



A Waters Company

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WP-194



Final Report

WatR™ Pollution Proficiency Testing

WatR™ Pollution Study

Open Date: 03/14/11

Close Date: 04/28/11

Report Issued Date: 05/16/11



A Waters Company

May 16, 2011

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Enclosed is your final report for ERA's WP-194 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-194 WatR™ Pollution Proficiency Testing study have been evaluated using the following tiered approach. If the analyte is listed in the most current National Environmental Laboratory Accreditation Conference (NELAC) PT Field of Testing tables, the evaluation was completed by comparing the reported result to the acceptance limits generated using the criteria contained in the NELAC FoPT tables. If the analyte is not included in the NELAC 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 helpful in helping you work through your technical issues.

Thank you for your participation in ERA's WP-194 WatR™ Pollution Proficiency Testing study. If you have any questions, please contact the proficiency testing department, or myself, at 1-800-372-0122.

Sincerely,

A handwritten signature in black ink that reads "Jay R. McBurney". The signature is written in a cursive, flowing style.

Jay R. McBurney
Quality Program Manager

attachments
jrm



A Waters Company

Report Recipient	Contact/Phone Number	Reporting Type
North Carolina (WP)	Dana Satterwhite / 919-733-3908 x 243	All Analytes
South Carolina	Carol Smith / 803-896-0992	All Analytes

WP-194 Definitions & Study Discussion

Study Dates: 03/14/11 - 04/28/11

Report Issued: 05/16/11

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 USEPA/NELAC FoPT tables. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards. A parameter not added to the standard is given an Assigned Value of "0" per the guidelines contained in the USEPA's Criteria Document and NELAC 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-194 WatR™ Pollution Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the USEPA's National Standards for Water Proficiency Testing Studies Criteria Document (December 1998), and the criteria contained in the most current NELAC FoPT tables.

ERA's WP-194 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 USEPA's National Criteria Document for Water Proficiency Testing Studies, December 1998, and the criteria contained in the most current NELAC 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-194 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 Jay McBurney, Quality Program Manager, or the proficiency testing department at 1-800-372-0122.

Study: **WP-194**

ERA Customer Number: **E559701**

Laboratory Name: **Environmental Testing
Solutions, Inc.**

Inorganic Results



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

NC01230
E559701
05/16/11
03/14/11 - 04/28/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
WP Minerals (cat# 581)							
0027	Alkalinity as CaCO ₃	mg/L	49	49.2	42.5 - 56.2	Acceptable	SM2320B
0028	Chloride	mg/L	92	91.5	78.5 - 104	Acceptable	SM4500Cl- C VIS
0020	Conductivity at 25°C	µmhos/cm	500	492	442 - 541	Acceptable	SM2510B
0029	Fluoride	mg/L		2.58	2.14 - 3.03	Not Reported	
0026	Potassium	mg/L		30.2	25.0 - 36.0	Not Reported	
0025	Sodium	mg/L		79.7	67.7 - 91.4	Not Reported	
0030	Sulfate	mg/L	28.6	30.5	24.4 - 35.8	Acceptable	HACH8051
0021	Total Dissolved Solids at 180°C	mg/L	312	310	233 - 387	Acceptable	SM2540C
1950	Total Solids at 105°C	mg/L		319	278 - 356	Not Reported	
WP Hardness (cat# 580)							
0072	Non-Filterable Residue (TSS)	mg/L	76	87.7	72.0 - 97.3	Acceptable	SM2540D
0023	Calcium	mg/L		38.0	33.8 - 43.2	Not Reported	
0024	Magnesium	mg/L		8.40	7.13 - 9.62	Not Reported	
1550	Calcium Hardness as CaCO ₃	mg/L		94.9	84.4 - 108	Not Reported	
0022	Total Hardness as CaCO ₃	mg/L	115	129	114 - 148	Acceptable	SM2340C
WP pH (cat# 577)							
0019	pH	S.U.	5.52	5.50	5.30 - 5.70	Acceptable	SM4500H+ B
WP Settleable Solids (cat# 883)							
1965	Settleable Solids	mL/L	29	23.5	18.3 - 30.3	Acceptable	SM2540F
WP Simple Nutrients (cat# 584)							
0031	Ammonia as N	mg/L	8.8	9.64	7.13 - 12.0	Acceptable	SM4500NH3 D
1820	Nitrate + Nitrite as N	mg/L		13.8	11.2 - 16.0	Not Reported	
0032	Nitrate as N	mg/L		13.8	10.8 - 16.6	Not Reported	
0033	ortho-Phosphate as P	mg/L		3.46	2.84 - 4.11	Not Reported	
WP Demand (cat# 578)							
0038	BOD	mg/L	48	77.2	38.9 - 115	Acceptable	SM5210B
0102	CBOD	mg/L	52	66.5	29.8 - 103	Acceptable	SM5210B
0036	COD	mg/L	113	125	94.4 - 144	Acceptable	HACH 8000
0037	TOC	mg/L		49.4	41.2 - 57.0	Not Reported	
WP Turbidity (cat# 893)							
2055	Turbidity	NTU	3.8	4.18	3.40 - 4.93	Acceptable	SM2130B
WP Low-Level Total Residual Chlorine (cat# 881)							
1940	Low Level Total Residual Chlorine	µg/L	152	159	99.0 - 219	Acceptable	ORION 97-70

Study: **WP-194**

ERA Customer Number: **E559701**

Laboratory Name: **Environmental Testing
Solutions, Inc.**

Microbiology Results





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WP-194 Final Complete Report

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EPA ID: NC01230
ERA Customer Number: E559701
Report Issued: 05/16/11
Study Dates: 03/14/11 - 04/28/11

Anal. No.	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
WP WasteWatR™ Coliform MicrobE™ (cat# 576)							
2500	Total Coliforms (MF)	CFU/100mL		723	139 - 3750	Not Reported	
2530	Fecal Coliforms (MF)	CFU/100mL	280	157	18.0 - 1370	Acceptable	SM9222D m FC
2525	E.coli (MF)	CFU/100mL		348	19.0 - 6340	Not Reported	
2500	Total Coliforms (MPN)	MPN/100mL		936	75.3 - 11600	Not Reported	
2530	Fecal Coliforms (MPN)	MPN/100mL	80	563	22.2 - 14300	Acceptable	SM9221E A1
2525	E.coli (MPN)	MPN/100mL		1510	550 - 4150	Not Reported	

