



SCOPE OF ACCREDITATION TO ISO 17034:2016

ERA
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REFERENCE MATERIAL PRODUCER

Valid To: September 30, 2026

Certificate Number: 1539.03

In recognition of the successful completion of the A2LA Evaluation process, accreditation is granted to this Reference Material Producer for the production of certified reference materials of the following categories:

Certified Reference Material	Class or Type of Reference Materials/Artifact or Matrix	Concentration Range ² (after dilution, if applicable)	Relative Uncertainty ¹ (Expanded)	Measurement Technique(s)
Environmental Reference Materials	Single and Multi-component microorganisms in lyophilized pellets and in solution.			MPN Membrane Filtration Pour Plate Presence/Absence
Waters Potable Water Routine Analytes, Fresh Water Routine Analytes, Industrial Wastewater, Routine Analytes	Microbiology: Total Coliforms Fecal Coliforms E.Coli Enterococci Fecal Streptococci Heterotrophic Plate Count	Presence/Absence, (20 – 2400) CFU/100 mL (20 – 2400) MPN/100 mL Presence/Absence, (20 – 1000) CFU/100 mL (20 – 1000) MPN/100 mL (5 – 500) CFU/mL (5 – 500) MPN/mL	(2 to 150) %	

Certified Reference Material	Class or Type of Reference Materials/Artifact or Matrix	Concentration Range ² (after dilution, if applicable)	Relative Uncertainty ¹ (Expanded)	Measurement Technique(s)
Ion Activity pH Standards Ion Selective Electrode Calibrants Conductivity Standards Buffer Systems	Single and Multi-component organic and inorganic material in solution: Ultra-Pure Water Analytes Conductivity Total Organic Carbon Total Inorganic Carbon	(5 – 500,000) uS/cm (0.05 – 10,000) mg/L (0.05 – 10,000) mg/L	(0.1 – 5) %	Titration IC ICP/OES ICP/MS CVAA Spectrophotometry Colorimetric Infrared Conductivity Gravimetric Ion Selective Electrode Nephelometry
Environmental Reference Materials Waters Potable Water Routine Analytes Trace Elements Organic Pollutants Other Analytes Industrial Waste Water Routine Analytes Trace Elements Organic Pollutants Other Analytes	Single and Multi- component organic and inorganic material in solution: Miscellaneous Chemistry Cyanide Silica Surfactants Total Organic Halides Acidity Organic Carbon Chlorine Alkalinity Dissolved Oxygen	1.0 µg/L – 10,000 mg/L	(0.4 – 20) %	Titration IC ICP/OES ICP/MS CVAA Spectrophotometry Conductivity Nephelometry Gravimetric Ion Selective Electrode LC/UV LC/FLUOR LC/MS LC/MS/MS GC/FID GC/MS GC/ECD GC/NPD



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Environmental Reference Materials Waters Potable Water Routine Analytes Trace Elements Organic Pollutants Other Analytes Industrial Waste Water Routine Analytes Trace Elements Organic Pollutants Other Analytes	Single and Multi-component organic and inorganic material in solution: Organic Chemistry Volatiles Organic Compounds (VOCs) Semi-Volatiles Organic Compounds (SVOCs) Per-and Polyfluoroalkyl Substances (PFAS) Polynuclear Aromatic Hydrocarbons (PAHs) Phenolics Organochlorine Pesticides (OCPs) Organonitrogen Pesticides (ONPs) Organophosphorus Pesticides (OPPs) Triazine Pesticides Carbamate/Carbamoxyloxime Pesticides Polychlorinated Biphenyls (PCBs) – Aroclors/Congeners Chlorinated Acid Herbicides Herbicides Haloacetic Acids Glycols Nitroaromatics/Nitramines Petroleum Hydrocarbons (TPH/DRO/GRO/PVOC/VPH/EPH) Disinfection By-Products Dioxin	2 pg/L – 10,000 mg/L	(0.3 – 35) %	Titration IC ICP/OES ICP/MS CVAA Spectrophotometry Conductivity Nephelometry Gravimetric Ion Selective Electrode LC/UV LC/FLUOR LC/MS LC/MS/MS GC/FID GC/MS GC/ECD GC/NPD

¹ Uncertainties for the certified values are available on the reference material producer's issued certificates for reference materials and certified reference materials. The uncertainty ranges stated above represent typical relative expanded uncertainties, where k approximates a 95% confidence interval for given analytes within their respective product/category or sub-category. As some categories encompass many different products, concentration ranges, matrices, technologies and analyte/properties, please contact ERA/Waters for product/lot specific Certificates of Analysis to obtain actual estimates of uncertainty.

² This scope includes concentration ranges where applicable. Contact the reference material producer for certified values and other lot specific values.



Accredited Reference Material Producer

A2LA has accredited

ERA
Golden, CO

This accreditation covers the specific materials listed on the agreed upon Scope of Accreditation.

This producer meets the requirements of ISO 17034:2016 *General Requirements for the Competence of Reference Material Producers*. This accreditation demonstrates technical competence for a defined scope and the operation of a quality management system.



Presented this 20th day of November 2024.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1539.03
Valid to September 30, 2026

For reference materials to which this accreditation applies, please refer to the reference material producer's Scope of Accreditation.