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Phone 303-940-0033
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February 16, 2017

Ms. Kelley Keenan
Environmental Testing Solutions, Inc.
351 Depot Street
Asheville, NC 28801
USA

Dear Kelley,

Thank you for participating in the WSM0117 Water Supply Proficiency Testing Study. Enclosed is your final report, which has been carefully reviewed by the PT specialists at Phenova. This report presents some additional sections and features which will give you more information on the study data for the standards that were reported by your laboratory and more information regarding the overall performance of your laboratory in relation to other study participants.

The enclosed report is in two sections, the "Evaluation Report" and the "Statistical Report". The "Evaluation Report" contains the evaluation of your reported data as well the reported method, analysis date and analyst. The "Evaluation Report" is an updated and enhanced version of the reports you previously received at the conclusion of our PT studies. The "Statistical Report" contains your passing percentage as well as statistics from the study for the analytes reported by your laboratory.

For any analyte falling outside the established acceptance limits, our PT management staff would like to assist you in determining the most appropriate course of corrective action for your facility. Please contact us at any time if we may be of service to you.

Thank you again for participating in the WSM0117 Water Supply Proficiency Testing Study. We appreciate working with you and look forward to our next study. If you have any questions, please call us at 866-942-2978.



Report Definitions:

Assigned Value

The Assigned Value is determined from the study mean, gravimetric and volumetric true concentration of an analyte to be analyzed, calculation and/or an appropriate reference value as stipulated in the EPA National Standards for Water Proficiency Testing Studies Criteria Document (current version), the National Environmental Laboratory Accreditation Conference (NELAC) criteria (ref: NELAC FOT tables, NELAC PT Committee) and other documents distributed by accrediting agencies as applicable.

Evaluation Limits

Acceptance Limits are derived from fixed limits, coefficients, constants and calculations stipulated in the EPA National Standards for Water Proficiency Testing Studies Criteria Documents (current version), the National Environmental Laboratory Accreditation Conference (NELAC) criteria (ref: NELAC PT FOT tables, NELAC PT Committee) and other documents distributed by accrediting agencies as applicable.

Evaluation

- Acceptable* The reported value falls within the Acceptance Limits.
- Not Acceptable* The reported value falls outside the Acceptance Limits.
- No Evaluation* The reported value is non-numeric and can not be evaluated.
- NR* As required by the NELAC standards and requested by state authorities, any analyte purchased but not reported by your facility is listed as NR (Not Reported).

Study Mean and Standard Deviation

The mean and standard deviation are calculated from the study data using robust statistical calculations when possible. Other statistical calculations may be used if robust statistical calculations are not possible. The displayed values are independent of any statistical calculations required for the calculation of the analyte evaluation limits.

This report must not be reproduced except in full, without the written approval of Phenova.

This report must not be used to claim product certification, approval, or endorsement by the American Association for Laboratory Accreditation (A2LA) or any agency of the federal government.



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State Regulatory Agency Request(s):

Phenova has been authorized to send a copy of your WSM0117 final results to the following state agencies:

NC

Other Regulatory Agency Request(s):

No requests were made to send a copy of your WSM0117 final results to an agency.

Third Party Request(s):

No requests were made to send a copy of your WSM0117 final results to a third party.

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Final Report - Water Supply Proficiency Testing

Study: WSM0117

Opening Date: January 24, 2017 - Closing Date: February 9, 2017

Laboratory: Environmental Testing Solutions, Inc.
351 Depot Street
Asheville, NC 28801
USA

Contact: Ms. Kelley Keenan
828-350-9364

EPA Lab ID: NC01230

Micro (Presence/Absence) (PT-MIC-WS) Lot #: 5252-07

Complete Analyte Evaluation

The complete analyte evaluation(s) are based on the results for the individual samples. The Evaluation is "Acceptable" if nine of ten samples are Acceptable, and no false negatives are reported.

| NELAC Code | Analyte | Evaluation |
|------------|----------------|------------|
| 2530 | Fecal Coliform | NR |
| 2525 | E.Coli | Acceptable |
| 2500 | Total Coliform | Acceptable |

Individual Sample Evaluation

| NELAC Code | Analyte | Analysis Date | Analyst | Method Code | Method Description | Assigned Value | Result | Evaluation |
|-----------------|----------------|---------------|---------|-------------|--|----------------|----------|------------|
| Sample 1 | | | | | | | | |
| 2530 | Fecal Coliform | | | | | Absence | | NR |
| 2525 | E.Coli | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable |
| 2500 | Total Coliform | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Presence | Presence | Acceptable |
| Sample 2 | | | | | | | | |
| 2530 | Fecal Coliform | | | | | Presence | | NR |
| 2525 | E.Coli | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Presence | Presence | Acceptable |
| 2500 | Total Coliform | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Presence | Presence | Acceptable |
| Sample 3 | | | | | | | | |
| 2530 | Fecal Coliform | | | | | Absence | | NR |
| 2525 | E.Coli | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable |
| 2500 | Total Coliform | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable |

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| Micro (Presence/Absence) (PT-MIC-WS) cont'd | | | | | | | | Lot #: 5252-07 | |
|---|----------------|---------------|---------|-------------|--|----------------|----------|----------------|--|
| NELAC Code | Analyte | Analysis Date | Analyst | Method Code | Method Description | Assigned Value | Result | Evaluation | |
| Sample 4 | | | | | | | | | |
| 2530 | Fecal Coliform | | | | | Absence | | NR | |
| 2525 | E.Coli | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable | |
| 2500 | Total Coliform | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Presence | Presence | Acceptable | |
| Sample 5 | | | | | | | | | |
| 2530 | Fecal Coliform | | | | | Absence | | NR | |
| 2525 | E.Coli | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable | |
| 2500 | Total Coliform | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable | |
| Sample 6 | | | | | | | | | |
| 2530 | Fecal Coliform | | | | | Presence | | NR | |
| 2525 | E.Coli | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Presence | Presence | Acceptable | |
| 2500 | Total Coliform | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Presence | Presence | Acceptable | |
| Sample 7 | | | | | | | | | |
| 2530 | Fecal Coliform | | | | | Absence | | NR | |
| 2525 | E.Coli | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable | |
| 2500 | Total Coliform | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable | |
| Sample 8 | | | | | | | | | |
| 2530 | Fecal Coliform | | | | | Absence | | NR | |
| 2525 | E.Coli | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable | |
| 2500 | Total Coliform | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable | |

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EPA Lab ID: NC01230

| Micro (Presence/Absence) (PT-MIC-WS) cont'd | | | | | | | | Lot #: 5252-07 | |
|---|----------------|---------------|---------|-------------|--|----------------|----------|----------------|--|
| NELAC Code | Analyte | Analysis Date | Analyst | Method Code | Method Description | Assigned Value | Result | Evaluation | |
| Sample 9 | | | | | | | | | |
| 2530 | Fecal Coliform | | | | | Absence | | NR | |
| 2525 | E.Coli | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Absence | Absence | Acceptable | |
| 2500 | Total Coliform | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Presence | Presence | Acceptable | |
| Sample 10 | | | | | | | | | |
| 2530 | Fecal Coliform | | | | | Presence | | NR | |
| 2525 | E.Coli | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Presence | Presence | Acceptable | |
| 2500 | Total Coliform | 1/25/2017 | KEK | 20212402 | SM 9223 B (Colilert®) Rev.21st ED 2005 | Presence | Presence | Acceptable | |

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| Source Water Micro (PT-SW-WS) | | | | | | | | | | Lot #: 5252-14 |
|-------------------------------|---------------------|---------------|---------|-------------|---|------------|----------------|--------|-------------------|----------------|
| NELAC Code | Analyte | Analysis Date | Analyst | Method Code | Method Description | Units | Assigned Value | Result | Acceptance Limits | Evaluation |
| 2530 | Fecal Coliform, MF | | | | | CFU/100 mL | 33 | | 8 - 133 | NR |
| 2525 | E. Coli, MF | | | | | CFU/100 mL | 39 | | 14 - 105 | NR |
| 2500 | Total Coliform, MF | | | | | CFU/100 mL | 62 | | 39 - 99 | NR |
| 2530 | Fecal Coliform, MPN | | | | | MPN/100 mL | 43.5 | | 29.0 - 65.1 | NR |
| 2525 | E. Coli, MPN | 1/25/2017 | KEK | 20211409 | SM 9223 B (Colilert® Quanti-Tray®) Rev.21st ED 2005 | MPN/100 mL | 39.8 | 86.2 | 12.3 - 128 | Acceptable |
| 2500 | Total Coliform, MPN | | | | | MPN/100 mL | 47.6 | | 21.3 - 106 | NR |



PT Study Score Report

EPA ID: NC01230
 Laboratory: Environmental Testing Solutions, Inc.
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 USA

| Study Number | Number of Reported Results | Number of Passing Results | Percent Passing |
|--------------|----------------------------|---------------------------|-----------------|
| WSM0117 | 23 | 23 | 100% |

Report Definitions:

- Number of Reported Results*** The number of results reported which could be evaluated. Results receiving an evaluation of "NR" or "No Evaluation" are not included.
- Number of Passing Results*** The number of results reported receiving an evaluation of "Acceptable" or "Check for Error".
- Percent Passing*** The percentage of results reported receiving an evaluation of "Acceptable" or "Check for Error".



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Statistical Summary Report - Water Supply Proficiency Testing

Study: WSM0117

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351 Depot Street
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USA

Contact: Ms. Kelley Keenan
828-350-9364

EPA Lab ID: NC01230

| Micro (Presence/Absence) (PT-MIC-WS) | | | | | | | Lot #: 5252-07 |
|--------------------------------------|----------------|-------|------------|--------------------------|------------------------|-------------------------|----------------|
| NELAC Code | Analyte | Units | Study Mean | Study Standard Deviation | Low Acceptance Limit % | High Acceptance Limit % | |
| Sample 1 | | | | | | | |
| 2530 | Fecal Coliform | | N/A | N/A | N/A | N/A | |
| 2525 | E.Coli | | N/A | N/A | N/A | N/A | |
| 2500 | Total Coliform | | N/A | N/A | N/A | N/A | |
| Sample 2 | | | | | | | |
| 2530 | Fecal Coliform | | N/A | N/A | N/A | N/A | |
| 2525 | E.Coli | | N/A | N/A | N/A | N/A | |
| 2500 | Total Coliform | | N/A | N/A | N/A | N/A | |
| Sample 3 | | | | | | | |
| 2530 | Fecal Coliform | | N/A | N/A | N/A | N/A | |
| 2525 | E.Coli | | N/A | N/A | N/A | N/A | |
| 2500 | Total Coliform | | N/A | N/A | N/A | N/A | |
| Sample 4 | | | | | | | |
| 2530 | Fecal Coliform | | N/A | N/A | N/A | N/A | |
| 2525 | E.Coli | | N/A | N/A | N/A | N/A | |
| 2500 | Total Coliform | | N/A | N/A | N/A | N/A | |
| Sample 5 | | | | | | | |
| 2530 | Fecal Coliform | | N/A | N/A | N/A | N/A | |
| 2525 | E.Coli | | N/A | N/A | N/A | N/A | |
| 2500 | Total Coliform | | N/A | N/A | N/A | N/A | |
| Sample 6 | | | | | | | |
| 2530 | Fecal Coliform | | N/A | N/A | N/A | N/A | |
| 2525 | E.Coli | | N/A | N/A | N/A | N/A | |
| 2500 | Total Coliform | | N/A | N/A | N/A | N/A | |
| Sample 7 | | | | | | | |
| 2530 | Fecal Coliform | | N/A | N/A | N/A | N/A | |
| 2525 | E.Coli | | N/A | N/A | N/A | N/A | |
| 2500 | Total Coliform | | N/A | N/A | N/A | N/A | |
| Sample 8 | | | | | | | |
| 2530 | Fecal Coliform | | N/A | N/A | N/A | N/A | |
| 2525 | E.Coli | | N/A | N/A | N/A | N/A | |
| 2500 | Total Coliform | | N/A | N/A | N/A | N/A | |
| Sample 9 | | | | | | | |
| 2530 | Fecal Coliform | | N/A | N/A | N/A | N/A | |
| 2525 | E.Coli | | N/A | N/A | N/A | N/A | |
| 2500 | Total Coliform | | N/A | N/A | N/A | N/A | |
| Sample 10 | | | | | | | |
| 2530 | Fecal Coliform | | N/A | N/A | N/A | N/A | |
| 2525 | E.Coli | | N/A | N/A | N/A | N/A | |
| 2500 | Total Coliform | | N/A | N/A | N/A | N/A | |

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| Source Water Micro (PT-SW-WS) | | | | | | Lot #: 5252-14 |
|-------------------------------|---------------------|------------|------------|--------------------------|------------------------|-------------------------|
| NELAC Code | Analyte | Units | Study Mean | Study Standard Deviation | Low Acceptance Limit % | High Acceptance Limit % |
| 2530 | Fecal Coliform, MF | CFU/100 mL | 40.0 | 24.6 | 24.2 | 403 |
| 2525 | E. Coli, MF | CFU/100 mL | 43.2 | 21.5 | 35.9 | 269 |
| 2500 | Total Coliform, MF | CFU/100 mL | 55.1 | 25.2 | 62.9 | 160 |
| 2530 | Fecal Coliform, MPN | MPN/100 mL | 43.8 | 6.99 | 66.7 | 150 |
| 2525 | E. Coli, MPN | MPN/100 mL | 44.4 | 22.2 | 30.9 | 322 |
| 2500 | Total Coliform, MPN | MPN/100 mL | 51.3 | 19.7 | 44.7 | 223 |