CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board
500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

Cerilliant Corporation
811 Paloma Drive, Suite A
Round Rock, TX 78665

has been assessed by ANAB
and meets the requirements of international standard

ISO 17034:2016

while demonstrating technical competence in the field of

Reference Material Producer

Refer to the accompanying Scope of Accreditation for information regarding the types of materials to which this accreditation applies.

AR-1353
Certificate Number

ANAB Approval

Certificate Valid: 10/10/2018-11/21/2020
Version No. 005 Issued: 10/10/2018

This reference material producer is accredited in accordance with the recognized International Standard ISO 17034:2016.
This accreditation demonstrates technical competence for a defined scope and the operation of an RMP quality management system.

ANSI-ASQ National Accreditation Board

SCOPE OF ACCREDITATION TO ISO 17034:2016

Cerilliant Corporation
811 Paloma Drive, Suite A
Round Rock, TX 78665
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REFERENCE MATERIAL PRODUCER

Valid to: **November 21, 2020** Certificate Number: **AR-1353**

Chemical

Sub-Category of Reference Material	ILAC RM Category	Class or Type of Reference Materials Produced (Include Range Where Applicable)	Methods or Techniques Used in the RMP Laboratory (if Appropriate)
Organic Reference Materials	A3.1	• Single and Multi-component organic materials either neat or in dilute organic or aqueous solvents and biological matrices. Dilutions range from 1pg/mL to 100 mg/ml. CRM Categories • Pharmaceutical substances • Metabolites • Intermediates • Impurities and Degradants • Drugs of abuse • High-purity environmental contaminants • Polycyclic aromatic hydrocarbons • Pesticides • Dioxins and furans Chemical warfare	• Chromatography, USP - 621 (HPLC and GC) • Mass Spectrometry USP – 736 (LC-MS and GC-MS) • Nuclear Magnetic Resonance (NMR) USP – 761 • FTIR – USP 197 • Water Determination – Cerilliant Method AM1346 (Karl Fischer Analysis) • Residual Solvent Limits – Cerilliant Method AM 1087 (GC/FID Headspace) • Residue on Ignition (sulfated ash) – USP-281 • Optical rotation – USP 781 • Quantitative Nuclear Magnetic Resonance (QNMR) – Cerilliant Method AM1370

		verification compounds • Explosives and highly reactive compounds • Stable isotope labeled materials • Ethanol / Alcohol • Vitamins • Hormones • Biomarkers • Phytochemicals • Dietary Supplements	• Value assignment method of testosterone in Matrix by LCMS – AMP5000 • Gravimetric preparation • Volumetric preparation • Density measurement
Health and Industrial Hygiene	A5	• Single and Multi-component organic materials either neat or in dilute organic or aqueous solvents and biological matrices. Dilutions range from 1pg/mL to 100 mg/ml. CRM Categories • Pharmaceutical substances • Metabolites • Intermediates • Impurities and Degradants • Drugs of abuse • High-purity environmental contaminants • Polycyclic aromatic hydrocarbons • Pesticides • Dioxins and furans Chemical warfare verification compounds • Explosives and highly reactive compounds • Stable isotope labeled materials	• Chromatography, USP - 621 (HPLC and GC) • Mass Spectrometry USP – 736 (LC-MS and GC-MS) • Nuclear Magnetic Resonance (NMR) USP – 761 • FTIR – USP 197 • Water Determination – Cerilliant Method AM1346 (Karl Fischer Analysis) • Residual Solvent Limits – Cerilliant Method AM 1087 (GC/FID Headspace) • Residue on Ignition (sulfated ash) – USP-281 • Optical rotation – USP 781 • Quantitative Nuclear Magnetic Resonance (QNMR) – Cerilliant Method AM1370 • Value assignment method of testosterone in Matrix by LCMS – AMP5000 • Gravimetric preparation

		• Ethanol / Alcohol • Vitamins • Hormones • Biomarkers • Phytochemicals • Dietary Supplements	Volumetric preparation Density measurement
Forensic Reference Materials	A8	• Single and Multi-component organic materials either neat or in dilute organic or aqueous solvents and biological matrices. Dilutions range from 1pg/mL to 100 mg/ml. CRM Categories • Pharmaceutical substances • Metabolites • Intermediates • Impurities and Degradants • Drugs of abuse • High-purity environmental contaminants • Polycyclic aromatic hydrocarbons • Pesticides • Dioxins and furans Chemical warfare verification compounds • Explosives and highly reactive compounds • Stable isotope labeled materials • Ethanol / Alcohol • Vitamins • Hormones • Biomarkers • Phytochemicals • Dietary Supplements	• Chromatography, USP - 621 (HPLC and GC) • Mass Spectrometry USP – 736 (LC-MS and GC-MS) • Nuclear Magnetic Resonance (NMR) USP – 761 • FTIR – USP 197 • Water Determination – Cerilliant Method AM1346 (Karl Fischer Analysis) • Residual Solvent Limits – Cerilliant Method AM 1087 (GC/FID Headspace) • Residue on Ignition (sulfated ash) – USP-281 • Optical rotation – USP 781 • Quantitative Nuclear Magnetic Resonance (QNMR) – Cerilliant Method AM1370 • Value assignment method of testosterone in Matrix by LCMS – AMP5000 • Gravimetric preparation • Volumetric preparation • Density measurement

General Medicine	B1.1	• Single and Multi-component organic materials either neat or in dilute organic or aqueous solvents and biological matrices. Dilutions range from 1pg/mL to 100 mg/ml. CRM Categories • Pharmaceutical substances • Metabolites • Intermediates • Impurities and Degradants • Drugs of abuse • High-purity environmental contaminants • Polycyclic aromatic hydrocarbons • Pesticides • Dioxins and furans Chemical warfare verification compounds • Explosives and highly reactive compounds • Stable isotope labeled materials • Ethanol / Alcohol • Vitamins • Hormones • Biomarkers • Phytochemicals • Dietary Supplements	• Chromatography, USP - 621 (HPLC and GC) • Mass Spectrometry USP – 736 (LC-MS and GC-MS) • Nuclear Magnetic Resonance (NMR) USP – 761 • FTIR – USP 197 • Water Determination – Cerilliant Method AM1346 (Karl Fischer Analysis) • Residual Solvent Limits – Cerilliant Method AM 1087 (GC/FID Headspace) • Residue on Ignition (sulfated ash) – USP-281 • Optical rotation – USP 781 • Quantitative Nuclear Magnetic Resonance (QNMR) – Cerilliant Method AM1370 • Value assignment method of testosterone in Matrix by LCMS – AMP5000 • Gravimetric preparation • Volumetric preparation • Density measurement
		• Single and Multi-component organic materials either neat or in dilute organic or aqueous solvents and biological	• Chromatography, USP - 621 (HPLC and GC) • Mass Spectrometry USP – 736 (LC-MS and GC-MS)

Clinical Chemistry	B2	matrices. Dilutions range from 1pg/mL to 100 mg/ml. CRM Categories • Pharmaceutical substances • Metabolites • Intermediates • Impurities and Degradants • Drugs of abuse • High-purity environmental contaminants • Polycyclic aromatic hydrocarbons • Pesticides • Dioxins and furans Chemical warfare verification compounds • Explosives and highly reactive compounds • Stable isotope labeled materials • Ethanol / Alcohol • Vitamins • Hormones • Biomarkers • Phytochemicals • Dietary Supplements	• Nuclear Magnetic Resonance (NMR) USP – 761 • FTIR – USP 197 • Water Determination – Cerilliant Method AM1346 (Karl Fischer A nalysis) • Residual Solvent Limits – Cerilliant Method AM 1087 (GC/FID Headspace) • Residue on Ignition (sulfated ash) – USP-281 • Optical rotation – USP 781 • Quantitative Nuclear Magnetic Resonance (QNMR) – Cerilliant Method AM1370 • Value assignment method of testosterone in Matrix by LCMS – AMP5000 • Gravimetric preparation • Volumetric preparation • Density measurement

Notes:

1. Please contact the RMP organization for more information on CRM uncertainty values, Ucrm values, and other specific lot values. Some of this information may also be available on the RMP's website.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. AR-1353.

Vice President