



# CERTIFICATE OF ANALYSIS

STATUS: **RELEASED** REVISION: 00

DATE: 02/13/2023

Analysis ID No. 230045  
 TDA License No. 2020002  
 ISO/IEC No. 1055838  
 Purchase Order: 20230011  
 Page No. Page 1 of 2

CUSTOMER INFORMATION	SAMPLE INFORMATION
<b>Client Name:</b> Bumble Bee Botanicals	<b>Submitted Sample Name:</b> 12312203
<b>Address:</b> 8047 La Mesa Blvd Unit C, La Mesa 91942	<b>Submitted Sample Lot:</b> N/A
<b>Phone Number:</b> 619-500-2463	<b>Submitted Sample Description:</b> Grn Pwdr in Transparent / Black Pouch; Stored at Rm Temp
<b>Contact Name / Email:</b> Andrew Graham / Sales@bumblebeesd.com	<b>Submitted Sample Product Type / Matrix:</b> Kratom Leaf / Powder

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	1.563 w/w% 15.628 mg/g	Results Reported
Paynantheine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.308 w/w% 3.079 mg/g	Results Reported
Speciogynine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.237 w/w% 2.374 mg/g	Results Reported
Speciociliatine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only	0.268 w/w% 2.685 mg/g	Results Reported
7-OH-Mitragynine	UHPLC-DAD	0.01 w/w%	w/w%: Report Only mg/g: Report Only % 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	2.377 w/w% 23.766 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	1,710 CFU/gm	PASS
Total Yeast & Mold (TYM)	Isolation Agar	20 CFU/gm	NMT 100,000 CFU/gm	20 CFU/gm	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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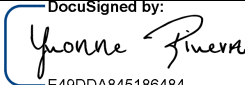
HEAVY METALS ASSAY					
Analysis	Test Method	LOQ	Specifications	Test Results	Pass / Fail
Lead	USP <232> <233> by ICP-MS	10 ppb	NMT 1000 ppb	550.1 ppb	PASS
Mercury	USP <232> <233> by ICP-MS	5 ppb	NMT 500 ppb	17.8 ppb	PASS
Arsenic	USP <232> <233> by ICP-MS	10 ppb	NMT 1500 ppb	168.6 ppb	PASS
Cadmium	USP <232> <233> by ICP-MS	10 ppb	NMT 300 ppb	22.7 ppb	PASS
Nickel	USP <232> <233> by ICP-MS	50 ppb	NMT 200,000 ppb	3,994.7 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> 230045 <b>Receipt Date:</b> 02/08/23 / 13:30 PM CST / M Husain <b>Receipt Condition:</b> Good <b>Analysis Start Date:</b> 02/08/23

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 specification according to oral drug products per USP &lt;232&gt;. Microbiological specifications follow AHPA guidelines for botanical ingredients (non-extract).</b></p> <p>©2020 Santé Laboratories, LLC – All Rights Reserved</p>

VERSION HISTORY		
Version	Effective Date	Summary of Changes
00	02/13/23	Initial Release

PRODUCT SAMPLE / IMAGE


REVIEWED AND APPROVED BY	
<p>DocuSigned by:              E49DDA846186484...  <b>Yvonne Rivera</b>            Data Management Specialist            Santé Laboratories</p>	<p>13 February 2023   02:22:15 PM (PST)            Date</p>