



A Waters Company

Thekkekalathil Madhavan Chandrasekhar
State of Florida DEP Biology Laboratory
2600 Blair Stone Rd
MS 6512, Room A416D
Tallahassee, FL 32399-2400
USA

WP-249



Final Report

WatR™ Pollution Proficiency Testing

WatR™ Pollution Study

Open Date: 10/16/15

Close Date: 11/30/15

Report Issued Date: 12/02/15



A Waters Company

December 2, 2015

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Enclosed is your final report for ERA's WP-249 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-249 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 many 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.

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-249 WatR™ Pollution Proficiency Testing study. If you have any questions, please contact our Proficiency Testing Department at 1-800-372-0122.

Sincerely,

David Kilhefner
Quality Officer

attachments



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Report Recipient	Contact/Phone Number	Reporting Type	Evaluation Type
Florida	Steve Arms / 904-791-1502	All Analytes	2009 TNI



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WP-249 Definitions & Study Discussion

Study Dates: 10/16/15 - 11/30/15

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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-249 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-249 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-249 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.





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WP-249 Laboratory Exception Report

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EPA ID:
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FL01181
S744813
12/02/15
10/16/15 - 11/30/15

2009 TNI Evaluation Checks

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.



All analytes are included in ERA's A2LA accreditation. Lab Code: 1539-01

16341 Table Mountain Pkwy • Golden, CO 80403 • 800.372.0122 • 303.431.8454 • fax 303.421.0159 • www.eraqc.com



Final Report Results For Laboratory State of Florida DEP Biology Laboratory

2009 TNI Evaluation Report

Study: **WP-249**

ERA Customer Number: **S744813**

Laboratory Name: **State of Florida DEP
Biology Laboratory**

Inorganic Results





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WP-249 2009 TNI Evaluation Final Complete Report

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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 Total Residual Chlorine (cat# 587, lot# P249-501)

1940	Total Residual Chlorine	mg/L	2.34	2.46	1.81 - 2.87	Acceptable	SM4500Cl G online	10/22/2015	0.0688	2.32	0.224	CALDWELL_A
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All analytes are included in ERA's A2LA accreditation. Lab Code: 1539-01

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Study # : WP-249



2009 TNI Evaluation Report

Study: **WP-249**

ERA Customer Number: **S744813**

Laboratory Name: **State of Florida DEP
Biology Laboratory**

Microbiology Results





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WP-249 2009 TNI Evaluation Final Complete Report

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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, lot# P249-083)

2500	Total Coliforms (MF)	CFU/100mL	390	516	149 - 931	Acceptable	SM9222B M endo online	10/29/2015	0.00929	373	130	COKER_R
2530	Fecal Coliforms (MF)	CFU/100mL		319	22.0 - 893	Not Reported				140	145	
2525	E.coli (MF)	CFU/100mL		516	34.0 - 1420	Not Reported				219	231	
2500	Total Coliforms (MPN)	MPN/100mL		566	114 - 2080	Not Reported				487	328	
2530	Fecal Coliforms (MPN)	MPN/100mL	350	566	51.6 - 2470	Acceptable	SM 9221 E-2006 2006	10/30/2015	-0.00326	357	403	RANKIN_A
2525	E.coli (MPN)	MPN/100mL	517	566	164 - 1350	Acceptable	SM9223 COL118QT-2004 2004	10/29/2015	0.0178	470	198	COKER_R

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, lot# P249-081)

2520	Enterococci (MF)	CFU/100mL	230	240	101 - 338	Acceptable	EPA 1600 2002	10/29/2015	0.0591	185	39.5	RANKIN_A
2520	Enterococci (MPN)	MPN/100mL	219	303	66.1 - 396	Acceptable	ENTEROLERT	10/29/2015	0.0754	162	55.1	COKER_R
2540	Fecal Streptococci (MF)	CFU/100mL		240	144 - 333	Not Reported				219	31.5	
2540	Fecal Streptococci (MPN)	MPN/100mL		303	12.9 - 5430	Not Reported				265	903	

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All analytes are included in ERA's A2LA accreditation. Lab Code: 1539-01

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CERTIFICATE OF EXCELLENCE

In recognition of the quality of your laboratory in proficiency testing for

WP-249

State of Florida DEP Biology Laboratory

is issued this certificate of achievement by ERA. This laboratory has been recognized as a Laboratory of Excellence for achieving 100% acceptable data in this study which included 654 participating laboratories. This achievement is a demonstration of the superior quality of the laboratory in evaluation of the standards listed below.

Enterococci

Total Residual Chlorine

WasteWatR™ Coliform

MicrobE™



David Kilhefner
Quality Officer