



# CERTIFICATE OF ANALYSIS

STATUS: **RELEASED** REVISION: 00

DATE: 10/19/2022

Analysis ID No. 224607  
TDA License No. 2020002  
ISO/IEC No. 1055838  
Purchase Order: 20221269  
Page No. Page 1 of 2

| CUSTOMER INFORMATION                        | SAMPLE INFORMATION                                         |
|---------------------------------------------|------------------------------------------------------------|
| <b>Client Name:</b>                         | <b>Submitted Sample Name:</b>                              |
| Kats Kratom                                 | Kratom Leaf Powder                                         |
| <b>Address:</b>                             | <b>Submitted Sample Lot:</b>                               |
| 619 Old Hickory Blvd, Old Hickory, TN 37138 | 183101TWP                                                  |
| <b>Phone Number:</b>                        | <b>Submitted Sample Description:</b>                       |
| 877-301-9923                                | Green Powder in Clear Plastic Bag w/ Zip Tie; Stored at RT |
| <b>Contact Name / Email:</b>                | <b>Submitted Sample Product Type / Matrix:</b>             |
| N/A                                         | 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<br>mg/g: Report Only                              | 1.491 w/w%<br>14.906 mg/g | Results Reported |
| Paynantheine       | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                              | 0.278 w/w%<br>2.776 mg/g  | Results Reported |
| Speciogynine       | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                              | 0.220 w/w%<br>2.199 mg/g  | Results Reported |
| Speciociliatine    | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                              | 0.372 w/w%<br>3.719 mg/g  | Results Reported |
| 7-OH-Mitragynine   | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only<br>% 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 Reported |
| Isorhynchophylline | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                              | < 0.010 w/w%              | Results Reported |
| Corynoxine         | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                              | < 0.010 w/w%              | Results Reported |
| Total Alkaloids    | UHPLC-DAD   | 0.01 w/w% | w/w%: Report Only<br>mg/g: Report Only                              | 2.360 w/w%<br>23.600 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 | 1,235 CFU/gm | 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><br>by ICP-MS | 10 ppb | NMT 1000 ppb    | 627.4 ppb    | PASS        |
| Mercury            | USP <232> <233><br>by ICP-MS | 5 ppb  | NMT 500 ppb     | < LOQ        | PASS        |
| Arsenic            | USP <232> <233><br>by ICP-MS | 10 ppb | NMT 1500 ppb    | 206.1 ppb    | PASS        |
| Cadmium            | USP <232> <233><br>by ICP-MS | 10 ppb | NMT 300 ppb     | < LOQ        | PASS        |
| Nickel             | USP <232> <233><br>by ICP-MS | 50 ppb | NMT 200,000 ppb | 2,387.0 ppb  | PASS        |

| TESTING FACILITY INFORMATION                                                               | SAMPLE INFORMATION                                                                                                                                                     |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Santé Laboratories</b><br>8201 East Riverside Drive, STE 650<br>Austin, Texas 78744 USA | <b>Santé Sample ID:</b> 224607<br><b>Receipt Date:</b> 10/11/2022 / 02:45 PM CST / C. Ritchie<br><b>Receipt Condition:</b> Good <b>Analysis Start Date:</b> 10/13/2022 |

| 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. <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><br>©2020 Santé Laboratories, LLC – All Rights Reserved |

| VERSION HISTORY |                |                    |
|-----------------|----------------|--------------------|
| Version         | Effective Date | Summary of Changes |
| 00              | 10/19/2022     | Initial Release    |

| PRODUCT SAMPLE / IMAGE |
|------------------------|
|                        |

| REVIEWED AND APPROVED BY                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div> <div>DocuSigned by:</div> <div> </div> </div> <div> <b>Brian Sloat, Ph.D.</b><br/>           Chief Scientific Officer / Quality Manager<br/>           Santé Laboratories         </div> <div>           19 October 2022   6:42:42 PM CDT<br/>           Date         </div> <div>DD-MM-YY</div> |