

LOUDOUN  WATER

Loudoun Water modernizes rush sample response with the IDEXX Tecta B16

Automated total coliform and *E. coli* results—ideal for after-hours and time-sensitive samples

Background

Loudoun Water is a public water utility in northern Virginia, serving a rapidly growing community with an in-house laboratory that supports both drinking water monitoring and operational response. The lab processes approximately 180 drinking water compliance samples per month for total coliforms and *E. coli*, typically Monday through Thursday, while also handling time-sensitive rush samples tied to construction schedules, main breaks, and resampling needs.

The Challenge: Keeping rush samples and projects moving without weekend call-backs

For Loudoun Water, rush drinking water samples often arrive when timing is least convenient—late on Fridays, over a weekend, or after normal lab hours. In those situations, traditional methods can create an expensive bottleneck: staff must return at a specific time to read and report results, even if the actual “read” takes only a few minutes.

As Laboratory Manager JJ Cornette explains, the closest staff member lives a 20-minute drive from the lab, while the farthest is more than an hour away. For emergency response, Loudoun Water compensates staff from the moment they leave home until they return—so travel time becomes part of the cost of “just reading” a rush sample.

The lab needed a way to deliver rush results reliably—without requiring someone to make a special trip back to the incubator. These time-sensitive samples include water main breaks, non-compliant samples, confirmation resamples, and construction-related sampling that can't always wait until Monday. “If there's a concern a sample could have compliance implications,” JJ explained, “we'll run Tecta side-by-side with our standard process so we can get results faster—especially if it turns out to be positive.”

“Tecta has made things much easier. Results are delivered automatically, without needing staff to be directly involved, which has helped reduce the strain on both personnel and timing.

As our service area keeps growing, we need dependable, rapid answers—especially for urgent samples that come in off-schedule.”

JJ Cornette

Laboratory Manager, Loudoun Water



The Solution: Automated incubation and emailed results

IDEXX Tecta is the practical solution when microbiological results need to be communicated quickly—especially when clearing precautionary boil water notices due to main breaks or placing new or repaired infrastructure into service. By automating incubation, detection, result interpretation, and result communication, the system reduces the time between sample receipt and reporting defensible microbiological results.

Loudoun Water adopted the IDEXX Tecta B16, a fully automated, EPA-approved water microbiology system designed to detect total coliforms and *E. coli* in drinking water. Instead of requiring staff to return at set times for visual readings, Tecta continuously monitors each test cartridge and sends results automatically via email as soon as they're available.

The Tecta B16 features 16 incubation chambers, allowing the lab to process multiple rush samples at once. Positive test results can be delivered in as little as 2 hours, depending on contamination levels, while negative results are confirmed within either 18 or 24 hours, based on the specific test. This rapid, automated workflow helps Loudoun Water quickly and confidently respond to urgent situations without the need for manual intervention.

Implementation: Adding a dedicated pathway for rush and after-hours samples

Rather than changing the lab's entire routine workflow, Loudoun Water uses Tecta as a targeted tool for samples where timing and responsiveness matter most. Typical triggers include Friday/weekend construction sampling, resamples tied to potential compliance impact, and incident response (such as main breaks) where faster answers can prevent unnecessary delays or repeat field work.

“Before Tecta, if a rush sample came in on a Friday or over the weekend, we had to wait to see if a staff member would be available to read the sample—now that extra step is gone, and we can tell our teams ‘yes, we can do that’ much sooner.”

JJ Cornette

Laboratory Manager, Loudoun Water



The Results: Faster answers for rush samples and fewer weekend trips to the lab

With Tecta in place, Loudoun Water can start time-sensitive bacteriological tests any time and receive results by email—supporting both after-hours decision-making and a more flexible sampling schedule for internal customers. For JJ, the value of Tecta is most evident in the moments when time matters most—when field crews and project teams need an answer quickly to decide what happens next.

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“When a water main break hits or a rush sample comes in, Tecta is the difference between waiting and knowing. We can get results faster and have them emailed as soon as possible—without needing an employee to come back and check an incubator—so we can quickly confirm there isn’t a problem, avoid unnecessary flushing or repeat trips, and give our team the confidence to move forward.”

JJ Cornette
Laboratory Manager, Loudoun Water

- **Improved responsiveness for main breaks and boil water advisories.** In loss-of-pressure scenarios, teams may need an initial sample and a follow-up sample (often about 16 hours later). Faster results can help confirm when “everything’s fine,” reducing the likelihood of sending crews back out or performing additional flushing when it isn’t needed.
- **Reduced overtime tied to rush sample readbacks.** Loudoun has seen a clear impact on costs: “This has drastically reduced the amount [of overtime] that we’ve seen... there’s still overtime... but it’s not for off-hours sample reading anymore.”
- **Faster decisions to support construction schedules.** JJ estimates construction accounts for “probably a good 80%” of their Tecta rush samples. When schedules are compressed by weather or sequencing, faster bacteriological insight helps teams keep work moving: “We want to keep rolling with this project, but we can’t keep rolling until we get results back.”
- **Right-sized use for rush samples—without disrupting routine compliance testing.** Loudoun Water averages about one to two Tecta rush samples per week. In parallel, the team collects about 180 drinking water compliance samples per month for total coliform and *E. coli* (typically Monday through Thursday).

Loudoun Water’s experience with the IDEXX Tecta B16 shows how automation can help utilities meet rush-sample demands driven by construction and incident response. When used for time-sensitive applications, Tecta can support earlier decision-making related to lifting precautionary boil water notices or placing new or repaired infrastructure into service. Positive detections are similarly identified sooner, allowing remedial actions to begin more quickly.





U.S. EPA Approved

Tecta is an U.S. EPA-approved* method for the simultaneous detection of total coliforms and *E.coli* in drinking water.



Start a test anytime

Because Tecta automates result detection and interpretation, samples can be started whenever they arrive without waiting for traditional read windows or batching schedules.



Automated emailed results

Results are automatically emailed when positives are detected or when tests are complete, allowing laboratories to communicate results sooner.



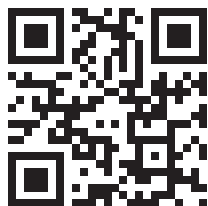
Faster time to positive detection

Tecta flags positive results as soon as target growth is detected, allowing remedial actions and operational responses to begin more quickly.



Support faster operational decisions

Earlier insight into microbiological water quality helps utilities and laboratories respond sooner to boil water notices, infrastructure repairs, and time-sensitive operational events.



**Learn more about the IDEXX Tecta system
at idexx.com/Loudoun**

*Tectalert EC/TC medium and Tecta instruments are U.S. EPA approved at 40 CFR Part 141, listed as a method in Presence/Absence Method for the Simultaneous Detection of Total Coliforms and Escherichia coli (E. coli) in Drinking Water.

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