

# PERFORMANCE EVALUATION

Quarterly Study

**WPMIC10-1**

WPMICRO / DMRQA 30

20-Jan-2010 through 5-Mar-2010

**RT1068**

RTC Labcode

**WY00006**

US EPA Labcode

Energy Laboratories  
Terry Friedlan  
400 West Boxelder Rd.  
Gillette WY 82718

Thank you for participating in study WPMIC10-1. Additional information about this study may be found online at [www.rt-corp.com](http://www.rt-corp.com). If you have any questions or comments about this study please contact me.

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**This report may contain data that are not covered by the A2LA accreditation.**

Sincerely,



Christopher Rucinski  
Quality Director

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Dataset

**WPMIC10-1MLI****Dataset Analyst**

Ingram, Mary

**Include in DMRQA Study**

Evaluations from this dataset will be included in DMRQA 30.

**Accreditors**

Evaluations of this dataset will be sent to the accreditor(s) listed below using your laboratory's labcode listed above each accrediting agency. If any of the information listed below is incorrect, please contact RTC immediately.

**Accrediting Labcode WY00006**

EPA Region 8

**370** Aaron Urdiales  
1595 Wynkoop Street (ENF-W-NP)  
Denver CO 80202  
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**217** Linda Himmelbauer  
1595 Wynkoop Street  
Denver CO 80202-1129  
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**606** Sandra Spence  
1595 Wynkoop Street  
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UNITED STATES

**Accrediting Labcode WY00006**

Wyoming DEQ

Water Quality Division

**206** Edward Mock  
122 W. 25th Street  
Cheyenne WY 82002  
UNITED STATES

**Microbiology**

Analysis

EPA 1603 (mTEC mod) (2002) - Analyst: M. Ingram

Method Number 10236201

	Result Units	Proficiency Value	Accept. Window	Z	Evaluation
Escherichia coli 1, 4 2525 / MIC-003 - Lot 015787 /Analyst: MLI/ Analysis Date: 2/8/10	300 CFU/100mL	139.00	70.6 to 257		Not Acceptable

Analysis

SM/APHA 9222 D (m-FC) 18th ED (1992) - Analyst: M. Ingram

Method Number 20037405

	Result Units	Proficiency Value	Accept. Window	Z	Evaluation
Fecal coliforms 1, 4 2530 / MIC-003 - Lot 015787 /Analyst: MLI/ Analysis Date: 2/17/10	27.8 CFU/100mL	101.00	46.0 to 205		Not Acceptable

**Microbiology (continued)**

Analysis

SM/APHA 9223 B (Colilert®) 18th ED (1992) - Analyst: M. Ingram

Method Number 20211807

	Result Units	Proficiency Value	Accept. Window	Z	Evaluation
Escherichia coli, MPN 1, 4 2525 / MIC-003 - Lot 015787 /Analyst: MLI/ Analysis Date: 2/8/10	187 MPN/100 mL	150.00	58 to 400		<b>Acceptable</b>

Analysis

SM/APHA 9223 B (Colilert®) 19th ED (1995) - Analyst: M. Ingram

Method Number 20212004

	Result Units	Proficiency Value	Accept. Window	Z	Evaluation
Total Coliform, MPN 1, 4 2500 / MIC-003 - Lot 015787 /Analyst: MLI/ Analysis Date: 2/8/10	187 MPN/100 mL	150.00	58 to 400		<b>Acceptable</b>

End of WPMIC10-1MLI

## Sample Information

### E. coli in Water - Quantitative WP

MIC-003 / Lot 015787

	Units	Assigned Value	Study Mean	Study Std. Dev.
Total Coliform, MPN 2500 Microbiology	MPN/100 m	150		
Total coliforms 2500 Microbiology	CFU/100mL	150	154.00	60.50
Escherichia coli 2525 Microbiology	CFU/100mL	150	135.00	28.40
Escherichia coli, MPN 2525 Microbiology	MPN/100 m	150		
Fecal coliform, MPN 2530 Microbiology	MPN/100 m	150	197.00	98.00
Fecal coliforms 2530 Microbiology	CFU/100mL	150	97.50	26.40

### Definitions:

**Assigned Value:** Value attributed to a particular quantity and accepted, sometimes by convention, as having an uncertainty appropriate for a given purpose. See ISO Guide 43 for additional information.

**Accept. Window:** The range of values that constitute acceptable performance for a laboratory participation in this PT study.

**Z:** A Z-Score tells how a single data point compares to normal data. A Z-Score says not only whether a point was above or below average, but how unusual the measurement is. Generally, a method result with a Z-Score less than |2| is considered to be in control, a Z-Score between |2| and |3| is considered 'Questionable', but still within control and a Z greater than |3| is considered not acceptable and the method is out of control.

**Study Mean:** Statistical study mean calculated using a robust statistical model (RTC employs the 'Biweight Program'). Robust statistical techniques to minimize the influence that extreme results can have on estimates of the mean and standard deviation NOTE - These techniques assign less weight to extreme results, rather than eliminate them from a data set.

**Study Std. Dev.:** Standard deviation calculated from study data using robust statisticals (Biweight).

**Gravimetric Value:** The prepared to value, determined by gravimetric means. The uncertainty associated to this value is standard uncertainty and based on RTC's gravimetric tolerances.

Program analyte accrediting footnotes

1 NELAC

2 EPA

3 Other

4 A2LA

5 NELAC Experimental