

# CERTIFICATE OF ANALYSIS

STATUS: **RELEASED** REVISION: 00

DATE: 01/04/2023

Analysis ID No. 225528  
TDA License No. 2020002  
ISO/IEC No. 1055838  
Purchase Order: 20221502  
Page No. Page 1 of 2

Customer Information	SAMPLE INFORMATION
<b>Company Name:</b> Happy Hippo LLC	<b>Submitted Sample Name:</b> BLOOD ORANGE GMD
<b>Address:</b> 1553 N Milwaukee St STE 131, Boise, ID 83704	<b>Submitted Sample Lot:</b> HH-001 11/26/22
<b>Phone Number:</b> [REDACTED]	<b>Submitted Sample Description:</b> Green Powder in Pink Resealable Bag; Stored RT
<b>Contact Name / Email:</b> [REDACTED]	<b>Submitted Sample Product Type / Matrix:</b> Kratom Powder / Plant Matter

ALKALOIDS ASSAY					
Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Mitragynine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.698 w/w% 6.975 mg/g	Results Reported
Paynantheine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.141 w/w% 1.406 mg/g	Results Reported
Speciogynine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.106 w/w% 1.061 mg/g	Results Reported
Speciociliatine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.116 w/w% 1.165 mg/g	Results Reported
7-OH-Mitragynine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only % of Total Alkaloids: NMT 2%	< 0.010 w/w%	PASS
Mitraphylline	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	< 0.010 w/w%	Results Reported
Isorhynchophylline	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	< 0.010 w/w%	Results Reported
Corynoxine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	< 0.010 w/w%	Results Reported
Total Alkaloids	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	1.061 w/w% 10.608 mg/g	Results Reported

MICROBIOLOGICAL ASSAY					
Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Total Aerobic Plate Count (TAPC)	Isolation Agar	20 CFU/gm	NMT 10,000,000 CFU/gm	< LOQ	PASS
Total Yeast & Mold (TYM)	Isolation Agar	20 CFU/gm	NMT 100,000 CFU/gm	< LOQ	PASS
Coliforms	Isolation Agar	20 CFU/gm	NMT 10,000 CFU/gm	< LOQ	PASS
Escherichia coli (E.coli)	Isolation Agar	1 CFU/10 gm	Absent in 10 gm	Absent	PASS
Salmonella	Isolation Agar	1 CFU/25 gm	Absent in 25 gm	Absent	PASS

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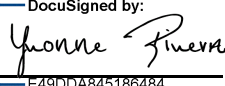
HEAVY METALS ASSAY					
Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Lead	USP <232> <233> by ICP-MS	10 ppb	NMT 1,000 ppb	252.6 ppb	PASS
Mercury	USP <232> <233> by ICP-MS	5 ppb	NMT 500 ppb	9.8 ppb	PASS
Arsenic	USP <232> <233> by ICP-MS	10 ppb	NMT 1500 ppb	59.3 ppb	PASS
Cadmium	USP <232> <233> by ICP-MS	10 ppb	NMT 300 ppb	< LOQ	PASS
Nickel	USP <232> <233> by ICP-MS	50 ppb	NMT 200,000 ppb	2,273.8 ppb	PASS

TESTING FACILITY INFORMATION	SAMPLE INFORMATION
<b>Santé Laboratories</b> 8201 East Riverside Drive, STE 650 Austin, Texas 78744 USA	<b>Santé Sample ID:</b> 225528 <b>Receipt Date:</b> 12/21/2022 / 12:20 PM / C. Ritchie <b>Receipt Condition:</b> Good <b>Analysis Start Date:</b> 12/22/2022

ADDITIONAL REPORT NOTES
<p>The reported results presented in this document is only applicable to samples submitted to Santé Laboratories for testing and may not represent the entire lot and/or batch produced by the manufacturer. <b>Heavy metal specifications according to limits defined by Texas DSHS for consumable hemp. Nickel and Chromium specification according to oral drug products per USP &lt;232&gt;. Microbiological limits according to specifications defined by AHPA for botanical extracts.</b></p> <p>©2020 Santé Laboratories, LLC – All Rights Reserved</p>

VERSION HISTORY		
Version	Effective Date	Summary of Changes
00	01/04/2023	Initial Release

PRODUCT SAMPLE / IMAGE


REVIEWED AND APPROVED BY
<p>DocuSigned by:              E49DDA845186484...</p> <p>04 January 2023   2:49:43 PM PST            DD-MM-YY</p> <p>Yvonne Rivera            Data Management Specialist            Santé Laboratories</p> <p>Date</p>