PORTLAND WATER BUREAU
FROM FOREST TO FAUCET

Randy Leonard, Commissioner
David G. Shaff, Administrator

1120 SW 5th Avenue, Room 600
Portland, Oregon 97204-1926
Information: 503-823-7404
www.portlandonline.com/water

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DATE: October 8, 2012 WQ 0.10.14.4

TO: Oregon Health Authority
Environmental Public Health
Drinking Water Program

SUBJECT: **Monthly Report for September 2012**
Bull Run Treatment Variance
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 2012. 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.

Analytical Services, Inc. completed the analysis for *Cryptosporidium* (see attached report). Please note that PWB switched to the Modified 1623 (Precoat) method on July 10, 2012. This method modification has previously been validated for PWB's source water in order to improve *Cryptosporidium* recovery during seasonal matrix changes. 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:	09/01/2012 - 09/30/2012	45	450.64	0	4	33.8
Previous 11 Months*:	4/1/2012 – 8/31/2012	104	2201.02	0	14	43.6

*Please note that because April 2012 was the first reporting month under the Bull Run Treatment Variance, this row currently summarizes less than 11 months of monitoring.

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

Sincerely,

Ann Richter

Ann Richter
Environmental Program Manager

Transmitted: Three pages (including this transmittal memo) emailed to dwp.dmce@state.or.us on this date.

Analytical Services, Inc.
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:**	September 2012
PWS Name:	Portland Water Bureau	**Report Date:**	October 4, 2012
	1900 N Interstate Avenue	**Monitoring Regime:**	Observation
	Portland, Oregon 97227	**Source Water:**	Bull Run Intake - WTP-A
County:	Multnomah		

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
BB20908	2P	9/3/2012	Field	9.95	0	0	0.00	-	Modified 1623
BB20909	2P	9/3/2012	Field	10.05	0	0	0.00	-	Modified 1623
BB20910	2P	9/3/2012	Field	10.08	0	0	0.00	-	Modified 1623
BB20911	2P	9/3/2012	Field	10.00	0	0	0.00	-	Modified 1623
BB20912	2P	9/3/2012	Field	10.07	0	0	0.00	-	Modified 1623
BB20939	2P	9/4/2012	Field	9.96	0	0	0.00	-	Modified 1623
BB20940	2P	9/4/2012	Field	9.91	0	0	0.00	-	Modified 1623
BB20941	2P	9/4/2012	Matrix Spike	9.99	100	33	3.30	33.0	Modified 1623
BB20942	2P	9/4/2012	Field	9.93	0	0	0.00	-	Modified 1623
BB20943	2P	9/4/2012	Field	10.08	0	0	0.00	-	Modified 1623
BB20944	2P	9/4/2012	Field	10.02	0	0	0.00	-	Modified 1623
BB21036	2P	9/9/2012	Field	10.03	0	0	0.00	-	Modified 1623
BB21037	2P	9/9/2012	Field	10.01	0	0	0.00	-	Modified 1623
BB21038	2P	9/9/2012	Field	10.03	0	0	0.00	-	Modified 1623
BB21039	2P	9/9/2012	Field	10.03	0	0	0.00	-	Modified 1623
BB21040	2P	9/9/2012	Field	10.07	0	0	0.00	-	Modified 1623
BB21167	2P	9/11/2012	Matrix Spike	10.03	100	23	2.29	23.0	Modified 1623
BB21168	2P	9/11/2012	Field	10.09	0	0	0.00	-	Modified 1623
BB21169	2P	9/11/2012	Field	9.95	0	0	0.00	-	Modified 1623
BB21170	2P	9/11/2012	Field	10.08	0	0	0.00	-	Modified 1623
BB21171	2P	9/11/2012	Field	9.98	0	0	0.00	-	Modified 1623
BB21172	2P	9/11/2012	Field	10.08	0	0	0.00	-	Modified 1623
BB21266	2P	9/16/2012	Field	10.00	0	0	0.00	-	Modified 1623
BB21267	2P	9/16/2012	Field	10.03	0	0	0.00	-	Modified 1623
BB21268	2P	9/16/2012	Field	10.01	0	0	0.00	-	Modified 1623
BB21269	2P	9/16/2012	Field	10.06	0	0	0.00	-	Modified 1623
BB21270	2P	9/16/2012	Field	10.04	0	0	0.00	-	Modified 1623
BB21378	2P	9/18/2012	Field	10.05	0	0	0.00	-	Modified 1623

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
BB21379	2P	9/18/2012	Matrix Spike	10.00	100	34	3.40	34.0	Modified 1623
BB21380	2P	9/18/2012	Field	9.92	0	0	0.00	-	Modified 1623
BB21381	2P	9/18/2012	Field	10.08	0	0	0.00	-	Modified 1623
BB21382	2P	9/18/2012	Field	10.10	0	0	0.00	-	Modified 1623
BB21383	2P	9/18/2012	Field	10.06	0	0	0.00	-	Modified 1623
BB21489	2P	9/23/2012	Field	10.00	0	0	0.00	-	Modified 1623
BB21490	2P	9/23/2012	Field	10.04	0	0	0.00	-	Modified 1623
BB21491	2P	9/23/2012	Field	9.98	0	0	0.00	-	Modified 1623
BB21492	2P	9/23/2012	Field	9.93	0	0	0.00	-	Modified 1623
BB21493	2P	9/23/2012	Field	9.99	0	0	0.00	-	Modified 1623
BB21632	2P	9/25/2012	Field	10.09	0	0	0.00	-	Modified 1623
BB21633	2P	9/25/2012	Matrix Spike	9.97	100	45	4.51	45.0	Modified 1623
BB21634	2P	9/25/2012	Field	9.94	0	0	0.00	-	Modified 1623
BB21635	2P	9/25/2012	Field	10.09	0	0	0.00	-	Modified 1623
BB21636	2P	9/25/2012	Field	9.96	0	0	0.00	-	Modified 1623
BB21637	2P	9/25/2012	Field	10.00	0	0	0.00	-	Modified 1623
BB21721	2P	9/30/2012	Field	9.97	0	0	0.00	-	Modified 1623
BB21722	2P	9/30/2012	Field	10.00	0	0	0.00	-	Modified 1623
BB21723	2P	9/30/2012	Field	9.94	0	0	0.00	-	Modified 1623
BB21724	2P	9/30/2012	Field	10.00	0	0	0.00	-	Modified 1623
BB21725	2P	9/30/2012	Field	9.96	0	0	0.00	-	Modified 1623

Notes: "Modified 1623" involves precoating the HV filter and modified elution solution (ASI SOP 224-7).

ASI Data Quality Statement:

All data reported above, unless otherwise noted, were generated in accordance with EPA Method 1623.

Reviewed by PSwanden Date Reviewed: 4-Oct-2012