



Mingus Mapps, Commissioner  
Gabriel Solmer, Director



1120 SW 5<sup>th</sup> Avenue, Room 600  
Portland, Oregon 97204-1926  
Information: 503-823-7404  
www.portlandoregon.gov/water

**DATE:** February 15, 2022

WQ 0.10.14.4

**TO:** Oregon Health Authority, Drinking Water Services

**SUBJECT:** Monthly Report for January 2022  
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**

<b><i>Cryptosporidium</i> and <i>Giardia</i> Field Samples</b>				<b><i>Cryptosporidium</i> Recoveries</b>		<b>Fecal Coliforms</b>	<b>Turbidity</b>
<b>No. of Samples</b>	<b>Total Volume (L)</b>	<b>Total No. <i>Cryptosporidium</i> Oocysts</b>	<b>Total No. <i>Giardia</i> Cysts</b>	<b>No. of Matrix Spikes</b>	<b>Average Matrix Spike Recovery (%)</b>	<b>Highest Count (CFU/100 mL)</b>	<b>Highest Reading (NTU)</b>
18	900	11	1	1	75.8	2	1.34

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

Sincerely,

Ann Levy  
Environmental Manager

**Transmitted:** Four pages (including this transmittal memo) emailed to [dwp.dmce@state.or.us](mailto: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>			
<b>PWS ID:</b>	OR4100657			<b>Collection Month &amp; Year:</b>	Jan. 2022		
<b>PWS Name:</b>	Portland Water Bureau 1900 N Interstate Avenue Portland, Oregon 97227			<b>Report Date:</b>	February 3, 2022		
<b>County:</b>	Multnomah			<b>Monitoring Regime:</b>	Bilateral Compliance Agreement		
				<b>Source Water:</b>	Bull Run Intake - WTP-A		

PWB Sample ID	Loc ID	Sample Collection Date	Sample Type	Sample Volume Filtered (L)	Analysis Method	<i>Cryptosporidium</i>			<i>Giardia</i>		
						No. of Oocysts Spiked	No. of Oocysts Counted	Oocyst Matrix Spike Recovery (%)	No. of Cysts Spiked	No. of Cysts Counted	Cyst Matrix Spike Recovery (%)
BC67190	Intake 2PIS	1/2/2022	Field	50	1623.1	0	0		0	0	
BC67191	Intake 2PIS	1/3/2022	Field	50	1623.1	0	0		0	0	
BC67192	Intake 2PIS	1/4/2022	Field	50	1623.1	0	1		0	0	
BC67193	Intake 2PIS	1/4/2022	MS	50	1623.1	99	76	75.8	99	89	89.9
BC67194	Intake 2PIS	1/5/2022	Field	50	1623.1	0	1		0	0	
BC67751	Intake 2PIS	1/9/2022	Field	50	1623.1	0	0		0	0	
BC67752	Intake 2PIS	1/10/2022	Field	50	1623.1	0	1		0	0	
BC67753	Intake 2PIS	1/11/2022	Field	50	1623.1	0	1		0	0	
BC67754	Intake 2PIS	1/12/2022	Field	50	1623.1	0	0		0	0	
BC67896	Intake 2PIS	1/16/2022	Field	50	1623.1	0	1		0	0	
BC67897	Intake 2PIS	1/17/2022	Field	50	1623.1	0	1		0	0	
BC67898	Intake 2PIS	1/18/2022	Field	50	1623.1	0	0		0	0	
BC67899	Intake 2PIS	1/19/2022	Field	50	1623.1	0	2		0	0	
BC68213	Intake 2PIS	1/23/2022	Field	50	1623.1	0	0		0	0	
BC68214	Intake 2PIS	1/24/2022	Field	50	1623.1	0	1		0	1	
BC68215	Intake 2PIS	1/25/2022	Field	50	1623.1	0	0		0	0	
BC68216	Intake 2PIS	1/26/2022	Field	50	1623.1	0	0		0	0	
BC68474	Intake 2PIS	1/30/2022	Field	50	1623.1	0	1		0	0	
BC68475	Intake 2PIS	1/31/2022	Field	50	1623.1	0	1		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 Marsha Farooqui

Date Reviewed: 02/03/2022

# 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: 01/2022**

DAY	12 AM (NTU)	4 AM (NTU)	8 AM (NTU)	NOON (NTU)	4 PM (NTU)	8 PM (NTU)	Highest Reading (NTU)
1	0.29	0.33	0.29	0.35	0.29	0.28	<b>0.35</b>
2	0.30	0.28	0.28	0.28	0.28	0.30	<b>0.30</b>
3	0.28	0.29	0.29	0.32	0.30	0.29	<b>0.32</b>
4	0.30	0.28	0.28	0.33	0.28	0.28	<b>0.33</b>
5	0.28	0.28	0.29	0.29	0.30	0.29	<b>0.30</b>
6	0.29	0.30	0.28	0.33	0.34	0.45	<b>0.45</b>
7	0.91	1.00	1.22	1.18	1.08	0.99	<b>1.22</b>
8	0.90	0.91	1.01	1.22	1.33	1.21	<b>1.33</b>
9	1.22	1.12	1.16	1.16	1.17	1.16	<b>1.22</b>
10	1.17	1.16	1.13	1.16	1.13	1.16	<b>1.17</b>
11	1.17	1.14	1.14	1.16	1.28	1.33	<b>1.33</b>
12	1.34	1.23	1.23	1.23	1.25	1.34	<b>1.34</b>
13	1.28	1.34	1.28	1.30	1.29	1.24	<b>1.34</b>
14	1.25	1.25	1.22	1.24	1.27	1.28	<b>1.28</b>
15	1.30	1.27	1.23	1.22	1.21	1.17	<b>1.30</b>
16	1.17	1.18	1.13	1.14	1.13	1.10	<b>1.18</b>
17	1.13	1.13	1.12	1.13	1.12	1.11	<b>1.13</b>
18	1.07	1.06	1.04	1.03	1.03	1.02	<b>1.07</b>
19	1.03	1.02	1.02	1.01	1.08	1.07	<b>1.08</b>
20	1.25	1.02	0.97	0.98	1.06	1.01	<b>1.25</b>
21	0.95	0.85	0.84	0.88	0.87	0.89	<b>0.95</b>
22	0.86	0.86	0.85	0.85	0.84	0.81	<b>0.86</b>
23	0.80	0.77	0.77	0.77	0.76	0.74	<b>0.80</b>
24	0.70	0.70	0.68	0.69	0.65	0.64	<b>0.70</b>
25	0.62	0.61	0.61	0.60	0.56	0.56	<b>0.62</b>
26	0.59	0.59	0.58	0.58	0.71	0.70	<b>0.71</b>
27	0.75	0.76	0.71	0.74	0.80	0.70	<b>0.80</b>
28	0.69	0.63	0.61	0.61	0.62	0.60	<b>0.69</b>
29	0.59	0.60	0.59	0.58	0.60	0.58	<b>0.60</b>
30	0.60	0.58	0.56	0.56	0.56	0.56	<b>0.60</b>
31	0.56	0.55	0.55	0.56	0.56	0.55	<b>0.56</b>

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

<sup>1</sup>Filtered systems only

Signature:   
 Anna Vosa, P.E.

Date: 2/9/22

## OHA Drinking Water Services - Raw Coliform Data (Unfiltered)

Portland Water Bureau

ID#: OR 4100657

Month/Year: 01/2022

Date	Fecal Coliform (CFU/100mL)	Comments
1/1/2022	1	
1/2/2022	<1	
1/3/2022	<1	
1/4/2022	<1	
1/5/2022	1	
1/6/2022	1	
1/7/2022	1	
1/8/2022	1	
1/9/2022	2	
1/10/2022	1	
1/11/2022	<1	
1/12/2022	1	
1/13/2022	1	
1/14/2022	1	
1/15/2022	1	
1/16/2022	<1	
1/17/2022	1	
1/18/2022	1	
1/19/2022	1	
1/20/2022	1	
1/21/2022	1	
1/22/2022	1	
1/23/2022	<1	
1/24/2022	1	
1/25/2022	<1	
1/26/2022	<1	
1/27/2022	1	
1/28/2022	1	
1/29/2022	<1	
1/30/2022	<1	
1/31/2022	<1	

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

**Six Month Summary:**

# of Samples For Fecal Coliform:	182
# of Samples > 20 CFU/100mL:	0
Percent:	0.0%