

# CERTIFICATE OF ANALYSIS

**SAMPLE NAME:** MN LIME - OCT BATCH

**SAMPLE CODE:** HEM-231009-001

**CLIENT:** HAPPI MN & TX

**BATCH RESULT:** PASS



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**MATRIX NAME:**

Beverage

**SAMPLE TYPE:**

Quality Assurance

**RECEIVED DATE:**

Tuesday, Oct 10, 2023

**PUBLISHED DATE:**

Friday, Oct 13, 2023

**BATCH CODE:**

**BATCH SIZE:**

1U

**SAMPLE SIZE:**

8U

**AVERAGE UNIT WEIGHT:**

228.49g

POT

**LAB-TM-001**

Potency Analysis by  
HPLC-DAD

MET

**LAB-TM-005**

Heavy Metals Analysis  
by ICP-MS

SOL

**LAB-TM-004**

Residual Solvent  
Analysis by GC-MS

PGC

**LAB-TM-003**

Chemical Residue  
Analysis by GC-  
MS/MS

PLC

**LAB-TM-002**

Chemical Residue  
Analysis by LC-MS/MS

TYM

**LAB-TM-015**

Enumeration of Total  
Yeast and Mold

**RESULTS REVIEWED BY:** Leslie Varela

Laboratory Director  
Cambium Analytica  
Friday, Oct 13, 2023

**RESULTS REVIEWED BY:** Douglas Smith

VP - Scientific Operations  
Cambium Analytica  
Friday, Oct 13, 2023

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**LAB-TM-001 - DETERMINATION OF POTENCY BY HPLC-DAD**

POT-HEM-231009-001-02 - THURSDAY, OCT 12, 2023



ANALYTE	VALUE	VALUE (PER SERVING)	ACTION LIMIT	LOD	LOQ	STATUS
Total Cannabinoids	0.0024 %	5.509 mg	N/A	N/A	N/A	N/A
Delta-9 THC	0.0023 %	5.182 mg	N/A	0.4945 ug/g	1.516 ug/g	N/A
Total THC	0.0023 %	5.182 mg	N/A	N/A	N/A	N/A
CBG	0.0001 %	0.1805 mg	N/A	0.2073 ug/g	0.8539 ug/g	N/A
CBN	<LOQ	0.1462 mg	N/A	0.3561 ug/g	4.3163 ug/g	N/A
CBC	ND	0 mg	N/A	0.4372 ug/g	4.843 ug/g	N/A
CBD	ND	0 mg	N/A	0.6432 ug/g	5.401 ug/g	N/A
CBDA	ND	0 mg	N/A	0.0886 ug/g	0.2949 ug/g	N/A
CBDV	ND	0 mg	N/A	0.0919 ug/g	0.4418 ug/g	N/A
CBGA	ND	0 mg	N/A	0.4596 ug/g	4.8149 ug/g	N/A
Delta-8 THC	ND	0 mg	N/A	0.4043 ug/g	4.5669 ug/g	N/A
Delta-8 THCV	0 %	0 mg	N/A	N/A	N/A	N/A
Delta-9 THCV	0 %	0 mg	N/A	N/A	N/A	N/A
THCA	ND	0 mg	N/A	0.4497 ug/g	4.9472 ug/g	N/A
Total CBD	ND	N/A	N/A	N/A	N/A	N/A
Total THCV	ND	N/A	N/A	0.5628 ug/g	5.071 ug/g	N/A

**LAB-TM-005 - DETERMINATION OF HEAVY METALS BY ICP-MS**

MET-HEM-231009-001-01 - MONDAY, OCT 9, 2023



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Arsenic	0.008 ug/g	N/A	0.1985 ug/kg	0.6616 ug/kg	N/A
Cadmium	ND	N/A	0.0817 ug/kg	0.2724 ug/kg	N/A
Chromium	ND	N/A	0.6272 ug/kg	2.0907 ug/kg	N/A
Copper	0.028 ug/g	N/A	0.1546 ug/kg	0.5152 ug/kg	N/A
Lead	0.001 ug/g	N/A	0.0845 ug/kg	0.2817 ug/kg	N/A
Mercury	ND	N/A	0.0171 ug/kg	0.0571 ug/kg	N/A
Nickel	ND	N/A	0.3213 ug/kg	1.0709 ug/kg	N/A





## LAB-TM-004 - DETERMINATION OF RESIDUAL SOLVENTS BY GC-MS

SOL-HEM-231009-001-01 - MONDAY, OCT 9, 2023



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
1,2-Dichloroethane	ND	N/A	0.4 ug/g	1.34 ug/g	N/A
2-Methylbutane	ND	N/A	1.54 ug/g	5.14 ug/g	N/A
2-Methylpentane	ND	N/A	0.0462 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	N/A	1.57 ug/g	5.23 ug/g	N/A
Acetonitrile	ND	N/A	1.85 ug/g	6.17 ug/g	N/A
Benzene	ND	N/A	0.18 ug/g	0.59 ug/g	N/A
Butane	ND	N/A	1.68 ug/g	5.59 ug/g	N/A
Butanes (Sum of Butane and Isobutane)	ND	N/A	N/A	N/A	N/A
Chloroform	ND	N/A	0.78 ug/g	2.59 ug/g	N/A
Ethanol	751 ug/g	N/A	6.02 ug/g	20.1 ug/g	N/A
Ethyl Acetate	ND	N/A	1.95 ug/g	6.49 ug/g	N/A
Ethyl Ether	ND	N/A	1.37 ug/g	4.55 ug/g	N/A
Ethylene Oxide	ND	N/A	0.15 ug/g	0.49 ug/g	N/A
Heptane	ND	N/A	1.31 ug/g	4.37 ug/g	N/A
Hexane	ND	N/A	1.42 ug/g	4.74 ug/g	N/A
Hexanes (Sum of Hexane, 2,2-Dimethylbutane, 2,3-Dimethylbutane, 2-Methylpentane, and 3-Methylpentane)	ND	N/A	N/A	N/A	N/A
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	ND	N/A	7.89 ug/g	26.4 ug/g	N/A
Methylene Chloride	ND	N/A	1.36 ug/g	4.53 ug/g	N/A
Neopentane	ND	N/A	1.49 ug/g	4.97 ug/g	N/A
Pentane	ND	N/A	1.46 ug/g	4.87 ug/g	N/A
Pentanes (Sum of Pentane, 2-Methylbutane, and Neopentane)	ND	N/A	N/A	N/A	N/A
Propane	ND	N/A	1.95 ug/g	6.51 ug/g	N/A
Toluene	ND	N/A	1.88 ug/g	6.26 ug/g	N/A
Total Xylenes	ND	N/A	2.02 ug/g	6.72 ug/g	N/A
Trichloroethylene	ND	N/A	0.29 ug/g	0.96 ug/g	N/A

## LAB-TM-003 - DETERMINATION OF CHEMICAL RESIDUE BY GC-MS/MS

PGC-HEM-231009-001-01 - MONDAY, OCT 9, 2023



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Chlorfenapyr	ND	N/A			N/A
Methyl Parathion	ND	N/A			N/A





**LAB-TM-002 - DETERMINATION OF CHEMICAL RESIDUE BY LC-MS/MS**  
 PLC-HEM-231009-001-01 - MONDAY, OCT 9, 2023



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Abamectin	ND	N/A	0.0736 ug/kg	0.7999 ug/kg	N/A
Acephate	ND	N/A	0.0262 ug/kg	0.22 ug/kg	N/A
Acequinocyl	ND	N/A	0.0236 ug/kg	0.2484 ug/kg	N/A
Acetamiprid	0.002 ug/g	N/A	0.0199 ug/kg	0.1836 ug/kg	N/A
Aldicarb	ND	N/A	0.0316 ug/kg	0.2633 ug/kg	N/A
Azoxystrobin	ND	N/A	0.0141 ug/kg	0.1166 ug/kg	N/A
Bifenazate	ND	N/A	0.0136 ug/kg	0.1513 ug/kg	N/A
Bifenthrin	ND	N/A	0.0272 ug/kg	0.2691 ug/kg	N/A
Boscalid	ND	N/A	0.0157 ug/kg	0.1589 ug/kg	N/A
Carbaryl	ND	N/A	0.0287 ug/kg	0.2836 ug/kg	N/A
Carbofuran	ND	N/A	0.0282 ug/kg	0.2676 ug/kg	N/A
Chlorantraniliprole	0.001 ug/g	N/A	0.017 ug/kg	0.1643 ug/kg	N/A
Chlorpyrifos	ND	N/A	0.0289 ug/kg	0.3114 ug/kg	N/A
Clofentezine	ND	N/A	0.0396 ug/kg	0.3123 ug/kg	N/A
Cyfluthrin	ND	N/A	0.0622 ug/kg	0.8882 ug/kg	N/A
Cypermethrin	ND	N/A	0.0399 ug/kg	0.283 ug/kg	N/A
Daminozide	ND	N/A	0.0299 ug/kg	0.2517 ug/kg	N/A
Diazinon	ND	N/A	0.0325 ug/kg	0.1872 ug/kg	N/A
Dichlorvos	ND	N/A	0.0299 ug/kg	0.2656 ug/kg	N/A
Dimethoate	ND	N/A	0.0272 ug/kg	0.2606 ug/kg	N/A
Ethoprophos	ND	N/A	0.0365 ug/kg	0.3453 ug/kg	N/A
Etofenprox	ND	N/A	0.0212 ug/kg	0.1912 ug/kg	N/A
Etoxazole	ND	N/A	0.0197 ug/kg	0.1929 ug/kg	N/A
Fenoxycarb	ND	N/A	0.0239 ug/kg	0.2312 ug/kg	N/A
Fenpyroximate	ND	N/A	0.0218 ug/kg	0.1682 ug/kg	N/A
Fipronil	ND	N/A	0.0128 ug/kg	0.0588 ug/kg	N/A
Flonicamid	ND	N/A	0.0195 ug/kg	0.232 ug/kg	N/A
Fludioxonil	ND	N/A	0.0247 ug/kg	0.2581 ug/kg	N/A
Hexythiazox	ND	N/A	0.0196 ug/kg	0.2382 ug/kg	N/A
Imazalil	ND	N/A	0.0352 ug/kg	0.2793 ug/kg	N/A
Imidacloprid	ND	N/A	0.0179 ug/kg	0.1708 ug/kg	N/A
Kresoxim Methyl	ND	N/A	0.0178 ug/kg	0.1415 ug/kg	N/A
Malathion	ND	N/A	0.0324 ug/kg	0.3928 ug/kg	N/A
Metalaxyl	ND	N/A	0.0203 ug/kg	0.1924 ug/kg	N/A
Methiocarb	ND	N/A	0.0254 ug/kg	0.2521 ug/kg	N/A
Methomyl	ND	N/A	0.0347 ug/kg	0.2663 ug/kg	N/A
MGK-264	ND	N/A	0.0315 ug/kg	0.302 ug/kg	N/A
Myclobutanil	ND	N/A	0.0269 ug/kg	0.3158 ug/kg	N/A
Naled	ND	N/A	0.0537 ug/kg	0.4003 ug/kg	N/A
Oxamyl	ND	N/A	0.0261 ug/kg	0.2468 ug/kg	N/A
Paclobutrazol	ND	N/A	0.0308 ug/kg	0.3071 ug/kg	N/A
Permethrins (Sum of Cis- and Trans-Permethrin)	ND	N/A	0.0174 ug/kg	0.1639 ug/kg	N/A





ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Phosmet	ND	N/A	0.0265 ug/kg	0.2492 ug/kg	N/A
Prallethrin	ND	N/A	0.0587 ug/kg	0.2245 ug/kg	N/A
Propiconazole	ND	N/A	0.025 ug/kg	0.1633 ug/kg	N/A
Propoxur	ND	N/A	0.0395 ug/kg	0.3395 ug/kg	N/A
Pyrethrins (Sum of Cinerin 1, Jasmolin 1, and Pyrethrin 1)	ND	N/A			N/A
Pyrethrins Cinerin 1	ND	N/A			N/A
Pyrethrins Jasmolin 1	ND	N/A			N/A
Pyrethrins Pyrethrin 1	ND	N/A			N/A
Pyridaben	ND	N/A	0.0308 ug/kg	0.2403 ug/kg	N/A
Spinosad	ND	N/A	0.0197 ug/kg	0.1788 ug/kg	N/A
Spinosad A	ND	N/A	0.0175 ug/kg	0.1501 ug/kg	N/A
Spinosad D	ND	N/A	0.0052 ug/kg	0.0364 ug/kg	N/A
Spiromesifen	ND	N/A	0.0232 ug/kg	0.2569 ug/kg	N/A
Spirotetramat	ND	N/A	0.024 ug/kg	0.2254 ug/kg	N/A
Spiroxamine	ND	N/A	0.031 ug/kg	0.2233 ug/kg	N/A
Tebuconazole	ND	N/A	0.0382 ug/kg	0.3345 ug/kg	N/A
Thiacloprid	ND	N/A	0.0258 ug/kg	0.2469 ug/kg	N/A
Thiamethoxam	ND	N/A	0.0153 ug/kg	0.1458 ug/kg	N/A
Trifloxystrobin	ND	N/A	0.0188 ug/kg	0.2121 ug/kg	N/A



**LAB-TM-015 - ENUMERATION OF TOTAL YEAST AND MOLD ON 3M RYM PLATES**  
TYM-HEM-231009-001-01 - MONDAY, OCT 9, 2023



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Total Yeast and Mold	0 CFU/g	100000 CFU/g	N/A	N/A	PASS

