

# **CERTIFICATE OF ANALYSIS**

STATUS: RELEASED REVISION: 00 DATE: 12/06/2022

 Analysis ID No.
 225264

 TDA License No.
 2020002

 ISO/IEC No.
 1055838

 Purchase Order:
 20221438

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| CUSTOMER INFORMATION                                    | SAMPLE INFORMATION                                 |
|---|--|
| Client Name:  | Submitted Sample Name:                             |
| TCC LLC   | 11222206   |
| Address:  | Submitted Sample Lot:                              |
| 518 E 44 <sup>th</sup> St Unit 4, Garden City, ID 83714 | N/A  |
| Phone Number:   | Submitted Sample Description:                      |
| 208-340-0617  | Green Powder in Black Resealable Bag; Stored at RT |
| Contact Name / Email:                                   | Submitted Sample Product Type / Matrix:            |
| Ryan Titus / shipping@btgdistro.com                     | Kratom Leaf 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<br>mg/g: Report Only                                 | 1.833 w/w%<br>18.329 mg/g | Results<br>Reported |
| Paynantheine       | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                                 | 0.360 w/w%<br>3.597 mg/g  | Results<br>Reported |
| Speciogynine       | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                                 | 0.263 w/w%<br>2.626 mg/g  | Results<br>Reported |
| Speciociliatine    | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                                 | 0.321 w/w%<br>3.211 mg/g  | Results<br>Reported |
| 7-OH-Mitragynine   | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only<br>% of Total Alkaloids: NMT 2% | < 0.010 w/w%              | PASS                |
| Mitraphylline      | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                                 | < 0.010 w/w%              | Results<br>Reported |
| Isorhynchophylline | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                                 | < 0.010 w/w%              | Results<br>Reported |
| Corynoxine         | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                                 | < 0.010 w/w%              | Results<br>Reported |
| Total Alkaloids    | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                                 | 2.776 w/w%<br>27.763 mg/g | Results<br>Reported |

| MICROBIOLOGICAL ASSAY               |                |             |                       |               |             |
|-------------------------------------|----------------|-------------|-----------------------|---------------|-------------|
| Analysis                            | Test Method    | LOQ         | Specifications        | Test Results  | Pass / Fail |
| Total Aerobic Plate<br>Count (TAPC) | Isolation Agar | 20 CFU/gm   | NMT 10,000,000 CFU/gm | 83,000 CFU/gm | PASS        |
| Total Yeast &<br>Mold (TYM)         | Isolation Agar | 20 CFU/gm   | NMT 100,000 CFU/gm    | 8,060 CFU/gm  | PASS        |
| Coliforms                           | Isolation Agar | 20 CFU/gm   | NMT 10,000 CFU/gm     | 5,523 CFU/gm  | PASS        |
| Escherichia coli<br>(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><br>by ICP-MS | 10 ppb | NMT 1000 ppb    | 858.5 ppb    | PASS        |
| Mercury            | USP <232> <233><br>by ICP-MS | 5 ppb  | NMT 500 ppb     | 18.9 ppb     | PASS        |
| Arsenic            | USP <232> <233><br>by ICP-MS | 10 ppb | NMT 1500 ppb    | 229.5 ppb    | PASS        |
| Cadmium            | USP <232> <233><br>by ICP-MS | 10 ppb | NMT 300 ppb     | 24.8 ppb     | PASS        |
| Nickel             | USP <232> <233><br>by ICP-MS | 50 ppb | NMT 200,000 ppb | 2,704.7 ppb  | PASS        |

| TESTING FACILITY INFORMATION       | SAMPLE INFORMATION  |  |
|------------------------------------|---|--|
| Santé Laboratories                 | Santé Sample ID: 225264                                       |  |
| 8201 East Riverside Drive, STE 650 | <b>Receipt Date:</b> 11/28/2022 / 03:25 PM CST / P. Steinberg |  |
| Austin, Texas 78744 USA            | Receipt Condition: Good Analysis Start Date: 11/30/2022       |  |

### **ADDITIONAL REPORT NOTES**

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. Heavy metal specifications according to limits defined by Texas DSHS for consumable hemp. Nickel specification according to oral drug products per USP <232>. Microbiological specifications follow AHPA guidelines for botanical ingredients (non-extract).

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| VERSION HISTORY |                |                                  |  |  |
|-----------------|----------------|----------------------------------|--|--|
| Version         | Effective Date | ffective Date Summary of Changes |  |  |
| 00              | 12/06/2022     | Initial Release                  |  |  |

#### **PRODUCT SAMPLE / IMAGE**



#### **REVIEWED AND APPROVED BY**

- DocuSigned by:

Brian R. Sloat

06 December 2022 | 9:10:24 PM PST DD-MM-YY

Date

Brian Sloat, Ph.D.

Chief Scientific Officer / Quality Manager

Santé Laboratories