

# Certificate of Analysis



**Sample Name:** DLD Green powder  
**Client:** Direct Leaf Distribution  
**Sample Code:** DTS-251209-064  
**Matrix Name:** Raw Plant Material  
**Type / Result:** Quality Assurance - Pass



**Received Date:** Fri, Dec 12, 2025  
**Published Date:** Mon, Dec 22, 2025  
**Batch/Lot Code:** DLDG0126  
**Batch Size:** N/A  
**Sample Size:** 1U

## RESULT SUMMARY

Mitragynine	1.5728 %
Total Major Alkaloids	2.5715 %

<b>ALKU</b> ✓ Kratom Alkaloids High Level	<b>ALKL</b> ✓ Kratom Alkaloids Low Level	<b>MOS</b> ✓ Moisture Content Loss on Drying	<b>TAMC</b> ✓ Total Aerobic Bacteria Plate	<b>SS</b> ✓ Salmonella & STEC qPCR
<b>HVMET</b> ✓ Heavy Metals Big 4	<b>TYMFD</b> ✓ Total Yeast & Mold Plate	<b>7OHFL</b> ✓ 7-Hydroxymitragynine Florida		

## Approvals

### RESULTS REVIEWED BY:

**Leslie Varela**  
Laboratory Director

Cambium Analytica  
Monday, Dec 22, 2025

### RESULTS CERTIFIED BY:

**Douglas Smith**  
VP - Scientific  
Operations

Cambium Analytica  
Monday, Dec 22, 2025

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## Lab Information

**Address:** 1230 Woodmere Ave, Traverse City, MI 49686    **Phone:** 231.252.3669    **Accreditation:** ISO/IEC 17025:2017 – #108157



ALKU

**Kratom Alkaloids - High Level**LAB-TM-052 - Determination of Kratom Alkaloid Content by UPLC-DAD  
ALKU-DTS-251209-064-01 - TUE, DEC 16, 2025

Analyte	Value	Value (mg/g)	Action Limit	LOD	LOQ	Status
Mitragynine	1.5728 %	15.7277 mg/g	N/A	0.3 ug/g	0.5 ug/g	N/A
Speciociliatine	0.4463 %	4.4631 mg/g	N/A	0.3 ug/g	0.5 ug/g	N/A
Paynantheine	0.3529 %	3.5290 mg/g	N/A	0.3 ug/g	0.5 ug/g	N/A
Speciogynine	0.1995 %	1.9951 mg/g	N/A	0.3 ug/g	0.5 ug/g	N/A
Total Major Alkaloids*	2.5715 %	25.7149 mg/g	N/A	N/A	N/A	N/A

\*Total Major Alkaloids is calculated as the sum of Mitragynine, Paynantheine, Speciociliatine and Speciogynine.

ALKL

**Kratom Alkaloids - Low Level**LAB-TM-047 - Determination of Kratom Alkaloid Content by LC-TQ  
ALKL-DTS-251209-064-01 - WED, DEC 17, 2025

Analyte	Value	Value (mg/g)	Action Limit	LOD	LOQ	Status
7-Hydroxymitragynine	0.00414 %	0.04144 mg/g	N/A	0.002 ug/g	0.011 ug/g	N/A
Mitraphylline	0.00003 %	0.00028 mg/g	N/A	0.004 ug/g	0.019 ug/g	N/A
Total Minor Alkaloids*	0.00417 %	0.04172 mg/g	N/A	N/A	N/A	N/A

\*Total Minor Alkaloids is calculated as the sum of 7-Hydroxymitragynine and Mitraphylline.

MOS

**Moisture Content - Loss on Drying**LAB-TM-008 - Loss on Drying  
MOS-DTS-251209-064-01 - MON, DEC 22, 2025

Analyte	Value	Action Limit	LOD	LOQ	Status
Moisture	3.30 %	N/A	N/A	N/A	N/A

TAMC

**Total Aerobic Bacteria - Plate - 25g - Full Range**LAB-TM-060 - Enumeration of Total Aerobic Count in Foods and Dietary Supplements  
TAMC-DTS-251209-064-02 - THU, DEC 18, 2025

Analyte	Value	Action Limit	LOD	LOQ	Status
Total Aerobic Count	1400000 CFU/g	N/A	100000 CFU/g	100000 CFU/g	N/A

SS

**Salmonella & STEC - qPCR**LAB-TM-006 - Microbial Analysis by qPCR  
SS-DTS-251209-064-01 - WED, DEC 17, 2025

Analyte	Value	Action Limit	LOD	LOQ	Status
Salmonella spp.	ND	N/A	N/A	N/A	N/A
Shiga Toxin Producing E. coli	ND	N/A	N/A	N/A	N/A



HVMET

**Heavy Metals - Big 4**LAB-TM-044 - Determination of Heavy Metals by ICP-MS  
HVMET-DTS-251209-064-01 - TUE, DEC 16, 2025

Analyte	Value	Value (mg/g)	Action Limit	LOD	LOQ	Status
Arsenic	0.223 ug/g	0.000 mg/g	N/A	0.509 ug/kg	2.062 ug/kg	N/A
Cadmium	0.026 ug/g	0.000 mg/g	N/A	0.256 ug/kg	0.509 ug/kg	N/A
Lead	0.701 ug/g	0.001 mg/g	N/A	0.255 ug/kg	0.515 ug/kg	N/A
Mercury	0.021 ug/g	0.000 mg/g	N/A	0.025 ug/kg	0.057 ug/kg	N/A

TYMFD

**Total Yeast & Mold - Plate - 25g - Full Range**LAB-TM-061 - Enumeration of Yeast and Mold in Foods and Dietary Supplements  
TYMFD-DTS-251209-064-02 - MON, DEC 22, 2025

Analyte	Value	Action Limit	LOD	LOQ	Status
Total Mold	47000 CFU/g	N/A	1000 CFU/g	1000 CFU/g	N/A
Total Yeast	10000 CFU/g	N/A	1000 CFU/g	1000 CFU/g	N/A
Total Yeast and Mold*	57000 CFU/g	N/A	1000 CFU/g	1000 CFU/g	N/A

\*Total Yeast and Mold is calculated as the sum of Total Yeast and Total Mold

Due to limited sample quantity submitted, testing was conducted on a 1-gram aliquot

7OHFL

**7-Hydroxymitragynine - Florida - Dry-Weight Basis**7-Hydroxymitragynine - (Florida — Dry-Weight Basis)  
7OHFL-DTS-251209-064-01 - MON, DEC 22, 2025

Analyte	Value	Action Limit	LOD	LOQ	Status
7-Hydroxymitragynine - As Received*	0.00 ppm	N/A	N/A	N/A	N/A
7-Hydroxymitragynine - Dry-Weight*	42.81 ppm	400 ppm	N/A	N/A	PASS
Moisture (%) by Input*	3.30 %	N/A	N/A	N/A	N/A

\*7-Hydroxymitragynine - As Received: The "As Received" value represents the concentration of 7-hydroxymitragynine, expressed in parts per million (ppm), as reported in the Kratom Alkaloids - Low Level test. This corresponds to the measured percentage of 7-hydroxymitragynine in the sample as received.

\*7-Hydroxymitragynine (Dry-Weight Basis): The dry weight concentration of 7-hydroxymitragynine is calculated using the following formula: Dry Weight 7-Hydroxymitragynine (ppm) = 7-Hydroxymitragynine (ppm) x (100 / (100 - Moisture by Input (%)))

\*The Moisture (%) by Input result may represent either a client-provided input or a value measured by Cambium. This value is incorporated into associated calculated analytes for reporting purposes.

