

Product Description: Hemp CBD Tincture - 500mg/60ml - CO₂, MCT, MT

Invoice Number: 2019-1014A

Lot Number: T-23919-B3

Best By Date: 08/26/2019

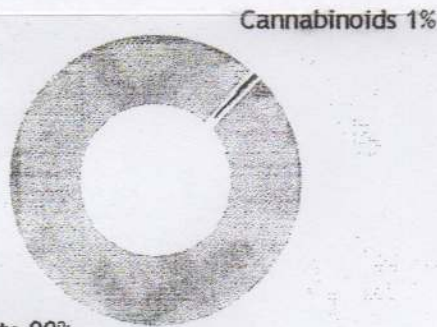
Product Code: T-500-CO₂-MCT-MT-60ml

Date of Analysis: 08/28/2019

Manufacture Date: 08/27/2019

Cannabinoid Potency - Expected CBD: 8.33 mg/mL ± 10%

% Total Cannabinoids

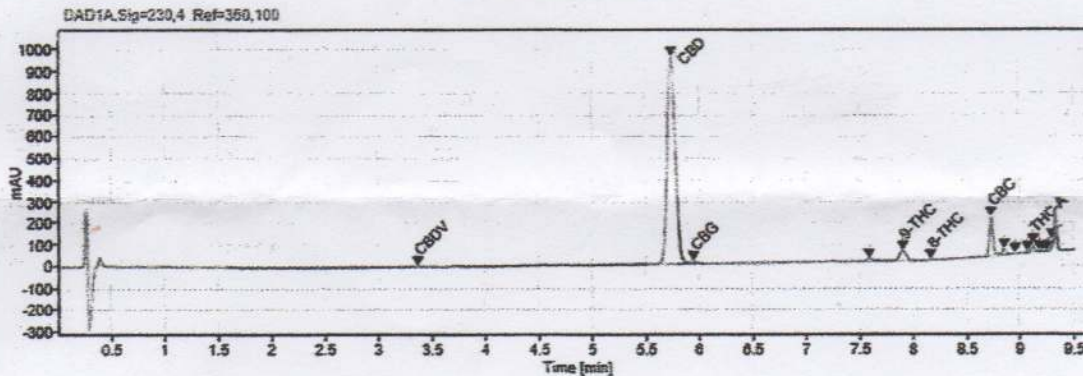


	mg/mL	%
CBD:	9.25 mg/mL	0.93 %
Total THC:	0.49 mg/mL	0.05 %
CBC	0.36 mg/mL	0.04 %
CBDa:	ND	ND
CBDV:	<0.05 mg/mL	<0.01 %
CBG:	0.10 mg/mL	0.01 %
CBGa:	ND	ND
CBN:	ND	ND
d8-THC:	<0.05 mg/mL	<0.01 %
d9-THC:	0.42 mg/mL	0.04 %
THCa:	0.05 mg/mL	0.01 %

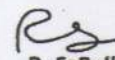
Density: 0.856 (kg/m³) Specific Gravity: 0.859

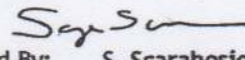
*Total d9-THC and CBD are calculated taking into account the loss of a carboxyl group during decarboxylation. The formulas are as follows : d9-THC = d9THC + (THCa * (0.877)) CBD = CBD + (CBDa * (0.877))
**Any compounds with results listed as "ND" were not detected during analysis.

Chromatogram



Analyzed via HPLC Under These Conditions: Humidity: 26% Temperature: 72.5°F

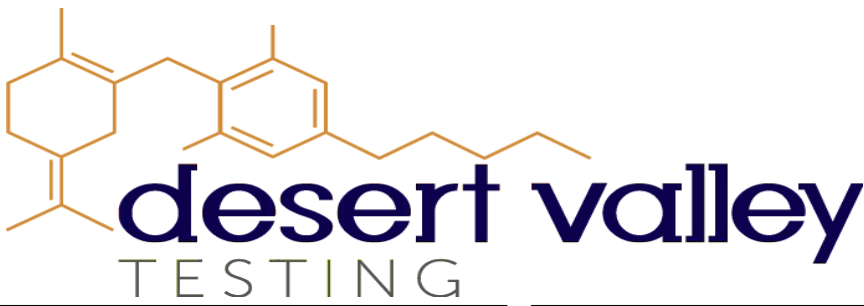
Analyzed By: 
R. SaBell
HPLC Analyst
08/28/2019

Approved By: 
S. Scarabosio
Analytical Laboratory Manager
08/28/2019



ISO 9001:2015 Certificate Number: US4293

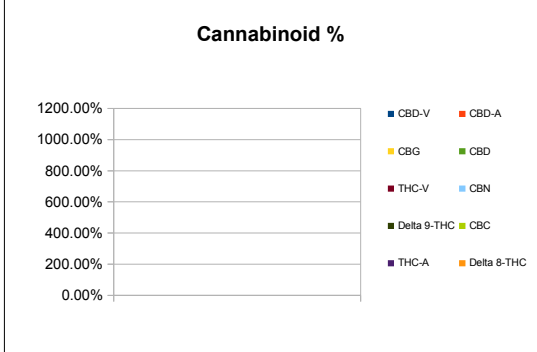
Certificate of Analysis test results are based only on the analysis of the product listed in the "Product Description" of this form. Hammer Enterprises, LLC, makes no claims as to the efficacy, safety, or other risks associated with any detected or non-detected compounds reported herein. All analyses conducted at Hammer Enterprises, LLC, is performed on well-maintained, quality instruments utilizing Good Laboratory Practices and validated methodology. This Certificate may not be reproduced except in full, without the written approval of Hammer Enterprises, LLC. **DISCLAIMER:** When reviewing certificate ensure watermark is complete and intact. Watermark will present as repeating HE logos diagonally across the entire page. The authenticity of this document is not guaranteed if there is evident modification, blocking, or alterations of the watermark.



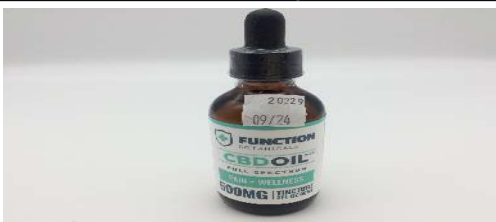
DESERT VALLEY TESTING
 51 W. Weldon Ave
 Phoenix, Arizona 85013
 480-788-6644
 www.desertvalleytesting.com

Sample Information		
Sample Identification	500mg in MCT Oil/Mint	
Laboratory Number	2019020229	
Batch Number	T-23919-B3	
Matrix	Tincture	
Analyzed Date	09/24/19	
Extraction Date	09/24/19	
Cannabinoid (HPLC)	%	mg/g
Compound		
CBD-V	NT	NT
CBD-A	NT	NT
CBG	NT	NT
CBD	NT	NT
THC-V	NT	NT
CBN	NT	NT
Delta 9-THC	NT	NT
CBC	NT	NT
THC-A	NT	NT
Delta 8-THC	NT	NT
Cannabinoids Total		
Max Active THC	NT	NT
Max Active CBD	NT	NT
T. Active Cannabinoids	NT	NT
Total Cannabinoids	NT	NT

Max Active Ratios		
NA :1 CBD to THC		
NA :1 THC to CBD		



Sample Image

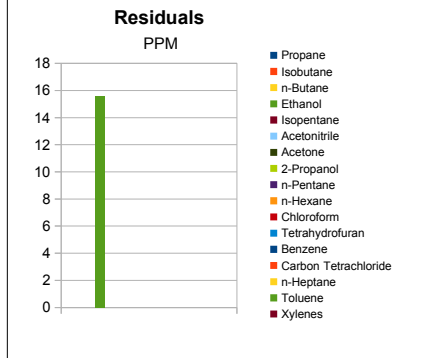


Micro Visual:	NOT TESTED
Percent Moisture	NOT TESTED

Chemist: JW
Report Expires: 12/23/19

RL=Reporting Limit
 NA=Not Applicable
 NT=Not Tested
 ND=Non Detected
 TNTC=Too Numerous to Count

RS (GCMS-HS)	PPM	RL
Compound		
Propane	ND	5.0
Isobutane	ND	5.0
n-Butane	ND	5.0
Ethanol	15.59	5.0
Isopentane	ND	5.0
Acetonitrile	ND	5.0
Acetone	ND	50.0
2-Propanol	ND	5.0
n-Pentane	ND	5.0
n-Hexane	ND	5.0
Chloroform	ND	5.0
Tetrahydrofuran	ND	5.0
Benzene	ND	5.0
Carbon Tetrachloride	ND	5.0
n-Heptane	ND	5.0
Toluene	ND	5.0
Xylenes	ND	10.0



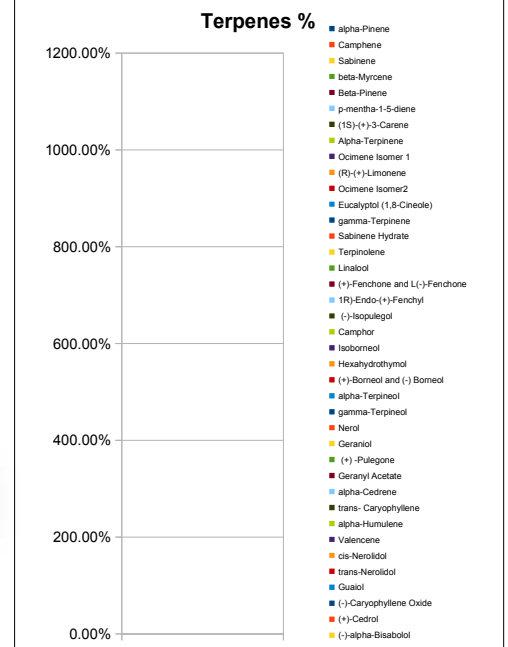
g/medible	NA
mg THC/medible	NA
mg CBD/medible	NA
(mg) total cannabinoids/medible	NA

Metals	PPM	RL
Compound		
Lead	ND	0.018
Arsenic	0.168	0.007
Cadmium	0.027	0.004
Mercury	ND	0.020

Microbial	CFU/g
Compound	
Enterobacteriaceae	NT
Coliform	NT
Ecoli	NT
Aerobic	NT
Yeast	NT
Mold	NT



Terpene (GC-MS)	%	mg/g
Compound		
alpha-Pinene	NT	NT
Camphene	NT	NT
Sabinene	NT	NT
beta-Myrcene	NT	NT
Beta-Pinene	NT	NT
p-mentha-1-5-diene	NT	NT
(1S)-(+)-3-Carene	NT	NT
Alpha-Terpinene	NT	NT
Ocimene Isomer 1	NT	NT
(R)-(+)-Limonene	NT	NT
Ocimene Isomer2	NT	NT
Eucalyptol (1,8-Cineole)	NT	NT
gamma-Terpinene	NT	NT
Sabinene Hydrate	NT	NT
Terpinolene	NT	NT
Linalool	NT	NT
(+)-Fenchone and L(-)-Fenchone	NT	NT
1R)-Endo-(+)-Fenchyl	NT	NT
(-)-Isopulegol	NT	NT
Camphor	NT	NT
Isoborneol	NT	NT
Hexahydrothymol	NT	NT
(+)-Borneol and (-) Borneol	NT	NT
alpha-Terpineol	NT	NT
gamma-Terpineol	NT	NT
Nerol	NT	NT
Geraniol	NT	NT
(+) -Pulegone	NT	NT
Geranyl Acetate	NT	NT
alpha-Cedrene	NT	NT
trans- Caryophyllene	NT	NT
alpha-Humulene	NT	NT
Valencene	NT	NT
cis-Nerolidol	NT	NT
trans-Nerolidol	NT	NT
Guaicol	NT	NT
(-)-Caryophyllene Oxide	NT	NT
(+)-Cedrol	NT	NT
(-)-alpha-Bisabolol	NT	NT
Total Terpenes	NA	NA





Sample Information	
Sample Identification	500mg in MCT Oil/Mint
Laboratory Number	2019020229
Batch Number	T-23919-B3
Matrix	Tincture
Analyzed Date	09/30/19
Extraction Date	09/24/19

RL=Report Limit
NT=Not Tested

NR=Not Reported
ND=Non Detected

Chemsit BR
Report Expires: 12/30/19

Pesticides (LC-MS TQ)	Mass	RL
Compound	ppm	ppm
ACEPHATE	ND	0.040
ACEQUINOCYL	ND	0.200
ACETAMIPRID	ND	0.020
ALDICARB	ND	0.040
ABAMECTIN	ND	0.070
AVERMECTIN B1B	ND	0.070
AZOXYSTROBIN	ND	0.020
BIFENAZATE	ND	0.020
BIFENTHRIN	ND	0.020
BOSCALID	ND	0.040
CARBARYL	ND	0.020
CARBOFURAN	ND	0.020
CHLORANTRANILIPROLE	ND	0.020
CHLOREFENAPYR	ND	0.100
CHLORPYRIFOS	ND	0.020
CLOFENTEZINE	ND	0.020
CYFLUTHRIN	ND	0.100
CYPERMETHRIN	ND	0.100
DAMINOZIDE	ND	0.100
DIAZINON	ND	0.020
DICHLORVOS	ND	0.010
DIMETHOATE	ND	0.020
ETHOPROPHOS	ND	0.020
ETOXAZOLE	ND	0.040
ETOXAZOLE	ND	0.010
FENOXYCARB	ND	0.020
FENPYROXIMATE	ND	0.040
FIPRONIL	ND	0.040
FLONICAMID	ND	0.100
FLUDIOXONIL	ND	0.040
HEXYTHIAZOX	ND	0.100
IMAZALIL	ND	0.040

Pesticides (LC-MS TQ)	Mass	RL
Compound	ppm	ppm
IMIDACLOPRID	ND	0.020
KRESOXIM-METHYL	ND	0.040
MALATHION A	ND	0.050
METALAXYL	ND	0.020
METHIOCARB	ND	0.020
METHOMYL	ND	0.040
MGK 264	ND	0.020
MYCLOBUTANIL	ND	0.040
NALED	ND	0.050
OXAMYL	ND	0.100
PACLOBUTRAZOL	ND	0.040
PARATHION METHYL	ND	0.100
PERMETHRINS	ND	0.040
PHOSMET	ND	0.020
PIPERONYL BUTOXIDE	ND	0.200
PRALLETHRIN	ND	0.020
PROPICONAZOLE	ND	0.040
PROPOXURE	ND	0.020
PYRETHRINS CINERIN 1	ND	0.500
PYRETHRINS JASMOLIN 1	ND	0.500
PYRETHRINS PYRETHRIN 1	ND	0.500
PYRIDABEN	ND	0.020
SPINOSYN A	ND	0.060
SPINOSYN D	ND	0.060
SPIROMESIFEN	ND	0.030
SPIROTETRAMAT	ND	0.020
SPIROXAMINE	ND	0.040
TEBUCONAZOLE	ND	0.010
THIACLOMPRID	ND	0.020
THIAMETHOXAM	ND	0.020
TRIFLOXYSTROBIN	ND	0.020

HEMP CBD TINC - 500mg/60mL-CO2,MCT,MT

Batch ID:	T-23919-B3	Test ID:	9361112.0026
Reported:	6-Dec-2019	Method:	TM17
Type:	Concentrate		
Test:	Pesticides		


PESTICIDE RESIDUE


Compound	Dynamic Range (ppb)	Result (ppb)	Compound	Dynamic Range (ppb)	Result (ppb)
Acephate	48 - 2218	ND*	Malathion	48 - 2218	ND*
Acetamiprid	48 - 2218	ND*	Metalaxyl	287 - 2218	ND*
Avermectin	287 - 2218	ND*	Methiocarb	48 - 2218	ND*
Azoxystrobin	48 - 2218	ND*	Methomyl	48 - 2218	ND*
Bifenazate	48 - 2218	ND*	MGK 264 1	48 - 2218	ND*
Boscalid	287 - 2218	ND*	MGK 264 2	287 - 2218	ND*
Carbaryl	48 - 2218	ND*	Myclobutanil	287 - 2218	ND*
Carbofuran	48 - 2218	ND*	Naled	287 - 2218	ND*
Chlorantraniliprole	48 - 2218	ND*	Oxamyl	48 - 2218	ND*
Chlorpyrifos	287 - 2218	ND*	Paclobutrazol	48 - 2218	ND*
Clofentezine	48 - 2218	ND*	Permethrin	287 - 2218	ND*
Diazinon	48 - 2218	ND*	Phosmet	48 - 2218	ND*
Dichlorvos	287 - 2218	ND*	Prophos	287 - 2218	ND*
Dimethoate	48 - 2218	ND*	Propoxur	287 - 2218	ND*
E-Fenproximate	287 - 2218	ND*	Pyridaben	287 - 2218	ND*
Etofenprox	287 - 2218	ND*	Spinosad A	48 - 2218	ND*
Etoxazole	287 - 2218	ND*	Spinosad D	287 - 2218	ND*
Fenoxycarb	48 - 2218	ND*	Spiromesifen	48 - 2218	ND*
Fipronil	287 - 2218	ND*	Spirotetramat	287 - 2218	ND*
Flonicamid	48 - 2218	ND*	Spiroxamine 1	48 - 2218	ND*
Fludioxonil	287 - 2218	ND*	Spiroxamine 2	48 - 2218	ND*
Hexythiazox	287 - 2218	ND*	Tebuconazole	48 - 2218	ND*
Imazalil	287 - 2218	ND*	Thiacloprid	48 - 2218	ND*
Imidacloprid	48 - 2218	ND*	Thiamethoxam	48 - 2218	ND*
Kresoxim-methyl	48 - 2218	ND*	Trifloxystrobin	287 - 2218	ND*

* ND = None Detected (Defined by Dynamic Range of the method)

N/A

FINAL APPROVAL


 Sam Smith
 6-Dec-2019
 12:35 PM
 PREPARED BY / DATE


 Greg Zimpfer
 6-Dec-2019
 1:00 PM
 APPROVED BY / DATE

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC.

Hemp CBD Tinc - 500mg/60ml - CO2, MCT, MT

Batch ID:	T-23919-B3	Test ID:	T000026659
Reported:	5-Nov-2019	Method:	Arsenic = Arsenic EPA 6020A (mod), Cadmium = Cadmium EPA 6020A (mod), Lead = Lead EPA 6020A (mod), Mercury = Mercury EPA 6020A (mod)
Type:	Unit		
Test:	Metals		

HEAVY METALS

Compound	Reporting Limit (ppm)	Result (ppm)
Arsenic	0.05	<0.05
Cadmium	0.05	<0.05
Lead	0.05	<0.05
Mercury	0.05	<0.05

FINAL APPROVAL

Sam Smith
5-Nov-2019
7:34 AM

PREPARED BY / DATE

David Green
5-Nov-2019
8:24 AM

APPROVED BY / DATE

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC.