



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



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Information: 503-823-7404  
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**DATE:** September 9, 2016

WQ 0.10.14.4

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

**SUBJECT: Monthly Report for August 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 August. 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 August 16, 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:	08/01/2016-08/31/2016	45	513.6	0	5	44.5
Previous 11 Months:	09/01/2015-07/31/2016	186	5216.2	0	19	36.3

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

Sincerely,

Ann Richter  
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	
PWS ID:	OR4100657	Collection Month & Year:	August 2016
PWS Name:	Portland Water Bureau 1900 N Interstate Avenue Portland, Oregon 97227	Report Date:	September 6, 2016
County:	Multnomah	Monitoring Regime:	Observation
		Source Water:	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
BB71823	Intake 2PIS	8/2/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB71828	Intake 2PIS	8/2/2016	MS	11.5	98	61	5.30	62.2	EPA 1623-Precoat
BB71824	Intake 2PIS	8/2/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB71825	Intake 2PIS	8/2/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB71826	Intake 2PIS	8/2/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB71827	Intake 2PIS	8/2/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB72341	Intake 2PIS	8/7/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB72342	Intake 2PIS	8/7/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB72343	Intake 2PIS	8/7/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB72344	Intake 2PIS	8/7/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB72345	Intake 2PIS	8/7/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB72352	Intake 2PIS	8/9/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB72358	Intake 2PIS	8/9/2016	MS	11.5	98	43	3.73	43.9	EPA 1623-Precoat
BB72353	Intake 2PIS	8/9/2016	Field	11.3	0	0	0.00		EPA 1623-Precoat
BB72354	Intake 2PIS	8/9/2016	Field	11.3	0	0	0.00		EPA 1623-Precoat
BB72355	Intake 2PIS	8/9/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB72356	Intake 2PIS	8/9/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73393	Intake 2PIS	8/14/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73394	Intake 2PIS	8/14/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73395	Intake 2PIS	8/14/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73396	Intake 2PIS	8/14/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73397	Intake 2PIS	8/14/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73399	Intake 2PIS	8/16/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB-73404	Intake 2PIS	8/16/2016	MS	11.3	98	44	3.91	44.9	EPA 1623-Precoat
BB-73400	Intake 2PIS	8/16/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73401	Intake 2PIS	8/16/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73402	Intake 2PIS	8/16/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73403	Intake 2PIS	8/16/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73909	Intake 2PIS	8/21/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73910	Intake 2PIS	8/21/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-73911	Intake 2PIS	8/21/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB-73907	Intake 2PIS	8/21/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB-73908	Intake 2PIS	8/21/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB 74006	Intake 2PIS	8/23/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB 74007	Intake 2PIS	8/23/2016	MS	11.3	99	34	3.01	34.3	EPA 1623-Precoat
BB 74008	Intake 2PIS	8/23/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB 74009	Intake 2PIS	8/23/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB 74010	Intake 2PIS	8/23/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB 74011	Intake 2PIS	8/23/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB74410	Intake 2PIS	8/28/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB74411	Intake 2PIS	8/28/2016	Field	11.3	0	0	0.00		EPA 1623-Precoat
BB74412	Intake 2PIS	8/28/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB74413	Intake 2PIS	8/28/2016	Field	11.4	0	0	0.00		EPA 1623-Precoat
BB74414	Intake 2PIS	8/28/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-74515	Intake 2PIS	8/30/2016	Field	11.2	0	0	0.00		EPA 1623-Precoat
BB-74520	Intake 2PIS	8/30/2016	MS	11.5	99	37	3.22	37.4	EPA 1623-Precoat
BB-74516	Intake 2PIS	8/30/2016	Field	11.6	0	0	0.00		EPA 1623-Precoat
BB-74517	Intake 2PIS	8/30/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-74518	Intake 2PIS	8/30/2016	Field	11.5	0	0	0.00		EPA 1623-Precoat
BB-74519	Intake 2PIS	8/30/2016	Field	11.5	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     P. Suberda    

Date Reviewed:     September 6, 2016