PORTLAND WATER BUREAU
FROM FOREST TO FAUCET

Nick Fish, Commissioner
David G. Shaff, Administrator

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

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DATE: August 7, 2013 WQ 0.10.14.4

TO: Oregon Health Authority
Environmental Public Health
Drinking Water Program

SUBJECT: **Monthly Report for July 2013**
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 July 2013. 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.

Clancy Environmental – Tetra Tech, Inc. completed the analysis for *Cryptosporidium* (see attached report). Please note that PWB switched to the Modified 1623 (Precoat) method on July 9, 2013. This method modification has 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:	7/1/2013-7/31/2013	37	493.8	0	4	60.3
Previous 11 Months:	8/1/2012-6/30/2013	219	4750.3	0	27	45.0

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.

Clancy Environmental – Tetra Tech
20 Mapleville Depot, Saint Albans, VT 05478 USA
802.527.2460 Fax: 802.524.3909

Cryptosporidium Laboratory Analysis Report

Water System Information		Sample Information	
PWS ID:	OR4100657	**Collection Month & Year:**	July 2013
PWS Name:	Portland Water Bureau	**Report Date:**	August 5, 2013
	1900 N Interstate Avenue	**Monitoring Regime:**	Observation
	Portland, Oregon 97227	**Source Water:**	Bull Run Intake
County:	Multnomah		

Clancy Environmental - a Tetra Tech, Inc. company

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
BB29443	2P	7/1/2013	Field	50.0	0	0	0.00	-	1623
BB29601	2P	7/7/2013	Field	50.0	0	0	0.00	-	1623
BB29696	2P	7/9/2013	Field	11.2	0	0	0.00	-	Modified 1623
BB29697	2P	7/9/2013	Matrix Spike	11.5	100	59	5.13	59.0	Modified 1623
BB29698	2P	7/9/2013	Field	11.5	0	0	0.00	-	Modified 1623
BB29699	2P	7/9/2013	Field	11.5	0	0	0.00	-	Modified 1623
BB29700	2P	7/9/2013	Field	11.5	0	0	0.00	-	Modified 1623
BB29701	2P	7/9/2013	Field	11.5	0	0	0.00	-	Modified 1623
BB29774	2P	7/14/2013	Field	11.5	0	0	0.00	-	Modified 1623
BB29775	2P	7/14/2013	Field	11.5	0	0	0.00	-	Modified 1623
BB29776	2P	7/14/2013	Field	11.0	0	0	0.00	-	Modified 1623
BB29777	2P	7/14/2013	Field	11.5	0	0	0.00	-	Modified 1623
BB29778	2P	7/14/2013	Field	11.5	0	0	0.00	-	Modified 1623
BB29926	2P	7/16/2013	Field	11.2	0	0	0.00	-	Modified 1623
BB29931	2P	7/16/2013	Matrix Spike	10.9	100	52	4.77	52.0	Modified 1623
BB29927	2P	7/16/2013	Field	11.0	0	0	0.00	-	Modified 1623
BB29928	2P	7/16/2013	Field	11.0	0	0	0.00	-	Modified 1623
BB29929	2P	7/16/2013	Field	11.0	0	0	0.00	-	Modified 1623
BB29930	2P	7/16/2013	Field	11.0	0	0	0.00	-	Modified 1623
BB30080	2P	7/21/2013	Field	11.3	0	0	0.00	-	Modified 1623
BB30081	2P	7/21/2013	Field	11.1	0	0	0.00	-	Modified 1623
BB30082	2P	7/21/2013	Field	11.3	0	0	0.00	-	Modified 1623
BB30083	2P	7/21/2013	Field	11.1	0	0	0.00	-	Modified 1623
BB30084	2P	7/21/2013	Field	11.0	0	0	0.00	-	Modified 1623
BB30156	2P	7/23/2013	Field	11.2	0	0	0.00	-	Modified 1623
BB30157	2P	7/23/2013	Matrix Spike	11.4	100	74	6.49	74.0	Modified 1623
BB30158	2P	7/23/2013	Field	11.4	0	0	0.00	-	Modified 1623
BB30159	2P	7/23/2013	Field	11.4	0	0	0.00	-	Modified 1623
BB30160	2P	7/23/2013	Field	11.4	0	0	0.00	-	Modified 1623
BB30161	2P	7/23/2013	Field	11.1	0	0	0.00	-	Modified 1623
BB30337	2P	7/28/2013	Field	11.0	0	0	0.00	-	Modified 1623
BB30338	2P	7/28/2013	Field	11.3	0	0	0.00	-	Modified 1623
BB30339	2P	7/28/2013	Field	11.3	0	0	0.00	-	Modified 1623
BB30340	2P	7/28/2013	Field	11.0	0	0	0.00	-	Modified 1623

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County:	Multnomah		

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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
BB30341	2P	7/28/2013	Field	11.0	0	0	0.00	-	Modified 1623
BB30459	2P	7/30/2013	Field	11.1	0	0	0.00	-	Modified 1623
BB30464	2P	7/30/2013	Matrix Spike	11.5	100	56	4.87	56.0	Modified 1623
BB30460	2P	7/30/2013	Field	11.0	0	0	0.00	-	Modified 1623
BB30461	2P	7/30/2013	Field	11.5	0	0	0.00	-	Modified 1623
BB30462	2P	7/30/2013	Field	11.4	0	0	0.00	-	Modified 1623
BB30463	2P	7/30/2013	Field	11.5	0	0	0.00	-	Modified 1623

Notes: "Modified 1623" involves precoating the HV filter and modified elution solution (CEC Doc # CEC119.001).

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

Reviewed by_____ Date Reviewed: Monday, August 05, 2013