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**WS-168**



***Final Report***

# **WatR™ Supply Proficiency Testing**

**WatR™ Supply Study**

**Open Date: 07/06/10**

**Close Date: 08/20/10**

**Report Issued Date: 09/10/10**

September 10, 2010

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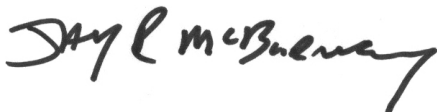
Enclosed is your final report for ERA's WS-168 WatR™ Supply Proficiency Testing (PT) study. Your final report includes an evaluation of all results submitted by your laboratory to ERA.

Data Evaluation Protocols: All analytes in ERA's WS-168 WatR™ Supply Proficiency Testing (PT) 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 WS-168 WatR™ Supply Proficiency Testing study. If you have any questions, please contact the proficiency testing department or myself at 1-800-372-0122.

Sincerely,



Jay R. McBurney  
Quality Program Manager

attachments  
jrm

| <b>Report Recipient</b> | <b>Contact/Phone Number</b> | <b>Reporting Type</b> |
|-------------------------|-----------------------------|-----------------------|
| North Carolina (WS)     | Cindy Price / 919-733-7308  | All Analytes          |

# WS-168 Definitions & Study Discussion

**Study Dates: 07/06/10 - 08/20/10**

**Report Issued: 09/10/10**

## WS 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. 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.

## WS Study Discussion

ERA's WS-168 WatR™ Supply 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 WS-168 WatR™ Supply 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 in the standards 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 WS-168 WatR™ Supply 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™ Supply Proficiency Testing program, please contact Jay McBurney, Quality Program Manager, or the proficiency testing department at 1-800-372-0122.



Study: **WS-168**

ERA Customer Number: **E559701**

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

## Inorganic Results



# WS-168 Final Complete Report

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EPA ID: NC01230  
 ERA Customer Number: E559701  
 Report Issued: 09/10/10  
 Study Dates: 07/06/10 - 08/20/10

| Anal. No. | Analyte | Units | Reported Value | Assigned Value | Acceptance Limits | Performance Evaluation | Method Description |
|-----------|---------|-------|----------------|----------------|-------------------|------------------------|--------------------|
|-----------|---------|-------|----------------|----------------|-------------------|------------------------|--------------------|

## WS Inorganics (cat# 591)

|      |                                 |          |      |      |             |              |              |
|------|---------------------------------|----------|------|------|-------------|--------------|--------------|
| 0027 | Alkalinity as CaCO3             | mg/L     |      | 117  | 105 - 129   | Not Reported |              |
| 1575 | Chloride                        | mg/L     |      | 26.2 | 23.1 - 29.4 | Not Reported |              |
| 1610 | Conductivity at 25°C            | µmhos/cm |      | 454  | 409 - 499   | Not Reported |              |
| 0010 | Fluoride                        | mg/L     |      | 2.61 | 2.35 - 2.87 | Not Reported |              |
| 1820 | Nitrate + Nitrite as N          | mg/L     |      | 8.69 | 7.82 - 9.56 | Not Reported |              |
| 0009 | Nitrate as N                    | mg/L     | 8.70 | 8.69 | 7.82 - 9.56 | Acceptable   | SM4500NO3- D |
| 1125 | Potassium                       | mg/L     |      | 29.6 | 25.5 - 33.6 | Not Reported |              |
| 0145 | Sulfate                         | mg/L     |      | 33.0 | 28.1 - 37.4 | Not Reported |              |
| 0024 | Total Dissolved Solids at 180°C | mg/L     |      | 401  | 258 - 545   | Not Reported |              |



Study: **WS-168**

ERA Customer Number: **E559701**

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

## Microbiology Results





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**EPA ID:** NC01230  
**ERA Customer Number:** E559701  
**Report Issued:** 09/10/10  
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| Anal. No.                                  | Analyte                     | Units     | Reported Value | Assigned Value | Acceptance Limits | Performance Evaluation | Method Description |
|--|-----------------------------|-----------|----------------|----------------|-------------------|------------------------|--------------------|
| <b>WS MicrobE™ (Coliforms) (cat# 080A)</b> |                             |           |                |                |                   |                        |                    |
| 0254                                       | Total Coliforms - Sample 1  | CFU/100mL | Absence        | Presence       | Presence          | Not Acceptable         | SM9223 COLILERT    |
| 0254                                       | Total Coliforms - Sample 2  | CFU/100mL | Presence       | Presence       | Presence          | Acceptable             | SM9223 COLILERT    |
| 0254                                       | Total Coliforms - Sample 3  | CFU/100mL | Presence       | Presence       | Presence          | Acceptable             | SM9223 COLILERT    |
| 0254                                       | Total Coliforms - Sample 4  | CFU/100mL | Presence       | Presence       | Presence          | Acceptable             | SM9223 COLILERT    |
| 0254                                       | Total Coliforms - Sample 5  | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |
| 0254                                       | Total Coliforms - Sample 6  | CFU/100mL | Presence       | Presence       | Presence          | Acceptable             | SM9223 COLILERT    |
| 0254                                       | Total Coliforms - Sample 7  | CFU/100mL | Presence       | Presence       | Presence          | Acceptable             | SM9223 COLILERT    |
| 0254                                       | Total Coliforms - Sample 8  | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |
| 0254                                       | Total Coliforms - Sample 9  | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |
| 0254                                       | Total Coliforms - Sample 10 | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |
| 0255                                       | Fecal Coliforms - Sample 1  | CFU/100mL |                | Absence        | Absence           | Not Reported           |                    |
| 0255                                       | Fecal Coliforms - Sample 2  | CFU/100mL |                | Absence        | Absence           | Not Reported           |                    |
| 0255                                       | Fecal Coliforms - Sample 3  | CFU/100mL |                | Presence       | Presence          | Not Reported           |                    |
| 0255                                       | Fecal Coliforms - Sample 4  | CFU/100mL |                | Presence       | Presence          | Not Reported           |                    |
| 0255                                       | Fecal Coliforms - Sample 5  | CFU/100mL |                | Absence        | Absence           | Not Reported           |                    |
| 0255                                       | Fecal Coliforms - Sample 6  | CFU/100mL |                | Presence       | Presence          | Not Reported           |                    |
| 0255                                       | Fecal Coliforms - Sample 7  | CFU/100mL |                | Absence        | Absence           | Not Reported           |                    |
| 0255                                       | Fecal Coliforms - Sample 8  | CFU/100mL |                | Absence        | Absence           | Not Reported           |                    |
| 0255                                       | Fecal Coliforms - Sample 9  | CFU/100mL |                | Absence        | Absence           | Not Reported           |                    |
| 0255                                       | Fecal Coliforms - Sample 10 | CFU/100mL |                | Absence        | Absence           | Not Reported           |                    |
| 0255                                       | E.coli - Sample 1           | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |
| 0255                                       | E.coli - Sample 2           | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |
| 0255                                       | E.coli - Sample 3           | CFU/100mL | Presence       | Presence       | Presence          | Acceptable             | SM9223 COLILERT    |
| 0255                                       | E.coli - Sample 4           | CFU/100mL | Presence       | Presence       | Presence          | Acceptable             | SM9223 COLILERT    |
| 0255                                       | E.coli - Sample 5           | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |
| 0255                                       | E.coli - Sample 6           | CFU/100mL | Presence       | Presence       | Presence          | Acceptable             | SM9223 COLILERT    |
| 0255                                       | E.coli - Sample 7           | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |
| 0255                                       | E.coli - Sample 8           | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |
| 0255                                       | E.coli - Sample 9           | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |
| 0255                                       | E.coli - Sample 10          | CFU/100mL | Absence        | Absence        | Absence           | Acceptable             | SM9223 COLILERT    |

**Total Coliforms Evaluation : Not Acceptable**

**Fecal Coliforms Evaluation : Not Reported**

**E.coli Evaluation : Acceptable**

Fecal Coliform Organism - Escherichia coli, Samples 3, 4 and 6  
 Total Coliform Organism - Enterobacter cloacae, Samples 1, 2 and 7  
 Negative (1) Coliform Organism - Proteus mirabilis, Sample 9  
 Negative (2) Coliform Organism - Pseudomonas aeruginosa, Sample 10  
 Blank - No Organism, Samples 5 and 8



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| Anal. No.                                    | Analyte               | Units     | Reported Value | Assigned Value | Acceptance Limits | Performance Evaluation | Method Description |
|--|-----------------------|-----------|----------------|----------------|-------------------|------------------------|--------------------|
| <b>WS WS SourceWatR™ MicrobE™ (cat# 595)</b> |                       |           |                |                |                   |                        |                    |
| 2500   | Total Coliforms (MF)  | CFU/100mL |                | 19.0           | 9.00 - 37.0       | Not Reported           |                    |
| 2530   | Fecal Coliforms (MF)  | CFU/100mL |                | 8.00           | 1.00 - 52.0       | Not Reported           |                    |
| 2525   | E.coli (MF)           | CFU/100mL |                | 15.0           | 6.00 - 38.0       | Not Reported           |                    |
| 2500   | Total Coliforms (MPN) | MPN/100mL |                | 23.1           | 12.7 - 42.0       | Not Reported           |                    |
| 2530   | Fecal Coliforms (MPN) | MPN/100mL |                | 22.2           | 11.9 - 41.4       | Not Reported           |                    |
| 2525   | E.coli (MPN)          | MPN/100mL | 16.9           | 23.4           | 12.7 - 43.2       | Acceptable             | SM9223 COLertQT    |

