021	1	
1/7/2021	2	
1/8/2021	<1	
1/9/2021	<1	
1/10/2021	1	
1/11/2021	1	
1/12/2021	<1	
1/13/2021	1	
1/14/2021	<1	
1/15/2021	1	
1/16/2021	1	
1/17/2021	1	
1/18/2021	1	
1/19/2021	1	
1/20/2021	1	
1/21/2021	2	
1/22/2021	<1	
1/23/2021	<1	
1/24/2021	<1	
1/25/2021	<1	
1/26/2021	<1	
1/27/2021	1	
1/28/2021	1	
1/29/2021	<1	
1/30/2021	<1	
1/31/2021	<1	

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

Six Month Summary:

# of Samples For Fecal Coliform:	184
# of Samples > 20 CFU/100mL:	0
Percent:	0.0%