MICROBIOLOGY

Matrices with low and high concentrations of analytes for testing bacteria in drinking water and waste water. Samples are delivered as lyophilized pellets in a glass vial with phosphate buffer dilution water.

Water Pollution PT Schedule 2020

| | Scheme # | Opens | Closes |
|-----------------------------|----------|--------|--------------|
| Q | WP 300 | Jan 13 | Feb 27 |
| 150 | WP 301 | Feb 10 | Mar 26 |
| | WP 302 | Mar 9 | Apr 23 |
| Q | WP 303 | Apr 13 | May 28 |
| | WP 304 | May 11 | Jun 25 |
| | WP 305 | Jun 8 | Jul 23 |
| Q | WP 306 | Jul 13 | Aug 27 |
| $\mathcal{I}_{\mathcal{I}}$ | WP 307 | Aug 10 | Sep 24 |
| 31 | WP 308 | Sep 8 | Oct 23 |
| Q | WP 309 | Oct 9 | Nov 23 |
| | WP 310 | Nov 13 | Dec 28 |
| | WP 311 | Dec 11 | Jan 25, 2021 |

| Q | WP 312 | Jan 18 | Mar 4 |
|---------|--------|--------|--------|
| 195 195 | WP 313 | Feb 15 | Apr 1 |
| | WP 314 | Mar 15 | Apr 29 |
| Q | WP 315 | Apr 12 | May 27 |
| | WP 316 | May 17 | Jul 1 |
| | WP 317 | Jun 14 | Jul 29 |
| Q | WP 318 | Jul 19 | Sep 2 |
| 100 | WP 319 | Aug 16 | Sep 30 |
| | WP 320 | Sep 13 | Oct 28 |
| Q | WP 321 | Oct 15 | Nov 29 |
| | WP 322 | Nov 12 | Dec 27 |

Opens

Dec 13

Closes

Jan 27, 2022

Scheme #

WP 323

Schedule subject to change - see Waters ERA's website at www.eraqc.com

Contents

CRM: A reference material characterized by a metrologically valid procedure for one or more specified properties, accompanied by a reference material certificate that provides the value of the specified property, its associated uncertainty, and a statement of metrological traceability.

A complete listing of ERA's CRMs can be found on our Scope of Accreditation for general requirements for competence of reference material producers available at www.eraqc.com/AboutERA/Accreditations.

PT: A Proficiency Test (PT) is an analysis of what is often referred to as a blind sample or a sample with unknown concentrations of analytes for the purpose of evaluating a laboratory's analytical performance.

QR: Similar to a Proficiency Test, a QuiK Response (QR) is a sample with unknown concentrations. However, unlike a scheduled PT, QR is on-demand and available at any time. Plus, your results are returned within two business days. QuiK Response can be used as a bilateral PT as referenced in the IUPAC/CITAC guide: Selection and use of PT schemes for a limited number of participants – chemical analytical labs.

RM: A material, sufficiently homogeneous and stable with respect to one or more specified properties, which has been established to be fit for its intended use in a measurement process.

| Description | CRM | PT | QR | Page |
|---|------|--------|--------|------|
| Enterococci | 081 | 880 Q | 787QR | 34 |
| Heterotrophic Plate Count (WP) | | 935 B | | 34 |
| Heterotrophic Plate Count (WS) | 084 | 079 M | 084QR | 34 |
| Massachusetts Ground Water Enterococci | 081 | 077 * | _ | 34 |
| Potable Water Coliform Microbe | 694 | 080 M | 085QR | 34 |
| Source Water Microbe | 078 | 595 Q | 078QR | 34 |
| Source Water Microbe - 9221 | 078A | 595A Q | 078AQR | 34 |
| Wastewater Coliform Microbe | 083 | 576 M | 786QR | 34 |
| Wastewater Coliform Microbe - 9221 | 083A | 576A M | 786AQR | 34 |
| | | | | |

Water Supply PT Schedule 2020

| | Scheme # | Opens | Closes |
|---|----------|-------|--------------|
| Q | WS 282 | Jan 6 | Feb 20 |
| | WS 283 | Feb 3 | Mar 19 |
| | WS 284 | Mar 2 | Apr 16 |
| Q | WS 285 | Apr 6 | May 21 |
| | WS 286 | May 4 | Jun 18 |
| | WS 287 | Jun 1 | Jul 16 |
| Q | WS 288 | Jul 6 | Aug 20 |
| | WS 289 | Aug 3 | Sep 17 |
| | WS 290 | Sep 1 | Oct 16 |
| Q | WS 291 | Oct 2 | Nov 16 |
| | WS 292 | Nov 2 | Dec 17 |
| | WS 293 | Dec 4 | Jan 18, 2021 |
| | | | |

2021

| | Scheme # | Opens | Closes |
|---|----------|--------|--------------|
| Q | WS 294 | Jan 11 | Feb 25 |
| | WS 295 | Feb 8 | Mar 25 |
| | WS 296 | Mar 8 | Apr 22 |
| Q | WS 297 | Apr 5 | May 20 |
| | WS 298 | May 10 | Jun 24 |
| | WS 299 | Jun 7 | Jul 22 |
| Q | WS 300 | Jul 12 | Aug 26 |
| | WS 301 | Aug 9 | Sep 23 |
| | WS 302 | Sep 7 | Oct 22 |
| Q | WS 303 | Oct 8 | Nov 22 |
| | WS 304 | Nov 5 | Dec 20 |
| | WS 305 | Dec 6 | Jan 20, 2022 |

All Waters ERA Microbiology PTs open monthly (M), quarterly (Q), or biannually (B) unless otherwise noted. Waters ERA Massachusetts Ground Water Enterococci PT is available any time. Quarterly months are January, April, July, and October.

WP Microbiology

Wastewater Coliform Microbe

CRM Cat. #083 PT Cat. #576 M

QR Cat. #786QR

Each PT sample is one lyophilized quantitative standard for use with all Clean Water Act quantitative methods, including MF and MPN. If determining MPN by SM 9221 or similar multiple tube techniques, use 083A, 576A, or 786A.

CRM also includes one blank sample. Each standard can be used for total coliform, fecal coliform, and *E. coli* which are present in the range 20–2400 CFU/100 mL or MPN/100 mL.

Wastewater Coliform Microbe - 9221

CRM Cat. #083A **PT** Cat. #576A

M

QR Cat. #786AQR

Each PT sample is one lyophilized quantitative standard for use with Standard Methods 9221 or similar multiple tube techniques.

CRM also includes one blank sample. Each standard can be used for total coliform, fecal coliform, and *E. coli* which are present in the range of 20–2400 MPN/100 mL.

Enterococci

CRM Cat. #081

PT Cat. #880 Q

QR Cat. #787QR

Each PT sample is one lyophilized standard, which can be analyzed for enterococci and/or fecal streptococci, MF or MPN in the range 20–1000 CFU/100 mL or MPN/100 mL.

CRM also includes one blank sample. Use with EPA Methods 1106.1 and 1600, ASTM Methods D5259-92, D6503-99, and Standard Methods 9230B and 9230C, and Enterolert Quantitray.

Heterotrophic Plate Count

PT Cat. #935



One lyophilized sample containing a Heterotrophic bacteria. SPC PT standards are required for laboratories seeking NELAC accreditation as well as by many other state programs.

B Offered Biannually in March and September.

State-Specific Microbiology

Massachusetts Ground Water Enterococci

CRM Cat. #081

Cat. #077



Each PT sample set is composed of 10 lyophilized samples to be analyzed for presence or absence of enterococci. This sample is specifically designed for the State of Massachusetts certification for compliance with the federal Ground Water Rule. Each CRM sample set is composed of two lyophilized samples - one quantitative positive and one blank.

* Massachusetts Ground Water Enterococci PT is available any time.

WS Microbiology

Heterotrophic Plate Count

CRM Cat. #084

PT Cat. #079 M

QR Cat. #084OR

Each sample is one lyophilized standard containing a heterotrophic bacteria present in the range 5–500 CFU/mL or MPN/mL. Use with the Standard Methods 9215B – Pour Plate Method, and Most Probable Number (MPN) Method (simplate).

Potable Water Coliform Microbe

CRM Cat. #694

PT Cat. #080 M

QR Cat. #085QR

Each sample set consists of lyophilized standards for the presence or absence analysis of total coliform, fecal coliform, and *E. coli*. The standards are applicable to all SDWA promulgated methods-MF, MPN, presence/absence, and ONPG-MUG. The Potable Water Coliform Microbe PT standard is available in all 12-monthly WS studies.

Source Water Microbe

CRM Cat. #078 PT Cat. #595 0

QR Cat. #078QR

Each sample is one lyophilized quantitative standard containing *E. coli* in the range 20–200 CFU/100 mL or MPN/100 mL. Use with all SDWA quantitative methods. Each standard can be used for total coliform, fecal coliform, and *E. coli*. If determining MPN by SM 9221 or similar multiple tube techniques, use 078A, 595A, and 078AQR.

Source Water Microbe - 9221

CRM Cat. #078A

Cat. #595A

0

QR Cat. #078AQR

Each sample is one lyophilized quantitative standard containing *E. coli* in the range of 20–200 MPN/100 mL for use with Standard Methods 9221 or similar multiple tube techniques. Each standard can be used for total coliforms, fecal coliforms, and *E. coli*.

CRM - Certified Reference Material

PT - Proficiency Testing

QR - QuiK Response

All Waters ERA Microbiology PTs open monthly (M) or quarterly (Q). Quarterly months are January, April, July, and October.

Mike Blades
Technical Manager
Years with Waters ERA: 26



GOING BEYOND THE STANDARD

Supplying Proficiency Testing (PT) and Certified Reference Material (CRM) standards is not unique. What sets us apart is our commitment to being more than a standards provider. Since 1977, we've worked as your partner, helping you produce reliable, defensible data, maintain critical accreditations, and make your laboratory successful.

- Data Tools to Help You Succeed: eDATA online PT data management portal allows you to effectively manage your proficiency testing program, assess risk, and evaluate trends over time.
- Expert Guidance at Your Fingertips: Direct access to one of the most qualified Customer Service and Technical Support teams in the environmental PT and CRM industry.
- Superior Standards for Better Results: Waters ERA maintains ISO 17025, ISO 17034, and ISO 17043 accreditations, giving you greater confidence in your data due to the largest studies, two-day report turn-around time, and more reliable performance evaluations.

