



Mingus Mapps, Commissioner
Gabriel Solmer, Director



1120 SW Fifth Avenue, Room 405
Portland, Oregon 97204-1926
Information: 503-823-7404
Portland.gov/water

DATE: December 14, 2023

WQ 0.10.14.4

TO: Oregon Health Authority, Drinking Water Services

**SUBJECT: Monthly Report for November 2023
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 November. Monitoring for *Cryptosporidium* at the Bull Run intake is done to comply with the interim measures of the Bilateral Compliance Agreement (Oregon Health Authority, Revised November 17, 2023).

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)
22	850	12	4	1	74.8	5	0.97

If you have any questions regarding these results, please contact me at 503-545-8190.

Sincerely,

Ann Levy
Environmental Manager

Transmitted: Four pages (including this transmittal memo) emailed to dup.dmce@odhsoha.oregon.gov 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:	Nov. 2023		
PWS Name:	Portland Water Bureau 1900 N Interstate Avenue Portland, Oregon 97227			Report Date:	December 6, 2023		
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 (%)
BD04741	Intake 2PIS	11/1/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD04742	Intake 2PIS	11/1/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD04939	Intake 2PIS	11/5/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD04940	Intake 2PIS	11/5/2023	Field	25	PWBL-SOP-61 3	0	1		0	0	
BD04941	Intake 2PIS	11/6/2023	Field	25	PWBL-SOP-61 3	0	1		0	0	
BD04942	Intake 2PIS	11/6/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD04943	Intake 2PIS	11/7/2023	Field	25	PWBL-SOP-61 3	0	2		0	1	
BD04944	Intake 2PIS	11/7/2023	Field	25	PWBL-SOP-61 3	0	1		0	1	
BD04945	Intake 2PIS	11/8/2023	Field	25	PWBL-SOP-61 3	0	0		0	1	
BD04946	Intake 2PIS	11/8/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD05245	Intake 2PIS	11/12/2023	Field	50	1623.1	0	1		0	0	
BD05246	Intake 2PIS	11/13/2023	Field	50	1623.1	0	0		0	0	
BD05249	Intake 2PIS	11/13/2023	MS	50.75	1623.1	99	74	74.8	99	85	85.8
BD05247	Intake 2PIS	11/14/2023	Field	50	1623.1	0	1		0	0	
BD05248	Intake 2PIS	11/15/2023	Field	50	1623.1	0	0		0	0	
BD05464	Intake 2PIS	11/19/2023	Field	50	1623.1	0	0		0	0	
BD05465	Intake 2PIS	11/20/2023	Field	50	1623.1	0	0		0	0	
BD05466	Intake 2PIS	11/21/2023	Field	50	1623.1	0	0		0	0	
BD05467	Intake 2PIS	11/22/2023	Field	50	1623.1	0	3		0	0	
BD05779	Intake 2PIS	11/26/2023	Field	50	1623.1	0	0		0	1	
BD05780	Intake 2PIS	11/27/2023	Field	50	1623.1	0	0		0	0	
BD05781	Intake 2PIS	11/28/2023	Field	50	1623.1	0	1		0	0	
BD05782	Intake 2PIS	11/29/2023	Field	50	1623.1	0	1		0	0	

Unless otherwise noted, all data were generated in accordance with EPA Method 1623-modified(PWBL-SOP-61 3)/1623.1 and 100% of the filtered volume was examined for each sample.

Reviewed by Marsha Farooqui

Date Reviewed: 12/07/2023

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: 11/2023

DAY	12 AM (NTU)	4 AM (NTU)	8 AM (NTU)	NOON (NTU)	4 PM (NTU)	8 PM (NTU)	Highest Reading (NTU)
1	0.54	0.54	0.54	0.53	0.53	0.93	0.93
2	0.62	0.59	0.67	0.60	0.59	0.58	0.67
3	0.59	0.60	0.59	0.56	0.55	0.55	0.60
4	0.53	0.54	0.52	0.55	0.56	0.75	0.75
5	0.59	0.59	0.58	0.60	0.64	0.69	0.69
6	0.70	0.71	0.74	0.72	0.84	0.91	0.91
7	0.91	0.87	0.97	0.93	0.86	0.82	0.97
8	0.74	0.75	0.74	0.72	0.78	0.85	0.85
9	0.80	0.80	0.78	0.78	0.77	0.77	0.80
10	0.76	0.77	0.75	0.76	0.75	0.75	0.77
11	0.74	0.72	0.72	0.74	0.74	0.71	0.74
12	0.71	0.69	0.67	0.67	0.69	0.70	0.71
13	0.67	0.67	0.67	0.67	0.66	0.67	0.67
14	0.65	0.63	0.62	0.62	0.61	0.62	0.65
15	0.61	0.95	0.69	0.66	0.64	0.61	0.95
16	0.61	0.60	0.60	0.59	0.59	0.59	0.61
17	0.59	0.58	0.55	0.55	0.55	0.55	0.59
18	0.55	0.55	0.54	0.55	0.55	0.55	0.55
19	0.54	0.55	0.56	0.55	0.53	0.53	0.56
20	0.53	0.55	0.54	0.53	0.52	0.52	0.55
21	0.52	0.49	0.48	0.49	0.49	0.51	0.52
22	0.49	0.48	0.47	0.48	0.48	0.48	0.49
23	0.48	0.47	0.47	0.45	0.46	0.48	0.48
24	0.48	0.46	0.45	0.46	0.47	0.46	0.48
25	0.45	0.45	0.44	0.44	0.45	0.45	0.45
26	0.44	0.43	0.44	0.42	0.42	0.42	0.44
27	0.43	0.43	0.43	0.42	0.43	0.43	0.43
28	0.43	0.44	0.43	0.42	0.43	0.43	0.44
29	0.43	0.43	0.41	0.41	0.41	0.40	0.43
30	0.39	0.39	0.39	0.39	0.40	0.39	0.40

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?	Chlorine residual measured in 95% of distribution samples?
All daily turbidity readings ≤ 5 NTU?	Yes	Yes	Yes	Yes

¹Filtered systems only

Signature: Anna Vosa
Anna Vosa, P.E.

Date: 12/7/23

OHA Drinking Water Services - Raw Coliform Data (Unfiltered)

Portland Water Bureau

ID#: OR 4100657

Month/Year: 11/2023

Date	Fecal Coliform (CFU/100mL)	Comments
11/1/2023	1	
11/2/2023	<1	
11/3/2023	<1	
11/4/2023	1	
11/5/2023	<1	
11/6/2023	4	
11/7/2023	5	
11/8/2023	4	
11/9/2023	2	
11/10/2023	4	
11/11/2023	3	
11/12/2023	2	
11/13/2023	3	
11/14/2023	1	
11/15/2023	2	
11/16/2023	2	
11/17/2023	1	
11/18/2023	1	
11/19/2023	1	
11/20/2023	1	
11/21/2023	<1	
11/22/2023	<1	
11/23/2023	1	
11/24/2023	1	
11/25/2023	2	
11/26/2023	<1	
11/27/2023	1	
11/28/2023	<1	
11/29/2023	2	
11/30/2023	1	

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

Six Month Summary:

# of Samples For Fecal Coliform:	183
# of Samples > 20 CFU/100mL:	0
Percent:	0.0%