



A Waters Company

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Biovir Laboratories  
685 Stone Rd  
Unit #6  
Benicia, CA 94510

**WP-213**



***Final Report***

# **WatR™ Pollution Proficiency Testing**

**WatR™ Pollution Study**

**Open Date: 10/15/12**

**Close Date: 11/29/12**

**Report Issued Date: 12/19/12**



A Waters Company

December 19, 2012

Richard Danielson  
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Enclosed is your final report for ERA's WP-213 WatR™Pollution Proficiency Testing (PT) study. Your final report includes an evaluation of all results submitted by your laboratory to ERA.

Data Evaluation Protocols: All analytes in ERA's WP-213 WatR™Pollution Proficiency Testing study have been evaluated using the following tiered approach. If the analyte is listed in the current TNI Fields of Proficiency Testing (FoPT) tables, the evaluation was completed by comparing the reported result to the acceptance limits generated using the criteria contained in the current TNI FoPT tables. If the analyte is not included in the TNI FoPT tables, the reported result has been evaluated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 0260).

Corrective Action Help: As part of your accreditation(s), you may be required to identify the root cause of any "Not Acceptable" results, implement the necessary corrective actions, and then satisfy your PT requirements by participating in a Supplemental (QuiK™Response) or future ERA PT study. ERA's technical staff is available to help your laboratory resolve any technical issues that may be impairing your PT performance and possibly affecting your routine data quality. Our laboratory and technical staff have well over three hundred years of collective experience in performing the full range of environmental analyses. As part of our technical support, ERA offers QC samples that can be useful in helping you work through your technical issues.

Please note the following changes to our final reports:

- At the request of the TNI Accreditation Council, we have included a Laboratory Exception Report that includes a list of all analytes reported with less than qualifiers when the assigned value was greater than "0." In addition, because we have received many requests from laboratories, this report also includes a list of all analytes with "Not Acceptable" evaluations.
- Some states have elected not to convert to the 2009 TNI Standards at this time. If you have released your results to a state that has retained the 2003 NELAC Evaluation Criteria, your final report will include a section that evaluates the results according to the 2003 Standard in addition to the 2009 TNI Standards.

Thank you for your participation in ERA's WP-213 WatR™Pollution Proficiency Testing study. If you have any questions, please contact our Proficiency Testing Department at 1-800-372-0122.

Sincerely,

A handwritten signature in black ink that reads "Jay R. McBurney".

Jay R. McBurney  
Quality Program Manager

attachments  
jrm



A Waters Company

Report Recipient	Contact/Phone Number	Reporting Type	Evaluation Type
California	Fred Choske / 510-620-3175	All Analytes	2009 TNI

# WP-213 Definitions & Study Discussion

**Study Dates: 10/15/12 - 11/29/12**

**Report Issued: 12/19/12**

## WP Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the most current TNI Fields of Proficiency Testing (FoPT) tables. A parameter not added to the standard is given an Assigned Value of "< PTRL" per the guidelines contained in the 2009 TNI Standards. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards.

The Acceptance Limits are established per the criteria contained in the most current USEPA/NELAC FoPT tables, or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

Acceptable = Reported Value falls within the Acceptance Limits.

Not Acceptable = Reported Value falls outside the Acceptance Limits.

No Evaluation = Reported Value cannot be evaluated.

Not Reported = No Value reported.

The Method Description is the method the laboratory reported to ERA.

## WP Study Discussion

ERA's WP-213 WatR™Pollution Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2009 TNI PT Standard and the criteria contained in the most current TNI Fields of Proficiency Testing (FoPT) tables.

ERA's WP-213 WatR™Pollution study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the 2009 TNI PT Standard and the criteria contained in the most current TNI FoPT tables.

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's WP-213 WatR™Pollution study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's WatR™Pollution Proficiency Testing program, please contact our Proficiency Testing Department at 1-800-372-0122.

# WP-213 Laboratory Exception Report

**Richard Danielson**  
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(707) 747-5906

**EPA ID:**  
**ERA Customer Number:**  
**Report Issued:**  
**Study Dates:**

**CA01401**  
**B354201**  
**12/19/12**  
**10/15/12 - 11/29/12**

2009 TNI Evaluation Check: There are no values reported with < where the assigned value was greater than 0.

2009 TNI Not Acceptable Evaluations: There were no Not Acceptable evaluations for this study.

# Final Report Results For Laboratory Biovir Laboratories

## 2009 TNI Evaluation Report

Study: **WP-213**

ERA Customer Number: **B354201**

Laboratory Name: **Biovir Laboratories**

### Microbiology Results





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# WP-213 2009 TNI Evaluation Final Complete Report

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(707) 747-5906

EPA ID:  
ERA Customer Number:  
Report Issued:  
Study Dates:

CA01401  
B354201  
12/19/12  
10/15/12 - 11/29/12

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
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### WP WasteWat<sup>TM</sup> Coliform MicrobE<sup>TM</sup> (cat# 576)

2500	Total Coliforms (MF)	CFU/100mL	1600	1220	281 - 2620	Acceptable	SM9222B M endo online	11/5/2012	1.91	858	389	RN
2530	Fecal Coliforms (MF)	CFU/100mL	730	1220	98.0 - 2800	Acceptable	SM9222D m FC online	11/5/2012	0.460	523	450	RN
2525	E.coli (MF)	CFU/100mL	1600	1220	134 - 2710	Acceptable	SM9222G EC online	11/5/2012	2.32	604	430	RN
2500	Total Coliforms (MPN)	MPN/100mL	1300	1320	382 - 3070	Acceptable	SM9221B online	11/5/2012	0.484	1080	448	Mary Peasley
2530	Fecal Coliforms (MPN)	MPN/100mL	1300	1320	146 - 5140	Acceptable	SM9221E EC online	11/5/2012	0.520	868	832	Mary Peasley
2525	E.coli (MPN)	MPN/100mL	1300	1320	395 - 2890	Acceptable	SM9221F online	11/5/2012	0.559	1070	415	Mary Peasley

Per Section 6.4.3 a of the 2009 TNI Standard, "The assigned values for quantitative microbiology analytes shall be equal to the mean of the assigned value verification and/or homogeneity testing per Sections 7.1 and 7.2". The final acceptance limits are derived from the calculated study mean and study standard deviation from laboratory-reported results. Disagreement between the assigned values and study means/acceptance limits are due to the inherent variability of microbiology methods and differences in the methods used by ERA and participant laboratories. For quantitative microbiology analytes, the assigned value is not used in the evaluation of laboratories.

### WP WasteWat<sup>TM</sup> Coliform MicrobE<sup>TM</sup> (cat# 576)

2500	Total Coliforms (MF)	CFU/100mL		1220	281 - 2620	Not Reported				858	389	
2530	Fecal Coliforms (MF)	CFU/100mL		1220	98.0 - 2800	Not Reported				523	450	
2525	E.coli (MF)	CFU/100mL		1220	134 - 2710	Not Reported				604	430	
2500	Total Coliforms (MPN)	MPN/100mL	800	1320	382 - 3070	Acceptable	SM9221B online	11/5/2012	-0.631	1080	448	Mary Peasley
2530	Fecal Coliforms (MPN)	MPN/100mL	800	1320	146 - 5140	Acceptable	SM9221E EC online	11/5/2012	-0.0814	868	832	Mary Peasley
2525	E.coli (MPN)	MPN/100mL	800	1320	395 - 2890	Acceptable	SM9221F ECMUG online	11/5/2012	-0.645	1070	415	Mary Peasley

Per Section 6.4.3 a of the 2009 TNI Standard, "The assigned values for quantitative microbiology analytes shall be equal to the mean of the assigned value verification and/or homogeneity testing per Sections 7.1 and 7.2". The final acceptance limits are derived from the calculated study mean and study standard deviation from laboratory-reported results. Disagreement between the assigned values and study means/acceptance limits are due to the inherent variability of microbiology methods and differences in the methods used by ERA and participant laboratories. For quantitative microbiology analytes, the assigned value is not used in the evaluation of laboratories.







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# WP-213 2009 TNI Evaluation Final Complete Report

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CA01401  
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TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
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### WP WasteWatR™ Coliform MicrobE™ (cat# 576)

2500	Total Coliforms (MF)	CFU/100mL		1220	281 - 2620	Not Reported				858	389	
2530	Fecal Coliforms (MF)	CFU/100mL		1220	98.0 - 2800	Not Reported				523	450	
2525	E.coli (MF)	CFU/100mL		1220	134 - 2710	Not Reported				604	430	
2500	Total Coliforms (MPN)	MPN/100mL	1732.9	1320	382 - 3070	Acceptable	SM9223 COLertQT online	11/5/2012	1.45	1080	448	Mary Peasley
2530	Fecal Coliforms (MPN)	MPN/100mL		1320	146 - 5140	Not Reported				868	832	
2525	E.coli (MPN)	MPN/100mL	1732.9	1320	395 - 2890	Acceptable	SM9223 COLertQT online	11/5/2012	1.60	1070	415	Mary Peasley

Per Section 6.4.3 a of the 2009 TNI Standard, "The assigned values for quantitative microbiology analytes shall be equal to the mean of the assigned value verification and/or homogeneity testing per Sections 7.1 and 7.2". The final acceptance limits are derived from the calculated study mean and study standard deviation from laboratory-reported results. Disagreement between the assigned values and study means/acceptance limits are due to the inherent variability of microbiology methods and differences in the methods used by ERA and participant laboratories. For quantitative microbiology analytes, the assigned value is not used in the evaluation of laboratories.

### WP Enterococci (cat# 880)

2520	Enterococci (MF)	CFU/100mL	660	772	228 - 1690	Acceptable	EPA 1600 2002	11/5/2012	0.160	621	244	RN
2520	Enterococci (MPN)	MPN/100mL	816.4	871	287 - 2190	Acceptable	ENTEROLERT	11/5/2012	0.0732	793	317	Mary Peasley
2540	Fecal Streptococci (MF)	CFU/100mL		772	134 - 1340	Not Reported				426	1360	
2540	Fecal Streptococci (MPN)	MPN/100mL		871	84.8 - 6630	Not Reported				746	328	

Per Section 6.4.3 a of the 2009 TNI Standard, "The assigned values for quantitative microbiology analytes shall be equal to the mean of the assigned value verification and/or homogeneity testing per Sections 7.1 and 7.2". The final acceptance limits are derived from the calculated study mean and study standard deviation from laboratory-reported results. Disagreement between the assigned values and study means/acceptance limits are due to the inherent variability of microbiology methods and differences in the methods used by ERA and participant laboratories. For quantitative microbiology analytes, the assigned value is not used in the evaluation of laboratories.

