



Nick Fish, Commissioner  
 Michael Stuhr, P.E., Administrator



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

**DATE:** November 9, 2016

WQ 0.10.14.4

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

**SUBJECT: Monthly Report for October 2016  
 Bull Run Treatment Variance and LT2ESWTR Round 2  
 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 October. Monitoring for *Cryptosporidium* at the Bull Run intake is done to comply with the conditions of Portland’s Bull Run Treatment Variance (OHA Final Order, March 14, 2012). PWB is currently in Observation Monitoring. Compliance turbidity readings at the intake for the reporting month were not greater than 2.0 NTU.

This data is also being submitted to meet the requirements for the second round of monitoring for the Long Term 2 Enhanced Surface Water Treatment Rule. The sample collected on October 11, 2016 is designated as the “LT2 Round 2” sample, in accordance with PWB’s LT2 Round 2 source water monitoring plan submitted to OHA on December 12, 2014.

Analytical Services, Inc. completed the analysis for *Cryptosporidium* (see attached report). A summary of the results for the reporting month and the previous eleven months is shown in the table below:

***Cryptosporidium* Data Summary for the Reporting Month and the Previous Eleven Months.**

Date Range		Total Field Samples	Total Field Sample Volume (L)	Total No. Oocysts Counted in Field Samples	Total Matrix Spikes	Average Matrix Spike Recovery (%)
Reporting Month:	10/01/2016-10/31/2016	45	500.7	0	4	55.8
Previous 11 Months:	11/01/2015-09/30/2016	186	5240.2	0	20	41.0

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

Sincerely,

Ann Levy  
 Environmental Program Manager

**Transmitted:** Two pages (including this transmittal memo) emailed to [dwp.dmce@state.or.us](mailto:dwp.dmce@state.or.us) on this date.



Microbiological Testing, Research & Consulting  
130 Allen Brook Ln., Williston VT 05495

**Cryptosporidium Laboratory Analysis Report**

Water System Information		Sample Information	
<b>PWS ID:</b>	OR4100657	<b>Collection Month &amp; Year:</b>	October 2016
<b>PWS Name:</b>	Portland Water Bureau 1900 N Interstate Avenue Portland, Oregon 97227	<b>Report Date:</b>	November 2, 2016
<b>County:</b>	Multnomah	<b>Monitoring Regime:</b>	Observation
		<b>Source Water:</b>	Bull Run Intake - WTP-A

Analytical Services, Inc. (ASI)

PWB Sample ID	Loc ID	Sample Collection Date	Sample Type	Sample Volume Filtered (L)	No. of Oocysts Spiked	No. of Oocysts Counted	No. Oocysts per Liter	Matrix Spike Recovery (%)	Analysis Method
BB76999	Intake 2PIS	10/2/2016	Field	10.9	0	0	0.00		EPA 1623-Precoat
BB77000	Intake 2PIS	10/2/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB77001	Intake 2PIS	10/2/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB77002	Intake 2PIS	10/2/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB77003	Intake 2PIS	10/2/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77159	Intake 2PIS	10/4/2016	Field	11.3	0	0	0.00		EPA 1623-Precoat
BB77160	Intake 2PIS	10/4/2016	MS	11.3	100	60	5.31	60.0	EPA 1623-Precoat
BB77161	Intake 2PIS	10/4/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB77162	Intake 2PIS	10/4/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB77163	Intake 2PIS	10/4/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB77164	Intake 2PIS	10/4/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB77429	Intake 2PIS	10/9/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB77430	Intake 2PIS	10/9/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77431	Intake 2PIS	10/9/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77432	Intake 2PIS	10/9/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB77433	Intake 2PIS	10/9/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77563	Intake 2PIS	10/11/2016	Field	10.9	0	0	0.00		EPA 1623-Precoat
BB77568	Intake 2PIS	10/11/2016	MS	11.1	100	48	4.34	48.0	EPA 1623-Precoat
BB77566	Intake 2PIS	10/11/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77567	Intake 2PIS	10/11/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77564	Intake 2PIS	10/11/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77565	Intake 2PIS	10/11/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77790	Intake 2PIS	10/16/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB77791	Intake 2PIS	10/16/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB77792	Intake 2PIS	10/16/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77793	Intake 2PIS	10/16/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77794	Intake 2PIS	10/16/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB77892	Intake 2PIS	10/18/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB77893	Intake 2PIS	10/18/2016	MS	10.9	99	53	4.85	53.5	EPA 1623-Precoat
BB77894	Intake 2PIS	10/18/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB77895	Intake 2PIS	10/18/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB77896	Intake 2PIS	10/18/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB77897	Intake 2PIS	10/18/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB78100	Intake 2PIS	10/23/2016	Field	10.6	0	0	0.00		EPA 1623-Precoat
BB78101	Intake 2PIS	10/23/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB78102	Intake 2PIS	10/23/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB78103	Intake 2PIS	10/23/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB78104	Intake 2PIS	10/23/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB78350	Intake 2PIS	10/25/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB78355	Intake 2PIS	10/25/2016	MS	11.3	99	61	5.39	61.6	EPA 1623-Precoat
BB78353	Intake 2PIS	10/25/2016	Field	11.3	0	0	0.00		EPA 1623-Precoat
BB78354	Intake 2PIS	10/25/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB78351	Intake 2PIS	10/25/2016	Field	11.3	0	0	0.00		EPA 1623-Precoat
BB78352	Intake 2PIS	10/25/2016	Field	11.3	0	0	0.00		EPA 1623-Precoat
BB-78649	Intake 2PIS	10/30/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB-78650	Intake 2PIS	10/30/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB-78651	Intake 2PIS	10/30/2016	Field	11.0	0	0	0.00		EPA 1623-Precoat
BB-78652	Intake 2PIS	10/30/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat
BB78653	Intake 2PIS	10/30/2016	Field	11.1	0	0	0.00		EPA 1623-Precoat

**ASI Data Quality Statement:**

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

Reviewed by PSchaden

Date Reviewed: November 2, 2016