

# PERFORMANCE EVALUATION

Quarterly Study

**WPMIC08-3B**

WPMICRO / DMRQA 28

9-Jul-2008 through 22-Aug-2008

**RT1014**

RTC Labcode

**WY00002**

US EPA Labcode

Energy Labs  
Jim Yocum  
PO Box 3258  
Casper WY 82602

Thank you for participating in study WPMIC08-3B. 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.

This report shall not be reproduced except in full, without written approval of the laboratory. A laboratory may not claim endorsement by A2LA or any other federal agency. RTC is accredited by A2LA to perform PT programs for the scope of accreditation under A2LA certificate 2122.01.

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

Sincerely,



Christopher Rucinski  
Quality Director

2931 Soldier Springs Road  
Laramie, WY 82070  
(307) 742-5452  
[www.rt-corp.com](http://www.rt-corp.com)







Dataset

**WPMIC08-3B****Include in DMRQA Study**

Evaluations from this dataset will be included in DMRQA 28.

**Accreditors**

Evaluations of this dataset will be sent to the accretor(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 WY00002**

USEPA Region VIII, TMS-Q

**217** Jim Gindelberger  
1595 Wynkoop Street  
Denver CO 80202-1129  
UNITED STATES

**606** Sandra Spence  
1595 Wynkoop Street  
Denver CO 80202-1129  
UNITED STATES

**Microbiology**

Analysis  
SM/APHA 9222 B (LES Endo) 20th ED (1998) Method Number 20198203

	ResultUnits	Accept / Warn	Z	Evaluation
Total Coliform, MPN 1, 4 2500 / MIC-003 - Lot 012886	1119.1MPN/100	489 to 3830		<b>Acceptable</b>

Analysis  
SM/APHA 9222 D (m-FC) 19th ED (1995) Method Number 20209409

	ResultUnits	Accept / Warn	Z	Evaluation
Fecal coliform, MPN 1, 4 2530 / MIC-003 - Lot 012886	170MPN/100	170 to 2620		<b>Acceptable</b>

Analysis  
SM/APHA 9223 B 18th ED (1992) Method Number 20037609  
COLILERT Technology Code: COLILERT

	ResultUnits	Accept / Warn	Z	Evaluation
Escherichia coli 4 2525 / MIC-003 - Lot 012886	1119.1CFU/100m	606 to 3000		<b>Acceptable</b>

End of WPMIC08-3B



# Sample Information

**Microbiological - Quantitative**  
MIC-003

Study Lot 012886  
Mfg Lot 012886

	Units	Proficiency Value	Proficiency Std. Dev.	Mean	Standard Deviation	Robust Mean	Robust Std. Dev.	Gravimetric
Total Coliform, MPN 2500 Microbiology	MPN/100	1,450.00	512.00	1,450.00	495.00	1,380.00	452.00	2000
Escherichia coli 2525 Microbiology	CFU/100m	1,400.00	379.00	1,230.00	419.00	1,290.00	408.00	2000
Fecal coliform, MPN 2530 Microbiology	MPN/100	1,550.00	281.00	1,530.00	546.00	1,530.00	325.00	2000

Program analyte accrediting footnotes

1 NELAC

3 Other

5 NELAC Experimental

2 EPA

4 A2LA

# PERFORMANCE EVALUATION

First Choice for Quality |



Quarterly Study

**WPMIC09-3B**

WPMICRO / DMRQA 29

8-Jul-2009 through 21-Aug-2009

**RT1014**

RTC Labcode

**WY00002**

US EPA Labcode

Energy Laboratories  
Steven Carlston  
PO BOX 3258  
Casper WY 82602-3258

Thank you for participating in study WPMIC09-3B. 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,

A handwritten signature in black ink, appearing to read "Chris Rucinski", is written over a light blue horizontal line.

Christopher Rucinski  
Quality Director

2931 Soldier Springs Road  
Laramie, WY 82070  
(307) 742-5452  
[www.rt-corp.com](http://www.rt-corp.com)







Dataset

**WPMIC09-3B\_Micro****Include in DMRQA Study**

Evaluations from this dataset will be included in DMRQA 29.

**Accreditors**

Evaluations of this dataset will be sent to the accretor(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 WY00002**

Colorado Dept. of Public Health & Environment

**451** Ben Chouaf  
Certification Officer  
8100 Lowry Boulevard  
Denver CO 80230-6928  
UNITED STATES

**Accrediting Labcode WY00002**

Florida Dept. of Health

**229** Stephen Arms  
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1217 Pearl Street  
Jacksonville FL 32231  
UNITED STATES

**Accrediting Labcode WY00002**

Idaho Bureau of Laboratories

**383** Sandra Radwin  
Micro Program  
2220 Old Penitentiary Road  
Boise ID 83712  
UNITED STATES

**Accrediting Labcode WY00002**

Montana Dept. of Public Health & Human Services

Environmental Laboratory Services

**235** Judy Halm  
PO Box 4369  
Helena MT 59604-4369  
UNITED STATES

**Accrediting Labcode WY00002**

Nebraska Health and Human Services System

Department of Regulation & Licensure

**504** Sandra Irons  
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Lincoln NE 68502  
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**Accrediting Labcode WY00002**

Nevada Division of Env. Protection



**Accrediting Labcode WY00002**  
Nevada Division of Env. Protection

**118** Donald Lafara  
901 S. Stewart Street  
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**Accrediting Labcode E87641**  
New Mexico Environmental Department

**411** Barbara Cooney  
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PO Box 26110  
Santa Fe NM 87502  
UNITED STATES

**Accrediting Labcode WY200001**  
Oregon State Public Health Laboratory

**122** Irene Ronning  
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Ste. 100  
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UNITED STATES

**Accrediting Labcode WY00002**  
South Dakota DENR

**364** Mike Smith  
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Joe Foss Building - Chemistry  
523 E. Capital  
Pierre SD 57501-3181  
UNITED STATES

**Accrediting Labcode T104704181-05-TX**  
Texas CEQ

**384** Frank Jamison  
Quality Assurance/Laboratory Accreditation  
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**217** Jim Gindelberger  
1595 Wynkoop Street  
Denver CO 80202-1129  
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**Accrediting Labcode WY00002**  
Utah Bureau of Laboratory Improvement



**Accrediting Labcode WY00002**  
Utah Bureau of Laboratory Improvement

**215** Kristin Brown  
PO Box 142109  
Salt Lake City UT 84114-2109  
UNITED STATES

**Accrediting Labcode WY00002**  
Wyoming DEQ  
Water Quality Division

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

## Microbiology

Analysis  
SM/APHA 9222 D (m-FC) 18th ED (1992) Method Number 20037405

	Result Units	Assigned Value	Accept.	Z	Evaluation
Fecal coliforms 1, 4 2530 / MIC-003 - Lot 014316 /Analyst: dkh/ Analysis Date: 7/23/09	165 CFU/100mL	144.00	38.8 to 440		<b>Acceptable</b>

Analysis  
SM/APHA 9223 B (Colilert® Quanti-Tray®) 19th ED (1995) Method Number 20211001

	Result Units	Assigned Value	Accept.	Z	Evaluation
Total Coliform, MPN 1, 4 2500 / MIC-003 - Lot 014316 /Analyst: dkh/ Analysis Date: 7/23/09	238.2 MPN/100 mL	211.00	57.3 to 651		<b>Acceptable</b>

Analysis  
SM/APHA 9223 B 18th ED (1992) Method Number 20037609

	Result Units	Assigned Value	Accept.	Z	Evaluation
Escherichia coli, MPN 4 2525 / MIC-003 - Lot 014316 /Analyst: dkh/ Analysis Date: 7/23/09	238.2 MPN/100 mL	197.00	70 to 710		<b>Acceptable</b>

End of WPMIC09-3B\_Micro



# Sample Information

## E. coli in Water - Quantitative WP

MIC-003 / Lot {EncryptedLotCode}

	Units	Assigned Value	Study Mean	Study Std. Dev.	Gravimetric Value
Total Coliform, MPN 2500 Microbiology	MPN/100	211.00	191.00	74.40	200 ± 4
Escherichia coli, MPN 2525 Microbiology	MPN/100	197.00	184.00	57.70	200 ± 4
Fecal coliforms 2530 Microbiology	CFU/100m	144.00	132.00	51.30	200 ± 4

### Definitions:

**Assigned Value:** Value attributed to a particular quantity and accepted, sometimes by convention, as having an uncertainty appropriate for a give 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

<sup>1</sup> NELAC

<sup>3</sup> Other

<sup>5</sup> NELAC Experimental

<sup>2</sup> EPA

<sup>4</sup> A2LA