



**Customer:** Viable Solutions  
 62 6 St N  
 Nampa Idaho 83687  
 United States of America (USA)

**Sample ID:** 1220510-12  
**Sample Matrix:** Kratom powder  
**Laboratory ID:** 22-012080-0012  
**Evidence of Cooling:** No  
**Temp:** 20.1 °C  
**Relinquished by:** Fedex



## Sample Results

### Metals

#### Heavy Metals Profile K

| Analyte | Result | Units | LOQ     | Analyzed Method                                        | Threshold | Pass/Fail | Notes |
|---------|--------|-------|---------|--------------------------------------------------------|-----------|-----------|-------|
| Arsenic | 0.244  | mg/kg | 0.0161  | 10/13/22 AOAC 2013.06 (mod.) <sup>b</sup> <sub>1</sub> | 1.50      | pass      |       |
| Cadmium | 0.0253 | mg/kg | 0.0161  | 10/11/22 AOAC 2013.06 (mod.) <sup>b</sup> <sub>1</sub> | 0.500     | pass      |       |
| Lead    | 0.650  | mg/kg | 0.0161  | 10/11/22 AOAC 2013.06 (mod.) <sup>b</sup> <sub>1</sub> | 1.00      | pass      |       |
| Mercury | 0.0299 | mg/kg | 0.00803 | 10/11/22 AOAC 2013.06 (mod.) <sup>b</sup> <sub>1</sub> | 0.200     | pass      |       |
| Nickel  | 2.90   | mg/kg | 0.0161  | 10/11/22 AOAC 2013.06 (mod.) <sup>b</sup> <sub>1</sub> | 20.0      | pass      |       |

1) trace metals in food by Inductively Coupled Mass Spectrometry

### Microbiology

#### Micro Profile L Rapid (M6000)

| Analyte                 | Result   | Units | LOQ | Analyzed Method                                 | Threshold  | Pass/Fail | Notes |
|-------------------------|----------|-------|-----|-------------------------------------------------|------------|-----------|-------|
| Aerobic Plate Count     | 100      | cfu/g | 100 | 10/10/22 AOAC 990.12 (Petrifilm) <sup>b</sup>   | 10,000,000 | pass      |       |
| E.coli                  | < LOQ    | cfu/g | 100 | 10/10/22 AOAC 991.14 (Petrifilm) <sup>b</sup>   | 100        | pass      |       |
| Total Coliforms         | < LOQ    | cfu/g | 100 | 10/10/22 AOAC 991.14 (Petrifilm) <sup>b</sup>   | 10,000     | pass      |       |
| Staphylococcus aureus   | < LOQ    | cfu/g | 100 | 10/09/22 AOAC 2003.07 <sup>b</sup>              |            |           |       |
| Mold (RAPID Petrifilm)  | < LOQ    | cfu/g | 100 | 10/11/22 AOAC 2014.05 (RAPID) <sup>b</sup>      | 50,000     | pass      |       |
| Yeast (RAPID Petrifilm) | < LOQ    | cfu/g | 100 | 10/11/22 AOAC 2014.05 (RAPID) <sup>b</sup>      | 50,000     | pass      |       |
| Listeria spp.           | Negative | /25g  | -   | 10/09/22 AOAC 2019.10 <sup>b</sup> <sub>2</sub> |            |           |       |
| Salmonella spp. by PCR  | Negative | /25g  | -   | 10/09/22 AOAC 2020.02 <sup>b</sup> <sub>3</sub> | Negative   | pass      |       |

2) GENE-UP® Assay

3) GENE-UP® Assay

### Mitragynine



### Mitragynine

#### Mitragynine + 7-Hydroxymitragynine (S3200)

| Analyte              | Result | Units | LOQ    | Analyzed Method                      | Threshold | Pass/Fail | Notes |
|----------------------|--------|-------|--------|--------------------------------------|-----------|-----------|-------|
| 7-Hydroxymitragynine | 0.0157 | %     | 0.0100 | 10/13/22 In house method by HPLC-DAD |           |           |       |
| Mitragynine          | 1.43   | %     | 0.0500 | 10/13/22 In house method by HPLC-DAD |           |           |       |

#### Abbreviations

**Limit(s) of Quantitation (LOQ):** The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

**Threshold Note:** limits based on AHPA recommended limits for unprocessed herbs and supplements and ingredients

#### Units of Measure

/25g = Per 25g

cfu/g = Colony forming units per gram

mg/kg = Milligram per kilogram = parts per million (ppm)

% = Percentage of sample

Approved Signatory



Derrick Tanner  
General Manager