

CERTIFICATE OF ANALYSIS

SAMPLE NAME: KUSH CAKES (FLOWER)

SAMPLE CODE: CAN-231214-023

CLIENT: GRASSHOPPER FARMS | AU-G-C-000362

BATCH RESULT: PASS



1230 Woodmere Ave
Traverse City, MI 49686
231.252.3669
cambiumanalytica.com
License #: AU-SC-000112



TEST PACKAGE:

1A405030001AF43000015501

MATRIX NAME:

Flower

SAMPLE TYPE:

Compliance

RECEIVED DATE:

Fri, Dec 15, 2023

PUBLISHED DATE:

Tue, Dec 19, 2023

SOURCE PACKAGE:

1A405030001AF43000015488

BATCH CODE:

N/A

BATCH SIZE:

19740.3399g

SAMPLE SIZE:

101.06g



LAB-TM-025

Cannabinoid Potency



LAB-TM-005

Heavy Metals



LAB-TM-012

Terpenes



LAB-TM-006

Aspergillus - qPCR



LAB-TM-026

Total Coliforms - Plate



LAB-TM-003

Chemical Residue - MI
Cannabis - GC/TQ



LAB-TM-002

Chemical Residue - MI
Cannabis - LC/TQ



LAB-TM-007

Foreign Matter & Filth



LAB-TM-015

Total Yeast & Mold -
Plate



LAB-TM-006

Salmonella & Shiga
Toxin Producing E.Coli
(STEC) - qPCR



LAB-TM-009

Water Activity

RESULTS REVIEWED BY: Leslie Varela

Laboratory Director
Cambium Analytica
Tuesday, Dec 19, 2023

RESULTS REVIEWED BY: Douglas Smith

VP - Scientific Operations
Cambium Analytica
Tue, Dec 19, 2023

This report may not be reproduced except in full without approval from Cambium Analytica. The results herein relate only to the sample & batch identified in this report.



LAB-TM-025 - DETERMINATION OF POTENCY OF CANNABIS AND CANNABIS INFUSED PRODUCTS ACN
 POT-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|--------------------|-----------|--------------|---------------|---------------|--------|
| Total Cannabinoids | 33.0859 % | N/A | | | N/A |
| THCA | 30.6494 % | N/A | 0.4497 ug/g | 4.9472 ug/g | N/A |
| Total THC | 28.1030 % | N/A | | | N/A |
| Delta-9 THC | 1.2235 % | N/A | 0.4945 ug/g | 1.516 ug/g | N/A |
| CBGA | 1.0262 % | N/A | 0.4596 ug/g | 4.8149 ug/g | N/A |
| CBG | 0.1123 % | N/A | 0.2073 ug/g | 0.8539 ug/g | N/A |
| CBDA | 0.0746 % | N/A | 0.0886 ug/g | 0.2949 ug/g | N/A |
| Total CBD | 0.0654 % | N/A | | | N/A |
| CBC | ND | N/A | 0.4372 ug/g | 4.843 ug/g | N/A |
| CBD | ND | N/A | 0.6432 ug/g | 5.401 ug/g | N/A |
| CBDV | ND | N/A | 0.0919 ug/g | 0.4418 ug/g | N/A |
| CBN | ND | N/A | 0.3561 ug/g | 4.3163 ug/g | N/A |
| Delta-8 THC | ND | N/A | 0.4043 ug/g | 4.5669 ug/g | N/A |
| Delta-8 THCV | ND | N/A | 0.050425 ug/g | 0.339339 ug/g | N/A |
| Delta-9 THCV | ND | N/A | 0.269941 ug/g | 0.403267 ug/g | N/A |
| Total THCV | ND | N/A | | | N/A |

LAB-TM-005 - DETERMINATION OF HEAVY METALS IN CANNABIS AND CANNABIS-INFUSED PRODUCTS BY ICP-MS
 MET-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|----------|------------|--------------|--------------|--------------|--------|
| Arsenic | 0.013 ug/g | 0.4 ug/g | 0.1985 ug/kg | 0.6616 ug/kg | PASS |
| Cadmium | 0.070 ug/g | 0.4 ug/g | 0.0817 ug/kg | 0.2724 ug/kg | PASS |
| Chromium | 0.030 ug/g | 1.2 ug/g | 0.6272 ug/kg | 2.0907 ug/kg | PASS |
| Copper | 9.453 ug/g | N/A | 0.1546 ug/kg | 0.5152 ug/kg | N/A |
| Lead | 0.028 ug/g | 1 ug/g | 0.2817 ug/kg | 0.2817 ug/kg | PASS |
| Mercury | 0.003 ug/g | 0.2 ug/g | 0.0171 ug/kg | 0.0571 ug/kg | PASS |
| Nickel | 0.441 ug/g | 1 ug/g | 0.3213 ug/kg | 1.0709 ug/kg | PASS |



LAB-TM-012 - DETERMINATION OF TERPENES BY GC-MS

TRP-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|--------------------------|---------|--------------|----------|--------|--------|
| Total Terpenes | 1.758 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Trans Caryophyllene | 0.727 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Limonene | 0.367 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Alpha Humulene | 0.228 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Beta Myrcene | 0.116 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Alpha Bisabolol | 0.091 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Linalool | 0.070 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Beta Pinene | 0.046 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Alpha Terpineol | 0.044 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| 1,R-Endo-Fenchyl Alcohol | 0.037 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Alpha Pinene | 0.031 % | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Alpha Cedrene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Alpha Phellandrene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Alpha Terpinene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Borneol | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Camphene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Camphor | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Caryophyllene Oxide | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Cedrol | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Cis Beta Ocimene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Cis Nerolidol | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Delta-3 Carene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Eucalyptol | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Fenchone | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Gamma Terpinene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Geranyl Acetate | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Guaiol | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Isoborneol | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Isopulegol | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Pulegone | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Sabinene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Sabinene Hydrate | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Terpinolene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Trans Beta Ocimene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Trans Nerolidol | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |
| Valencene | ND | N/A | 0.5 ug/g | 1 ug/g | N/A |



LAB-TM-006 - MICROBIAL ANALYSIS BY QPCR
ASP-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|-----------------------|-------|--------------|-----|-----|--------|
| Aspergillus Flavus | ND | Detection | | | PASS |
| Aspergillus Fumigatus | ND | Detection | | | PASS |
| Aspergillus Niger | ND | Detection | | | PASS |
| Aspergillus Spp | ND | Detection | | | PASS |
| Aspergillus Terreus | ND | Detection | | | PASS |

LAB-TM-026 - ENUMERATION OF TOTAL COLIFORMS ON 3M CC PLATES
COL-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|-----------------|---------|--------------|-----|-----|--------|
| Total Coliforms | 0 CFU/g | 1000 CFU/g | | | PASS |

LAB-TM-003 - DETERMINATION OF CHEMICAL RESIDUE OF CANNABIS AND CANNABIS INFUSED PRODUCTS BY GC
PGC-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|------------------|-------|--------------|-------------|--------------|--------|
| Chlorfenapyr | ND | 1 ug/g | 6.110 ug/kg | 20.400 ug/kg | PASS |
| Methyl Parathion | ND | 0.2 ug/g | 3.120 ug/kg | 10.500 ug/kg | PASS |



LAB-TM-002 - DETERMINATION OF CHEMICAL RESIDUE OF CANNABIS AND CANNABIS INFUSED PRODUCTS BY LC-TQ
 PLC-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|--|-------|--------------|-----------|-----------|--------|
| Abamectin | ND | 0.5 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Acephate | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Acequinocyl | ND | 2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Acetamiprid | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Aldicarb | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Azoxystrobin | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Bifenazate | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Bifenthrin | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Boscalid | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Carbaryl | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Carbofuran | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Chlorantraniliprole | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Chlorpyrifos | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Clofentezine | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Cyfluthrin | ND | 1 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Cypermethrin | ND | 1 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Daminozide | ND | 1 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Diazinon | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Dichlorvos | ND | 1 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Dimethoate | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Ethoprophos | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Etofenprox | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Etoxazole | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Fenoxycarb | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Fenpyroximate | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Fipronil | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Flonicamid | ND | 1 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Fludioxonil | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Hexythiazox | ND | 1 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Imazalil | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Imidacloprid | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Kresoxim Methyl | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Malathion | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Metalaxyl | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Methiocarb | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Methomyl | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| MGK-264 | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Myclobutanil | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Naled | ND | 0.5 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Oxamyl | ND | 1 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Paclobutrazol | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Permethrins (Sum of Cis- and Trans-Permethrin) | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |



LAB-TM-002 - DETERMINATION OF CHEMICAL RESIDUE OF CANNABIS AND CANNABIS INFUSED PRODUCTS BY LC-TQ
 PLC-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|--|-------|--------------|-----------|-----------|--------|
| Phosmet | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Prallethrin | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Propiconazole | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Propoxur | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Pyrethrins (Sum of Cinerin 1, Jasmolin 1, and Pyrethrin 1) | ND | 1 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Pyrethrins Cinerin 1 | ND | N/A | 0.05 ug/g | 0.10 ug/g | N/A |
| Pyrethrins Jasmolin 1 | ND | N/A | 0.05 ug/g | 0.10 ug/g | N/A |
| Pyrethrins Pyrethrin 1 | ND | N/A | 0.05 ug/g | 0.10 ug/g | N/A |
| Pyridaben | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Spinosad | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Spinosad A | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Spinosad D | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Spiromesifen | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Spirotetramat | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Spiroxamine | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Tebuconazole | ND | 0.4 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Thiacloprid | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Thiamethoxam | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |
| Trifloxystrobin | ND | 0.2 ug/g | 0.05 ug/g | 0.10 ug/g | PASS |



LAB-TM-007 - FOREIGN MATTER AND FILTH ANALYSIS

FOR-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|----------------------|-------|--------------|-----|-----|--------|
| Inorganic Matter | 0.0 % | Detection | | | PASS |
| Organic Matter | 0.0 % | 2 % | | | PASS |
| Stems | 1.0 % | 5 % | | | PASS |
| Total Foreign Matter | 1 % | N/A | | | N/A |

LAB-TM-015 - ENUMERATION OF TOTAL YEAST AND MOLD ON 3M RYM PLATES

TYM-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|----------------------|------------|--------------|-----------|-----------|--------|
| Total Yeast and Mold | 1400 CFU/g | 100000 CFU/g | <10 CFU/g | <10 CFU/g | PASS |

LAB-TM-006 - MICROBIAL ANALYSIS BY QPCR

SS-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|-------------------------------|-------|--------------|-----|-----|--------|
| Salmonella Spp | ND | Detection | | | PASS |
| Shiga Toxin Producing E. coli | ND | Detection | | | PASS |

LAB-TM-009 - DETERMINATION OF WATER ACTIVITY

AWA-CAN-231214-023-01 - THU, DEC 14, 2023



| ANALYTE | VALUE | ACTION LIMIT | LOD | LOQ | STATUS |
|----------------|----------|--------------|-----|-----|--------|
| Water Activity | 0.490 aw | 0.65 Awa | | | PASS |



