



DATE: October 13, 2023

WQ 0.10.14.4

TO: Oregon Health Authority, Drinking Water Services

SUBJECT: **Monthly Report for September 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 September. 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)
28	700	0	0	2	79.3	4	0.76

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

Water System Information				Sample Information			
PWS ID:	OR4100657			Collection Month & Year:	Sep. 2023		
PWS Name:	Portland Water Bureau 1900 N Interstate Avenue Portland, Oregon 97227			Report Date:	October 9, 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	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 (%)
BD02326	Intake 2PIS	9/3/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02327	Intake 2PIS	9/3/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02334	Intake 2PIS	9/3/2023	MS	25	PWBL-SOP-61 3	99	80	80.8	100	80	80
BD02328	Intake 2PIS	9/4/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02329	Intake 2PIS	9/4/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02330	Intake 2PIS	9/5/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02331	Intake 2PIS	9/5/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02332	Intake 2PIS	9/6/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02333	Intake 2PIS	9/6/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02571	Intake 2PIS	9/10/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02572	Intake 2PIS	9/10/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02573	Intake 2PIS	9/11/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02574	Intake 2PIS	9/11/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02575	Intake 2PIS	9/12/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02576	Intake 2PIS	9/12/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02577	Intake 2PIS	9/13/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02578	Intake 2PIS	9/13/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02849	Intake 2PIS	9/17/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02857	Intake 2PIS	9/17/2023	MS	25	PWBL-SOP-61 3	99	77	77.8	100	82	82
BD02850	Intake 2PIS	9/17/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02851	Intake 2PIS	9/18/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02852	Intake 2PIS	9/18/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02853	Intake 2PIS	9/19/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02854	Intake 2PIS	9/19/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02855	Intake 2PIS	9/20/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD02856	Intake 2PIS	9/20/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD03087	Intake 2PIS	9/24/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD03088	Intake 2PIS	9/24/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD03089	Intake 2PIS	9/26/2023	Field	25	PWBL-SOP-61 3	0	0		0	0	
BD03090	Intake 2PIS	9/26/2023	Field	25	PWBL-SOP-61 3	0	0		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: 10/11/2023

OHA Drinking Water Services - Raw Coliform Data (Unfiltered)

Portland Water Bureau

ID#: OR 4100657

Month/Year: 09/2023

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

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: 09/2023

DAY	12 AM (NTU)	4 AM (NTU)	8 AM (NTU)	NOON (NTU)	4 PM (NTU)	8 PM (NTU)	Highest Reading (NTU)
1	0.43	0.43	0.42	0.39	0.40	0.40	0.43
2	0.44	0.43	0.44	0.42	0.42	0.43	0.44
3	0.45	0.44	0.46	0.43	0.44	0.44	0.46
4	0.46	0.47	0.49	0.46	0.44	0.45	0.49
5	0.47	0.48	0.48	0.45	0.43	0.44	0.48
6	0.47	0.48	0.47	0.44	0.44	0.45	0.48
7	0.48	0.49	0.49	0.47	0.46	0.45	0.49
8	0.48	0.48	0.49	0.44	0.46	0.47	0.49
9	0.49	0.49	0.50	0.51	0.48	0.48	0.51
10	0.50	0.50	0.49	0.45	0.45	0.45	0.50
11	0.49	0.49	0.48	0.45	0.46	0.47	0.49
12	0.51	0.51	0.49	0.47	0.47	0.49	0.51
13	0.50	0.52	0.52	0.50	0.48	0.51	0.52
14	0.52	0.53	0.50	0.47	0.48	0.48	0.53
15	0.50	0.51	0.51	0.47	0.47	0.48	0.51
16	0.50	0.50	0.51	0.50	0.49	0.51	0.51
17	0.51	0.53	0.53	0.50	0.48	0.50	0.53
18	0.53	0.53	0.53	0.50	0.49	0.50	0.53
19	0.53	0.54	0.55	0.50	0.48	0.49	0.55
20	0.53	0.53	0.53	0.53	0.55	0.54	0.55
21	0.55	0.55	0.52	0.50	0.49	0.55	0.55
22	0.59	0.60	0.58	0.52	0.51	0.61	0.61
23	0.69	0.65	0.62	0.65	0.69	0.76	0.76
24	0.62	0.64	0.60	0.56	0.53	0.53	0.64
25	0.51	0.47	0.48	0.45	0.45	0.46	0.51
26	0.49	0.52	0.53	0.49	0.50	0.46	0.53
27	0.48	0.46	0.45	0.42	0.44	0.45	0.48
28	0.48	0.49	0.48	0.44	0.45	0.45	0.49
29	0.45	0.44	0.48	0.42	0.43	0.42	0.48
30	0.43	0.42	0.43	0.41	0.40	0.43	0.43

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: 10/6/2023