

# CERTIFICATE OF ANALYSIS

**SAMPLE NAME:** PART # 10190 - GOLDEN MONK 500 CT CAPSULES

**SAMPLE CODE:** DTS-241026-003

**CLIENT:** MIT45

**BATCH RESULT:** PASS



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License #:



**MATRIX NAME:** Pill - Capsule

**SAMPLE TYPE:** Quality Assurance

**RECEIVED DATE:** Tue, Oct 29, 2024

**PUBLISHED DATE:** Mon, Nov 4, 2024

**BATCH/LOT CODE:** 1806G

**BATCH SIZE:** 3U

**SAMPLE SIZE:** 3U

**AVERAGE UNIT WEIGHT:** 0.5875g (1 capsule, 500 servings/package. )

MITRAGYNINE

6.25 mg / serv

TOTAL MAJOR ALKALOIDS

10.70 mg / serv

TOTAL MINOR ALKALOIDS

0.03 mg / serv

ALKU



Kratom Alkaloids  
High Level

ALKL



Kratom Alkaloids  
Low Level

SOL



Residual Solvents  
USP <467>

SAL



Salmonella  
25g qPCR

ECOLI



Total E. Coli & Coliforms  
Plate

PGUSP



Pesticides  
USP <561>

PLUSP



Pesticides  
USP <561>

TAMC



Total Aerobic Bacteria  
Plate

SAUR



Staphylococcus aureus  
Plate

HVMET



Heavy Metals  
4

TYMFD



Total Yeast & Mold  
Plate

FTIRR



Identification by FTIR  
Report

**RESULTS REVIEWED BY:** Leslie Varela  
Laboratory Director  
Cambium Analytica  
Monday, Nov 4, 2024

**RESULTS CERTIFIED BY:** Douglas Smith  
VP - Scientific Operations  
Cambium Analytica  
Monday, Nov 4, 2024

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ALKU

KRATOM ALKALOIDS - HIGH LEVEL

LAB-TM-052 - DETERMINATION OF KRATOM ALKALOID CONTENT BY UPLC-DAD

ALKU-DTS-241026-003-01 - THU, OCT 31, 2024

| ANALYTE               | VALUE   | VALUE (MG/G) | PER SERVING | PER PACKAGE | ACTION LIMIT | LOD      | LOQ      | STATUS |
|-----------------------|---------|--------------|-------------|-------------|--------------|----------|----------|--------|
| Mitragynine           | 1.064 % | 10.637 mg/g  | 6.25 mg     | 3124.62 mg  | N/A          | 0.3 ug/g | 0.5 ug/g | N/A    |
| Speciociliatine       | 0.405 % | 4.046 mg/g   | 2.38 mg     | 1188.51 mg  | N/A          | 0.3 ug/g | 0.5 ug/g | N/A    |
| Paynantheine          | 0.220 % | 2.195 mg/g   | 1.29 mg     | 644.78 mg   | N/A          | 0.3 ug/g | 0.5 ug/g | N/A    |
| Speciogynine          | 0.134 % | 1.340 mg/g   | 0.79 mg     | 393.62 mg   | N/A          | 0.3 ug/g | 0.5 ug/g | N/A    |
| Total Major Alkaloids | 1.822 % | 18.218 mg/g  | 10.70 mg    | 5351.54 mg  | N/A          | N/A      | N/A      | N/A    |

ALKL

KRATOM ALKALOIDS - LOW LEVEL

LAB-TM-047 - DETERMINATION OF KRATOM ALKALOID CONTENT BY LC-TQ

ALKL-DTS-241026-003-01 - FRI, NOV 1, 2024



| ANALYTE               | VALUE     | VALUE (MG/G) | PER SERVING | PER PACKAGE | ACTION LIMIT | LOD        | LOQ        | STATUS |
|-----------------------|-----------|--------------|-------------|-------------|--------------|------------|------------|--------|
| 7-Hydroxymitragynine  | 0.00537 % | 0.05368 mg/g | 0.03 mg     | 15.77 mg    | N/A          | 0.002 ug/g | 0.011 ug/g | N/A    |
| Mitraphylline         | 0.00001 % | 0.00008 mg/g | 0.00 mg     | 0.02 mg     | N/A          | 0.004 ug/g | 0.019 ug/g | N/A    |
| Total Minor Alkaloids | 0.00538 % | 0.05376 mg/g | 0.03 mg     | 15.79 mg    | N/A          | 0.006 ug/g | 0.03 ug/g  | N/A    |





| ANALYTE                                                                                               | VALUE       | ACTION LIMIT | LOD        | LOQ        | STATUS |
|-------------------------------------------------------------------------------------------------------|-------------|--------------|------------|------------|--------|
| 1,2-Dichloroethane                                                                                    | ND          | 5 ug/g       | 0.4 ug/g   | 1.34 ug/g  | PASS   |
| 2-Methylbutane                                                                                        | ND          | N/A          | 1.54 ug/g  | 5.14 ug/g  | N/A    |
| 2-Methylpentane                                                                                       | ND          | N/A          | 0.046 ug/g | 0.154 ug/g | N/A    |
| 2,2-Dimethylbutane                                                                                    | ND          | N/A          | 0.98 ug/g  | 3.27 ug/g  | N/A    |
| 2,3-Dimethylbutane                                                                                    | ND          | N/A          | 2.19 ug/g  | 7.32 ug/g  | N/A    |
| 3-Methylpentane                                                                                       | ND          | N/A          | 0.73 ug/g  | 2.44 ug/g  | N/A    |
| Acetone                                                                                               | ND          | 5000 ug/g    | 1.57 ug/g  | 5.23 ug/g  | PASS   |
| Acetonitrile                                                                                          | ND          | 410 ug/g     | 1.85 ug/g  | 6.17 ug/g  | PASS   |
| Benzene                                                                                               | ND          | 2 ug/g       | 0.18 ug/g  | 0.59 ug/g  | PASS   |
| Butane                                                                                                | ND          | N/A          | 1.68 ug/g  | 5.59 ug/g  | N/A    |
| Chloroform                                                                                            | ND          | 60 ug/g      | 0.78 ug/g  | 2.59 ug/g  | PASS   |
| Ethanol                                                                                               | ND          | 5000 ug/g    | 6.02 ug/g  | 20.1 ug/g  | PASS   |
| Ethyl Acetate                                                                                         | ND          | 5000 ug/g    | 1.95 ug/g  | 6.49 ug/g  | PASS   |
| Ethyl Ether                                                                                           | ND          | 5000 ug/g    | 1.37 ug/g  | 4.55 ug/g  | PASS   |
| Ethylene Oxide                                                                                        | ND          | N/A          | 0.15 ug/g  | 0.49 ug/g  | N/A    |
| Heptane                                                                                               | ND          | 5000 ug/g    | 1.31 ug/g  | 4.37 ug/g  | PASS   |
| Hexane                                                                                                | ND          | 290 ug/g     | 1.42 ug/g  | 4.74 ug/g  | PASS   |
| Isobutane                                                                                             | ND          | N/A          | 1.6 ug/g   | 5.34 ug/g  | N/A    |
| Isopropyl Alcohol                                                                                     | ND          | N/A          | 4.9 ug/g   | 16.3 ug/g  | N/A    |
| Methanol                                                                                              | 69.114 ug/g | 3000 ug/g    | 7.89 ug/g  | 26.4 ug/g  | PASS   |
| Methylene Chloride                                                                                    | ND          | 600 ug/g     | 1.36 ug/g  | 4.53 ug/g  | PASS   |
| Neopentane                                                                                            | ND          | N/A          | 1.49 ug/g  | 4.97 ug/g  | N/A    |
| Pentane                                                                                               | ND          | 5000 ug/g    | 1.46 ug/g  | 4.87 ug/g  | PASS   |
| Propane                                                                                               | ND          | N/A          | 1.95 ug/g  | 6.51 ug/g  | N/A    |
| Toluene                                                                                               | ND          | 890 ug/g     | 1.88 ug/g  | 6.26 ug/g  | PASS   |
| Total Xylenes                                                                                         | ND          | 2170 ug/g    | 2.02 ug/g  | 6.72 ug/g  | PASS   |
| Trichloroethylene                                                                                     | ND          | 80 ug/g      | 0.29 ug/g  | 0.96 ug/g  | PASS   |
| Butanes (Sum of Butane and Isobutane)                                                                 | ND          | N/A          |            |            | N/A    |
| Hexanes (Sum of Hexane, 2,2-Dimethylbutane, 2,3-Dimethylbutane, 2-Methylpentane, and 3-Methylpentane) | ND          | 290 ug/g     |            |            | PASS   |
| Pentanes (Sum of Pentane, 2-Methylbutane, and Neopentane)                                             | ND          | 5000 ug/g    |            |            | PASS   |



| <div><div>SAL</div><div><div>SALMONELLA - 25G QPCR</div><div>LAB-TM-063 - DETECTION AND ISOLATION OF SALMONELLA SPP. IN FOODS AND DIETARY SUPPLEMENTS</div><div>SAL-DTS-241026-003-01 - THU, OCT 31, 2024</div></div></div> <div></div> |       |              |     |     |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------|-----|-----|--------|
| ANALYTE                                                                                                                                                                                                                                                                                                                    | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
| Salmonella Spp                                                                                                                                                                                                                                                                                                             | ND    | Detection    | N/A | N/A | PASS   |

| <div><div>ECOLI</div><div><div>TOTAL E. COLI &amp; COLIFORMS - PLATE</div><div>LAB-TM-059 - ENUMERATION OF ESCHERICHIA COLI AND TOTAL COLIFORM IN FOODS AND DIETARY SUPPLEMENTS</div><div>ECOLI-DTS-241026-003-01 - THU, OCT 31, 2024</div></div></div> <div></div> |       |              |          |          |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------|----------|----------|--------|
| ANALYTE                                                                                                                                                                                                                                                                                                                                                | VALUE | ACTION LIMIT | LOD      | LOQ      | STATUS |
| E. coli                                                                                                                                                                                                                                                                                                                                                | ND    | Detection    | 10 CFU/g | 10 CFU/g | PASS   |
| Total Coliforms                                                                                                                                                                                                                                                                                                                                        | ND    | 1000 CFU/g   | 10 CFU/g | 10 CFU/g | PASS   |





| ANALYTE                                                                                  | VALUE | ACTION LIMIT | LOD       | LOQ       | STATUS |
|------------------------------------------------------------------------------------------|-------|--------------|-----------|-----------|--------|
| Aldrin + Dieldrin                                                                        | ND    | 0.05 ug/g    | 0.1 ng/g  | 0.2 ng/g  | PASS   |
| Bromophos Ethyl                                                                          | ND    | 0.05 ug/g    | 0.1 ng/g  | 0.2 ng/g  | PASS   |
| Bromophos Methyl                                                                         | ND    | 0.05 ug/g    | 0.1 ng/g  | 0.2 ng/g  | PASS   |
| Bromopropylate                                                                           | ND    | 3 ug/g       | 6 ng/g    | 12 ng/g   | PASS   |
| Chlordane (Sum of -Cis, -Trans, Oxychlordane)                                            | ND    | 0.05 ug/g    | 0.1 ng/g  | 0.2 ng/g  | PASS   |
| Chlorthal-Dimethyl                                                                       | ND    | 0.01 ug/g    | 0.02 ng/g | 0.04 ng/g | PASS   |
| DDT (Sum of O,P-DDE, P,P-DDE, O,P-DDT, P,P-DDT, O,P-TDE, and P,P-TDE)                    | ND    | 1 ug/g       | 2 ng/g    | 4 ng/g    | PASS   |
| Dicofol                                                                                  | ND    | 0.5 ug/g     | 1 ng/g    | 2 ng/g    | PASS   |
| Endosulfan (Sum of Isomers and Sulphate)                                                 | ND    | 3 ug/g       | 6 ng/g    | 12 ng/g   | PASS   |
| Endrin                                                                                   | ND    | 0.05 ug/g    | 0.1 ng/g  | 0.2 ng/g  | PASS   |
| Fenchlorophos (Sum of Fenchlorophos and Fenchlorophos-Oxon)                              | ND    | 0.1 ug/g     | 0.2 ng/g  | 0.4 ng/g  | PASS   |
| Fenitrothion                                                                             | ND    | 0.5 ug/g     | 1 ng/g    | 2 ng/g    | PASS   |
| Fenvalerate                                                                              | ND    | 1.5 ug/g     | 3 ng/g    | 6 ng/g    | PASS   |
| Fluvalinate-Tau                                                                          | ND    | 0.05 ug/g    | 0.1 ng/g  | 0.2 ng/g  | PASS   |
| Heptachlor (Sum of Heptachlor, Cis-Heptachlorepoxyde, and Trans-Heptachlorepoxyde)       | ND    | 0.05 ug/g    | 0.1 ng/g  | 0.2 ng/g  | PASS   |
| Hexachlorobenzene                                                                        | ND    | 0.1 ug/g     | 0.2 ng/g  | 0.4 ng/g  | PASS   |
| Hexachlorocyclohexane (Sum of Isomers Alpha-, Beta-, Delta-, and Epsilon-)               | ND    | 0.3 ug/g     | 0.6 ng/g  | 1.2 ng/g  | PASS   |
| Lindane (Gamma-Hexachlorocyclohexane)                                                    | ND    | 0.6 ug/g     | 1.2 ng/g  | 2.4 ng/g  | PASS   |
| Methacriphos                                                                             | ND    | 0.05 ug/g    | 0.1 ng/g  | 0.2 ng/g  | PASS   |
| Methoxychlor                                                                             | ND    | 0.05 ug/g    | 0.1 ng/g  | 0.2 ng/g  | PASS   |
| Mirex                                                                                    | ND    | 0.01 ug/g    | 0.02 ng/g | 0.04 ng/g | PASS   |
| Parathion Ethyl + Paraoxon Ethyl                                                         | ND    | 0.5 ug/g     | 1 ng/g    | 2 ng/g    | PASS   |
| Pentachloroanisole                                                                       | ND    | 0.01 ug/g    | 0.02 ng/g | 0.04 ng/g | PASS   |
| Procymidone                                                                              | ND    | 0.1 ug/g     | 0.2 ng/g  | 0.4 ng/g  | PASS   |
| Quintozene (Sum of Quintozene, Pentachloroaniline, and Methyl-Pentachlorophenyl Sulfide) | ND    | 1 ug/g       | 2 ng/g    | 4 ng/g    | PASS   |





| ANALYTE     | VALUE | ACTION LIMIT | LOD       | LOQ       | STATUS |
|-------------|-------|--------------|-----------|-----------|--------|
| S-421       | ND    | 0.02 ug/g    | 0.04 ng/g | 0.08 ng/g | PASS   |
| Tecnazene   | ND    | 0.05 ug/g    | 0.1 ng/g  | 0.2 ng/g  | PASS   |
| Tetradifon  | ND    | 0.3 ug/g     | 0.6 ng/g  | 1.2 ng/g  | PASS   |
| Vinclozolin | ND    | 0.4 ug/g     | 0.8 ng/g  | 1.6 ng/g  | PASS   |





| ANALYTE                                                                                                                             | VALUE | ACTION LIMIT | LOD       | LOQ     | STATUS |
|-------------------------------------------------------------------------------------------------------------------------------------|-------|--------------|-----------|---------|--------|
| Acephate                                                                                                                            | ND    | 0.1 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Alachlor                                                                                                                            | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Azinphos Ethyl                                                                                                                      | ND    | 0.1 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Azinphos Methyl                                                                                                                     | ND    | 1 ug/g       | 12.5 ng/g | 25 ng/g | PASS   |
| Chlorfenvinphos                                                                                                                     | ND    | 0.5 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Chlorpyrifos Ethyl                                                                                                                  | ND    | 0.2 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Cyfluthrin                                                                                                                          | ND    | 0.1 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Cypermethrin                                                                                                                        | <LOQ  | 1 ug/g       | 12.5 ng/g | 25 ng/g | PASS   |
| Deltamethrin                                                                                                                        | ND    | 0.5 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Diazinon                                                                                                                            | ND    | 0.5 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Dichlorvos                                                                                                                          | ND    | 1 ug/g       | 12.5 ng/g | 25 ng/g | PASS   |
| Dimethoate + Omethoate                                                                                                              | ND    | 0.1 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Ethion                                                                                                                              | ND    | 2 ug/g       | 12.5 ng/g | 25 ng/g | PASS   |
| Etrimphos                                                                                                                           | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Fenpropathrin                                                                                                                       | ND    | 0.03 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Fensulfothion (Sum of Fensulfothion, Fensulfothion-Oxon, Fensulfothion-Oxon-Sulfone, and Fensulfothion-Sulfone)                     | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Fenthion (Sum of Fenthion, Fenthion-Oxon, Fenthion-Oxon-Sulfone, Fenthion-Oxon-Sulfoxide, Fenthion-Sulfone, and Fenthion-Sulfoxide) | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Flucythrinate                                                                                                                       | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Fonophos                                                                                                                            | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Lambda-Cyhalothrin                                                                                                                  | ND    | 1 ug/g       | 12.5 ng/g | 25 ng/g | PASS   |
| Malathion + Malaaxon                                                                                                                | ND    | 1 ug/g       | 12.5 ng/g | 25 ng/g | PASS   |
| Mecarbam                                                                                                                            | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Methamidophos                                                                                                                       | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Methidathion                                                                                                                        | ND    | 0.2 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Monocrotophos                                                                                                                       | ND    | 0.1 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Pendimethalin                                                                                                                       | ND    | 0.1 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Permethrins (Sum of Cis- and Trans-Permethrin)                                                                                      | ND    | 1 ug/g       | 12.5 ng/g | 25 ng/g | PASS   |
| Phosalone                                                                                                                           | ND    | 0.1 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Phosmet                                                                                                                             | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |





| ANALYTE                                                                              | VALUE | ACTION LIMIT | LOD       | LOQ     | STATUS |
|--------------------------------------------------------------------------------------|-------|--------------|-----------|---------|--------|
| Piperonyl Butoxide                                                                   | ND    | 3 ug/g       | 12.5 ng/g | 25 ng/g | PASS   |
| Pirimiphos Ethyl                                                                     | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Pirimiphos Methyl (Sum of<br>Pirimiphos-Methyl and n-<br>Desethyl-Pirimiphos-Methyl) | ND    | 4 ug/g       | 12.5 ng/g | 25 ng/g | PASS   |
| Profenophos                                                                          | ND    | 0.1 ug/g     | 12.5 ng/g | 25 ng/g | PASS   |
| Prothiophos                                                                          | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |
| Pyrethrins (Sum of Cinerin 1,<br>Jasmolin 1, and Pyrethrin 1)                        | ND    | 3 ug/g       | 12.5 ng/g | 25 ng/g | PASS   |
| Quinalphos                                                                           | ND    | 0.05 ug/g    | 12.5 ng/g | 25 ng/g | PASS   |





TAMC

TOTAL AEROBIC BACTERIA - PLATE

LAB-TM-060 - ENUMERATION OF TOTAL AEROBIC COUNT IN FOODS AND DIETARY SUPPLEMENTS

TAMC-DTS-241026-003-01 - THU, OCT 31, 2024



| ANALYTE             | VALUE | ACTION LIMIT | LOD       | LOQ       | STATUS |
|---------------------|-------|--------------|-----------|-----------|--------|
| Total Aerobic Count | ND    | 10000 CFU/g  | 100 CFU/g | 100 CFU/g | PASS   |

SAUR

STAPHYLOCOCCUS AUREUS - PLATE

LAB-TM-062 - ENUMERATION OF STAPHYLOCOCCUS AUREUS IN FOODS AND DIETARY SUPPLEMENTS

SAUR-DTS-241026-003-01 - THU, OCT 31, 2024



| ANALYTE   | VALUE | ACTION LIMIT | LOD      | LOQ      | STATUS |
|-----------|-------|--------------|----------|----------|--------|
| S. aureus | ND    | Detection    | 10 CFU/g | 10 CFU/g | PASS   |

HVMET

HEAVY METALS - 4

LAB-TM-044 - DETERMINATION OF HEAVY METALS BY ICP-MS

HVMET-DTS-241026-003-01 - THU, OCT 31, 2024



| ANALYTE | VALUE      | VALUE (MG/G) | PER SERVING | PER PACKAGE | ACTION LIMIT | LOD         | LOQ         | STATUS |
|---------|------------|--------------|-------------|-------------|--------------|-------------|-------------|--------|
| Arsenic | 0.048 ug/g | N/A          | 0.03 ug     | 14.03 ug    | 1.00 ug/g    | 0.198 ug/kg | 0.662 ug/kg | PASS   |
| Cadmium | 0.016 ug/g | N/A          | 0.01 ug     | 4.64 ug     | 1.00 ug/g    | 0.082 ug/kg | 0.272 ug/kg | PASS   |
| Lead    | 0.545 ug/g | N/A          | 0.32 ug     | 160.20 ug   | 3.00 ug/g    | 0.155 ug/kg | 0.515 ug/kg | PASS   |
| Mercury | 0.011 ug/g | N/A          | 0.01 ug     | 3.11 ug     | 1.00 ug/g    | 0.017 ug/kg | 0.057 ug/kg | PASS   |

TYMFD

TOTAL YEAST & MOLD - PLATE

LAB-TM-061 - ENUMERATION OF YEAST AND MOLD IN FOODS AND DIETARY SUPPLEMENTS

TYMFD-DTS-241026-003-01 - FRI, NOV 1, 2024



| ANALYTE              | VALUE | ACTION LIMIT | LOD      | LOQ      | STATUS |
|----------------------|-------|--------------|----------|----------|--------|
| Total Yeast and Mold | ND    | 100 CFU/g    | 10 CFU/g | 10 CFU/g | PASS   |

FTIRR

IDENTIFICATION BY FTIR - REPORT

NULL IDENTIFICATION BY FTIR

FTIRR-DTS-241026-003-01 - FRI, NOV 1, 2024



| ANALYTE             | VALUE    | ACTION LIMIT | LOD | LOQ | STATUS |
|---------------------|----------|--------------|-----|-----|--------|
| Quality Index Score | 99.427 % | 95-100 N/A   |     |     | PASS   |

