

Julie Weisz Energy Laboratories 400 West Boxelder Road Gillette, WY 82718 USA



WatR™Supply Proficiency Testing

WatR™Supply Study

Open Date: 09/05/2023

Close Date: 10/20/2023

Report Issued Date: 10/24/2023



October 24, 2023

Julie Weisz Energy Laboratories 400 West Boxelder Road Gillette, WY 82718

Enclosed is your final report for ERA's WS-326 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-326 WatR™Supply Proficiency Testing (PT) study have been evaluated using the following tiered approach. If the analyte is listed in the most current TNI Fields of Proficiency Testing (FoPT) table the evaluation was completed by comparing the reported result to the acceptance limits generated using the criteria contained in the table and the evaluation criteria contained in the 2016 TNI Standard, Volume 3. If the analyte is not included in the TNI FoPT table, the reported result has been evaluated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 730002268).

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.

Thank you for your participation in ERA's WS-326 WatR™Supply Proficiency Testing study. If you have any questions, please contact our Proficiency Testing Department at 1-800-372-0122.

Sincerely,

Craig Huff

Senior Technical Manager

attachments





Report Recipient	Contact/Phone Number	Reporting Type
EPA Region 8	Marcie Tidd / (303) 462-9476	All Analytes



WS-326 Definitions & Study Discussion

Study Dates: 09/05/2023 - 10/20/2023 Report Issued: 10/24/2023

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 TNI Fields of Proficiency Testing (FoPT) table. A parameter not added to the standard is given an Assigned Value of "< PTRL" per the guidelines contained in the 2016 TNI Standard. 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 TNI FoPT table 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-326 WatR™Supply Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2016 TNI Standard and the criteria contained in the most current TNI Fields of Proficiency Testing (FoPT) table.

ERA's WS-326 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 2016 TNI Standard and the criteria contained in the most current TNI FoPT table.

All activities associated with this proficiency testing study were performed by Waters/ERA with the exception of those noted below. The following physical samples/products were manufactured for Waters/ERA by a subcontractor:

Microbiology products with the following catalog numbers: 880, 935, 079, 077, 080, 595, 595A, 576, 576A

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-326 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 our Proficiency Testing Department at 1-800-372-0122.





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WS-326 Laboratory Exception Report

Julie Weisz QA Officer Energy Laboratories 400 West Boxelder Road Gillette, WY 82718 (307) 686-7175-2044

EPA ID: WY00006
ERA Customer Number: E351102
Report Issued: 10/24/2023
Study Dates: 09/05/2023 - 10/20/2023

Not Acceptable Evaluations

There were no Not Acceptable evaluations for this study.

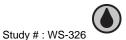






Final Report Results For Laboratory Energy Laboratories







Final Evaluation Report

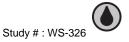
Study: **WS-326**

ERA Customer Number: E351102

Laboratory Name: Energy Laboratories

Microbiology Results







WS-326 Final Evaluation Report

A Waters Company

Julie Weisz QA Officer Energy Laboratories 400 West Boxelder Road Gillette, WY 82718 (307) 686-7175-2044 EPA ID: WY00006
ERA Customer Number: E351102
Report Issued: 10/24/2023
Study Dates: 09/05/2023 - 10/20/2023

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
WS Micro	WS MicrobE™ (Coliforms) (cat# 080A, lot# S326-085A)											
2500	Total Coliforms - Sample 1	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz
2500	Total Coliforms - Sample 2	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz
2500	Total Coliforms - Sample 3	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz
2500	Total Coliforms - Sample 4	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz
2500	Total Coliforms - Sample 5	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz
2500	Total Coliforms - Sample 6	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz
2500	Total Coliforms - Sample 7	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz
2500	Total Coliforms - Sample 8	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz
2500	Total Coliforms - Sample 9	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz
2500	Total Coliforms - Sample 10	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz

Total Coliforms Evaluation : Acceptable
Fecal Coliforms Evaluation : Not Reported
E.coli Evaluation : Acceptable

Fecal Coliform Organism - Escherichia coli (ATCC 35421), Samples 1, 3 and 6
Total Coliform Organism - Enterobacter cloacae (ATCC 35030), Samples 8, 9 and 10
Negative (1) Coliform Organism - Pseudomonas putida (ATCC 31483), Sample 5
Negative (2) Coliform Organism - Staphylococcus capitis (ATCC 35661), Sample 4
Blank - Blank Pellet (Qualitative), Samples 2 and 7



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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	
WS Micro	NS MicrobE™ (Coliforms) (cat# 080A, lot# S326-085A) (Continued)												
2530	Fecal Coliforms - Sample 1	CFU/100mL		Presence	Presence	Not Reported							
2530	Fecal Coliforms - Sample 2	CFU/100mL		Absence	Absence	Not Reported							
2530	Fecal Coliforms - Sample 3	CFU/100mL		Presence	Presence	Not Reported							
2530	Fecal Coliforms - Sample 4	CFU/100mL		Absence	Absence	Not Reported							
2530	Fecal Coliforms - Sample 5	CFU/100mL		Absence	Absence	Not Reported							
2530	Fecal Coliforms - Sample 6	CFU/100mL		Presence	Presence	Not Reported							
2530	Fecal Coliforms - Sample 7	CFU/100mL		Absence	Absence	Not Reported							
2530	Fecal Coliforms - Sample 8	CFU/100mL		Absence	Absence	Not Reported							
2530	Fecal Coliforms - Sample 9	CFU/100mL		Absence	Absence	Not Reported							
2530	Fecal Coliforms - Sample 10	CFU/100mL		Absence	Absence	Not Reported							

Total Coliforms Evaluation : Acceptable
Fecal Coliforms Evaluation : Not Reported
E.coli Evaluation : Acceptable

Fecal Coliform Organism - Escherichia coli (ATCC 35421), Samples 1, 3 and 6
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Blank - Blank Pellet (Qualitative), Samples 2 and 7





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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	
WS Micro	VS MicrobE™ (Coliforms) (cat# 080A, lot# S326-085A) (Continued)												
2525	E.coli - Sample 1	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz	
2525	E.coli - Sample 2	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz	
2525	E.coli - Sample 3	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz	
2525	E.coli - Sample 4	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz	
2525	E.coli - Sample 5	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz	
2525	E.coli - Sample 6	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz	
2525	E.coli - Sample 7	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz	
2525	E.coli - Sample 8	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz	
2525	E.coli - Sample 9	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz	
2525	E.coli - Sample 10	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/9/2023				Julie Weisz	

Total Coliforms Evaluation: Acceptable
Fecal Coliforms Evaluation: Not Reported
E.coli Evaluation: Acceptable

Fecal Coliform Organism - Escherichia coli (ATCC 35421), Samples 1, 3 and 6
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Negative (1) Coliform Organism - Pseudomonas putida (ATCC 31483), Sample 5
Negative (2) Coliform Organism - Staphylococcus capitis (ATCC 35661), Sample 4
Blank - Blank Pellet (Qualitative), Samples 2 and 7



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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	
WS Micro	VS MicrobE™ (Coliforms) (cat# 080B, lot# S326-085B)												
2500	Total Coliforms - Sample 1	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2500	Total Coliforms - Sample 2	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2500	Total Coliforms - Sample 3	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2500	Total Coliforms - Sample 4	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2500	Total Coliforms - Sample 5	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2500	Total Coliforms - Sample 6	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2500	Total Coliforms - Sample 7	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2500	Total Coliforms - Sample 8	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2500	Total Coliforms - Sample 9	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2500	Total Coliforms - Sample 10	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	

Total Coliforms Evaluation: Acceptable
Fecal Coliforms Evaluation: Not Reported
E.coli Evaluation: Acceptable

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Total Coliform Organism - Enterobacter cloacae (ATCC 35030), Samples 3, 7 and 9
Negative (1) Coliform Organism - Pseudomonas putida (ATCC 31483), Sample 6
Negative (2) Coliform Organism - Staphylococcus capitis (ATCC 35661), Sample 5

Blank - Blank Pellet (Qualitative), Samples 1 and 10





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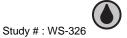
TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name	
WS Micro	VS MicrobE™ (Coliforms) (cat# 080B, lot# S326-085B) (Continued)												
2530	Fecal Coliforms - Sample 1	CFU/100mL		Absence	Absence	Not Reported							
2530	Fecal Coliforms - Sample 2	CFU/100mL		Presence	Presence	Not Reported							
2530	Fecal Coliforms - Sample 3	CFU/100mL		Absence	Absence	Not Reported							
2530	Fecal Coliforms - Sample 4	CFU/100mL		Presence	Presence	Not Reported							
2530	Fecal Coliforms - Sample 5	CFU/100mL		Absence	Absence	Not Reported							
2530	Fecal Coliforms - Sample 6	CFU/100mL		Absence	Absence	Not Reported							
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2530	Fecal Coliforms - Sample 8	CFU/100mL		Presence	Presence	Not Reported							
2530	Fecal Coliforms - Sample 9	CFU/100mL		Absence	Absence	Not Reported							
2530	Fecal Coliforms - Sample 10	CFU/100mL		Absence	Absence	Not Reported							

Total Coliforms Evaluation : Acceptable
Fecal Coliforms Evaluation : Not Reported
E.coli Evaluation : Acceptable

Fecal Coliform Organism - Escherichia coli (ATCC 35421), Samples 2, 4 and 8 Total Coliform Organism - Enterobacter cloacae (ATCC 35030), Samples 3, 7 and 9 Negative (1) Coliform Organism - Pseudomonas putida (ATCC 31483), Sample 6 Negative (2) Coliform Organism - Staphylococcus capitis (ATCC 35661), Sample 5







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2525	E.coli - Sample 7	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2525	E.coli - Sample 8	CFU/100mL	Presence	Presence	Presence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2525	E.coli - Sample 9	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	
2525	E.coli - Sample 10	CFU/100mL	Absence	Absence	Absence	Acceptable	SM9223 COLILERT 23rd ED 2016	9/10/2023				Brandon Bowe	

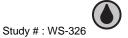
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Fecal Coliforms Evaluation : Not Reported
E.coli Evaluation : Acceptable

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Negative (2) Coliform Organism - Staphylococcus capitis (ATCC 35661), Sample 5
Blank - Blank Pellet (Qualitative), Samples 1 and 10

WS Heterotrophic Plate Count (cat# 079, lot# \$326-084)

2555	Heterotrophic Plate Count (MF, PP)	CFU/mL		192	144 - 256	Not Reported				192	28.1	
2555	Heterotrophic Plate Count (MPN)	MPN/mL	29.9	101	21.8 - 465	Acceptable	Simplate 2000	9/9/2023	-1.59	101	111	Julie Weisz





CERTIFICATE OF EXCELLENCE

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

WS-326

Energy Laboratories

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 267 participating laboratories. This achievement is a demonstration of the superior quality of the laboratory in evaluation of the standards listed below.

Heterotrophic Plate Count MicrobE™ (Coliforms)

CAR

Craig Huff Senior Technical Manager