



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

Spectra Analytical Laboratory, LLC. dba Steep Hill Hawaii
1150 S. King Street Suite #PH, Honolulu, HI 96814

*(Hereinafter called the Organization) and hereby declares that Organization is accredited
in accordance with the recognized International Standard:*

ISO/IEC 17025:2005

This accreditation demonstrates technical competence for a defined scope and the
operation of a laboratory quality management system
(as outlined by the joint ISO-ILAC-IAF Communiqué dated January 2009):

Chemical & Biological Testing
(As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Initial Accreditation Date:

July 31, 2017

Issue Date:

July 31, 2017

Expiration Date:

September 30, 2019

Tracy Szerszen
President/Operations Manager

Accreditation No.:

92630

Certificate No.:

L17-324

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

*The validity of this certificate is maintained through ongoing assessments based on a
continuous accreditation cycle. The validity of this certificate should be
confirmed through the PJLA website: www.pjlabs.com*



Certificate of Accreditation: Supplement

Spectra Analytical Laboratory, LLC. dba Steep Hill Hawaii

1150 S. King Street Suite #PH, Honolulu, HI 96814
Contact Name: Michael Covington Phone: 808-735-5227

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Biological ^F	Cannabis Plant Material	Moisture Content	Moisture Balance	D.L. = < 15 %
		Foreign or Extraneous Material	Visual Inspection	Presence / Absence
Microbiological ^F	Cannabis Plant Material, Cannabinoid Infused Products, and Cannabinoid Concentrates	Bile-Tolerant Gram Negative Bacteria: Processed & Unprocessed Materials CO ₂ and Solvent Based Extracts	TEMPO Laboratory Developed Methods	10 ³ CFU/g 10 ² CFU/g
		Total Viable Aerobic Bacteria: Processed & Unprocessed Materials CO ₂ and Solvent Based Extracts		10 ⁵ CFU/g 10 ⁴ CFU/g
		Total Yeast and Mold: Processed / Unprocessed Materials CO ₂ and Solvent Based Extracts		10 ⁴ CFU/g 10 ³ CFU/g
		Total Coliforms: Processed / Unprocessed Materials CO ₂ and Solvent Based Extracts		10 ³ CFU/g 10 ² CFU/g
		Total E. coli: Processed / Unprocessed Materials CO ₂ and Solvent Based Extracts		1 CFU/g
		Aspergillus fumigatus Aspergillus niger Aspergillus flavus	PathDx qPCR	1 CFU/g
		Salmonella spp.		1 CFU/g
		Mycotoxins: Aflatoxins Ochratoxins	ELISA	20 ug/kg



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Chemical ^F	Cannabis Plant Material, Cannabinoid Infused Products, and Cannabinoid Concentrates	Cannabinoid Potency: Delta 9 – Tetrahydrocannabinol (THC) Δ9 Tetrahydrocannabinol Acid (THCA) Cannabidiol (CBD) Cannabidiolic Acid (CBDA) Cannabigerol (CBG) Cannabinol (CBN)	HPLC - UV	% Purity (0 to 100 %)
		Terpenes/Residual Solvents: Butane Heptane Benzene Toluene Hexane Total Xylenes	HS-GC-MS/MS	D.L. = < 800 ppm D.L. = < 500 ppm D.L. = < 1 ppm D.L. = < 1 ppm D.L. = < 10 ppm D.L. = < 1 ppm
		EPA Regulated Pesticides ¹	LC-MS/MS GC-MS/MS	D.L. = < 1 ppm
		Heavy Metals Detection: Arsenic Lead Cadmium Mercury	AA- Graphite Furnace and Cold Vapor	D.L. = < 10 ppm D.L. = < 6 ppm D.L. = < 4 ppm D.L. = < 2 ppm

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location. Example: Outside Micrometer^F would mean that the laboratory performs this testing at its fixed location.
2. The presence of a superscript 1 for Pesticides¹ means that a complete list of pesticides the laboratory is accredited to perform testing identification shall be make available upon request.