



Tecta* and Tectalert*

Recognitions, Technical Documents, and Publications

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1. Recognitions/Approvals

Canada, Health Canada – 2020 – Drinking water, presence/absence, *E. coli* by Tecta EC/TC; Guideline for Canadian Drinking Water Quality, *E. coli*; <https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidelines-canadian-drinking-water-quality-guideline-technical-document-escherichia-coli.html>

Canada, Ontario – 2010 - Drinking water, presence/absence, total coliform and *E. coli* by Tecta EC/TC; Protocol of Accepted Drinking Water Testing Methods Version 2.0; https://files.ontario.ca/protocol_of_accepted_drinking_water_testing_methods.pdf

New Zealand – 2016 – Drinking water, presence/absence, *E. coli* by Tecta EC/TC; Tecta Press Release on the acceptance of Tecta from the New Zealand Ministry of Health; Available by request

Philippines – 2016 - Drinking water, presence/absence, total coliform and *E. coli* by Tecta EC/TC; Letter from the Department of Health national Reference Laboratory; Available by request

South Korea – 2012 - Drinking water, presence/absence, *E. coli* and B16 Instrument; Letter from the National Institute of Environmental Research (NIER); Available by request

United States – 2014 – U.S. EPA Approval of drinking water, presence/absence, total coliform and *E. coli* by Tecta EC/TC; Federal Register; Vol. 79, No. 118; <https://www.govinfo.gov/content/pkg/FR-2014-06-19/pdf/2014-14369.pdf>

United States – 2017 – U.S. EPA Approval of drinking water, by Tecta EC/TC Medium and the Tecta Instrument [B16]: A Presence/Absence Method for the Simultaneous Detection of Total Coliform and *Escherichia coli* (*E. coli*) in Drinking Water, March 20, 2017, Version 2.0. <https://www.govinfo.gov/content/pkg/FR-2017-07-27/pdf/2017-15380.pdf>

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United States – U.S. FDA Approval of Agricultural Water for Produce Safety Rule, presence/absence, total coliform and *E. coli* by Tecta EC/TC; FDA Fact Sheet – Equivalent Testing Methodology for Agricultural Water; <https://www.fda.gov/media/107656/download>

2. Certification

AOAC International Research Institute – 2022 (Initial approval date 2014, updated annually) – AOAC Performance Tested Certification for Tecta Combined *E. coli* and Total Coliform Test in tap water, well water, lake water, vegetable wash water, bottled water, sugar-free lemon iced tea. Certificate No. 010801; https://members.aoac.org/AOAC_Docs/RI/23PTM/23C_010801_IDEXXCanadaEC_ver2.pdf

3. Validations & Verifications

Quebec, Canada – 2014 - CEAEQ Validation of the Tecta EC/TC System for Monitoring Water Quality. Available by request.

United States – 2014 – US EPA Environmental Technology Verification (ETV) Report and Statement for ENDETEC TECTA B-16 by Pathogen Detection Systems, INC. EPA/600/R-14/307. https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=287547

4. Technical Documents and Other Publications

Beatson, P. and McLoughlin, T. (n.d.) Testing the waters with Tecta. Sydney Water. (Tecta FC) Available by request.

Tecta. Use of Tecta CCA (Tecta EC/TC) Test for Quantitative Assessment of *E. coli* and Total Coliform Bacteria in Water. Available by request.

5. Oral Communications

5.1 Wastewater – Biosolids

Brown, S. R. Monitoring Wastewater Effluent Using a Rapid, Automated Detection System for *E. coli* and Fecal Coliform Bacteria. (Tecta-CCA). WEFTEC Conference, Chicago, Illinois USA, Session 510; October 2021. <https://www.accesswater.org/publications/proceedings/-10077938/monitoring-wastewater-effluent-using-a-rapid--automated-detection-system-for-e--coli-and-fecal-coliform-bacteria>

Wohlsen, T., Marcotte, E., Brown, R.S. Characterization of the TECTA bacteria detection system for monitoring *E. coli* and thermotolerant (faecal) coliforms in biosolids. (Tecta-CCA). Biosolids National Conference, 2021. Copy of the abstract and paper are available by request.

5.2 Other Water

Brown, R.S., O'Donnell, L., and Luke, A. Automated, Rapid Microbial Detection System for Remote Testing of *E. coli*, Coliforms, and Enterococci Bacteria. (Tecta B16 and Tectalert). OZWater Conference, 2018. Copy of the presentation slides are available by request.

6. Publications and Scientific Papers

6.1 Drinking Water

Brown, S.R., Marcotte, E. J-P., Dunkinson, C.E., Aston, W.P., Gallant, P.J., and Wilton, D. (2010, January). An Automated Detection Technology for On-Site *E. coli* and Coliform Bacteria Monitoring. (Tecta EC/TC). *Water Environment Federation*. 2010(8):7433-7442; <https://www.accesswater.org/publications/proceedings/-298073/an-automated-detection-technology-for-on-site-e--coli-and-coliform-bacteria-monitoring>

Burnet, J.B., Tuc Dinh, Q., Imbeault, S., Dorner, S., and Prevost, M. (2019, April). Autonomous online measurement of β -D-glucuronidase activity in surface water: is it suitable for rapid *E. coli* monitoring? *Water Research*, Volume 152; <https://doi.org/10.1016/j.watres.2018.12.060>

Habash, M. and Johns, R. (2009, October). Comparison study of membrane filtration direct count and an automated coliform and *Escherichia coli* detection system for on-site water quality testing. (Tecta EC/TC). *J Microbiol. Methods*, 79(1):128-130. <https://pubmed.ncbi.nlm.nih.gov/19703500/>

6.2 Wastewater

Burnet, J. B., Sylvestre, E., Jalbert, J., Imbeault, S., Servais, P., Prevost, M., and Dorner, S. (2019, November). Tracking the contribution of multiple raw and treated wastewater discharges at an urban drinking water supply using near real-time monitoring of β -D-glucuronidase activity. *Water Research*, Volume 164; <https://doi.org/10.1016/j.watres.2019.114869>

6.3 Other Water

Beatson, P., Marcotte, E., and Brown, R.S. (n.d.). The TECTA system for rapid, automated faecal coliform monitoring in ambient water affected by sewage outflow. (Tecta B16, Tecta FC). Available by request.

Cazals, M., Stott, R., Fleury, C., Francois, P., Prevost, M., Servais, P., Dorner, S., and Burnet, J.B. (2020, June). Near real-time notification of water quality impairments in recreational freshwaters using rapid online detection of β -D-glucuronidase activity as a surrogate for *Escherichia coli* monitoring. *Science of the Total*

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Environment, Volume 720. <https://doi.org/10.1016/j.scitotenv.2020.137303>

Schang, C., Henry, R., Kolotelo, P.A., ... McCarthy, D. T. (2016, May). Evaluation of Techniques for Measuring Microbial Hazards in Bathing Waters: A Comparative Study. (Tecta EC/TC, Endetec). *PLOS ONE*
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0155848>

Wohlsen, T.D., Del Gabbro, T., Prochazka, E., and Brown, S. R. (N.D.) Rapid Methods for the detection of *E. coli* and enterococci in recreational waters. Available by request.

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