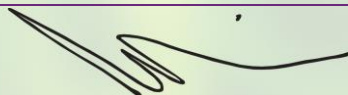


Certificate ID: **135238**
 Received: **11/20/25**
 Client Sample ID: **MIT THERAPY GREEN HULU MUTSU**
 Lot Number: **MT1001-GH**
 Matrix: **Beverages-Kratom**

Scan QR Code
for authenticity



Free River Distributing
2976 E. State Street, Suite 120-322
Eagle, ID 83616

Authorization:	Signature:	Date:
Andrew Aubin, Lab Director		11/26/2025



The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

KR: Kratom Alkaloids [WI-10-44]

Analyst: *AJA*

Test Date: *11/21/2025*

The client sample was analyzed for plant-based alkaloids by Liquid Chromatography (LC) with PDA detection. The collected data was compared to data collected for certified reference standard at a known concentrations. The presence or absence of all listed compounds were confirmed via UV spectral matching.

135238-KR

Compound	CAS	Weight %	Concentration (mg/mL)
Mitragynine	4098-40-2	0.544	5.68
Speciociliatine	14382-79-7	0.119	1.24
Paynantheine	4697-66-9	0.0847	0.884
Speciogynine	4697-67-0	0.0695	0.725
7-Hydroxy Mitragynine	174418-82-7	0.00 (0 ppm)	0
Total		0.817	8.53

ND or "0 ppm" – Not Detected at a level greater than the Limit of Detection of 0.005 wt% (50 ppm).

* Reported value is estimated as it is lower than the Limit of Quantitation (LOQ).

HM: Heavy Metal Analysis [WI-10-13]

Analyst: ZDV

Test Date: 11/21/2025

This sample was analyzed by elemental analysis using Inductively Coupled Plasma Mass Spectrometry (ICP-MS) for the identification of heavy metal constituents. External calibration curves for heavy metals were used for quantitation, with an additional internal reference standard. Resulting data was compared with a sample blank. This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

135238-HM

Symbol	Metal	Conc. ¹ (µg/kg)	RL	Use Limits ² (µg/kg)	Status
As	Arsenic	ND	50.0	2,000	PASS
Cd	Cadmium	ND	50.0	820	PASS
Hg	Mercury	ND	50.0	400	PASS
Ni	Nickel	ND	50.0	20,000	PASS
Pb	Lead	ND	50.0	1,200	PASS

1) ND = None detected above the indicated Reporting Limit (RL)

2) Testing limits established by the Utah Agriculture and Food, Regulatory Services (R70), Kratom Product Registration and Labeling (R70-580), Authority and Purpose (R70-580-1) - Pursuant to Section 4-45-107, this rule establishes the requirements for labeling and registration of products made from and containing kratom. Nickel specification according to oral drug products per USP.

MB1: Microbiological Contaminants [WI-10-47]

Analyst: SRD

Test Date: 11/26/2025

This sample was analyzed for microbiological contaminants using a culture-based plating methodology consistent with USP <61>. This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

135238P-MB1

Symbol	Analysis	Results	Units	Limits*	Status
AC	Total Aerobic Bacterial Count	<20	CFU/g	10,000,000 CFU/g	PASS
CC	Total Coliform Bacterial Count	<20	CFU/g	10,000 CFU/g	PASS
EB	Total Bile Tolerant Gram Negative Count	<20	CFU/g	10,000 CFU/g	PASS
YM	Total Yeast & Mold	<20	CFU/g	100,000 CFU/g	PASS

*Testing limits established by the Utah Agriculture and Food, Regulatory Services (R70), Kratom Product Registration and Labeling (R70-580), Authority and Purpose (R70-580-1) - Pursuant to Section 4-45-107, this rule establishes the requirements for labeling and registration of products made from and containing kratom.

MB2: Pathogenic Bacterial Contaminants [WI-10-48]

Analyst: SD

Test Date: 11/26/2025

This sample was analyzed for pathogenic bacteria using a culture-based plating methodology with an enrichment step consistent with USP <62>. This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety. Reports may not be reproduced except in their entirety.

135238-MB2

Test ID	Analysis	Results	Units	Limits*	Status
135238-ECPT	E. coli (O157)	Negative	NA	Non Detected	PASS
135238-SPT	Salmonella	Negative	NA	Non Detected	PASS

Note: All recorded pathogenic bacteria tests passed.

VC: Analysis of Volatile Organic Compounds [WI-10-28]

Analyst: KEM

Test Date: 11/21/2025

This sample was analyzed for residual solvents using Head-Space Gas Chromatography with Mass Spectrometric detection (HS-GC/MS). The collected data was compared to data collected for a reference standards at a known concentrations with an additional internal reference standard.

135238-VC

Compound	CAS	Amount ¹	Limit ²	RL	Status
Propane	74-98-6	ND	1,000 ppm	4	PASS
Isobutane	75-28-5	ND	1,000 ppm	4	PASS
Butane	106-97-8	ND	1,000 ppm	4	PASS
Methanol	67-56-1	ND	3,000 ppm	100	PASS
Pentane	109-66-0	ND	5,000 ppm	100	PASS
Ethanol	64-17-5	ND	5,000 ppm	100	PASS
Acetone	67-64-1	ND	5,000 ppm	100	PASS
Isopropanol	67-63-0	ND	5,000 ppm	100	PASS
Acetonitrile	75-05-8	ND	410 ppm	100	PASS
Hexane	110-54-3	ND	290 ppm	100	PASS
Heptane	142-82-5	ND	5,000 ppm	100	PASS

1) ND = Not detected at a level greater than the Reporting Limit (RL).

2) In ppm, based on USP recommended limits for residual solvents, adopted by the Massachusetts Department of Public Health for cannabis concentrates and extracts on 3/31/16. Butane/Propane limits are based on limits established for state of Colorado.

(*) For ethanol, as many formulations contain flavorings based on ethanol extracts of natural products, no status has been assigned.

END OF REPORT