



HL-WS1500 Lot#2000045

<b>Batch ID:</b>	N/A	<b>Test ID:</b>	T000074330
<b>Reported:</b>	14-May-2020	<b>Method:</b>	Concentrate - Test Methods: TM05, TM06
<b>Type:</b>	Concentrate		
<b>Test:</b>	Microbial Contaminants		

## MICROBIAL CONTAMINANTS

Contaminant	Result (CFU/g)*
<b>Total Aerobic Count**</b>	None Detected
<b>Total Coliforms**</b>	None Detected
<b>Total Yeast and Molds**</b>	None Detected
<b><i>E. coli</i></b>	None Detected
<b><i>Salmonella</i></b>	None Detected

\* CFU/g = Colony Forming Unit per Gram

\*\* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form.

Examples:  $10^2 = 100$  CFU  
 $10^3 = 1,000$  CFU  
 $10^4 = 10,000$  CFU  
 $10^5 = 100,000$  CFU

### NOTES:

Free from visual mold, mildew, and foreign matter


TYM: None Detected

Total Aerobic: None Detected

## FINAL APPROVAL



Mara Miller  
14-May-2020  
1:28 PM



Ben Minton  
14-May-2020  
2:50 PM

PREPARED BY / DATE

APPROVED BY / DATE

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Certificate #4329.03


HL-WS1500 Lot#2000045

<b>Batch ID:</b>	N/A	<b>Test ID:</b>	T000074331
<b>Reported:</b>	6-May-2020	<b>Method:</b>	TM19
<b>Type:</b>	Concentrate		
<b>Test:</b>	Metals		

**HEAVY METALS**


Analyte	Dynmic Range (ppm)	Result (ppm)
Arsenic	0.068 - 6.77	ND
Cadmium	0.068 - 6.80	ND
Mercury	0.068 - 6.84	ND
Lead	0.070 - 6.99	ND

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

**FINAL APPROVAL**

Alex Benson  
6-May-2020  
10:52 AM

PREPARED BY / DATE



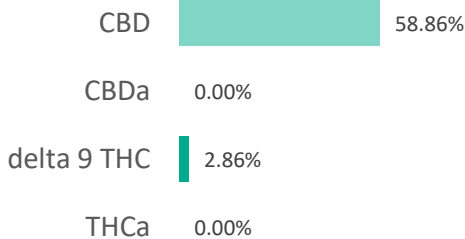
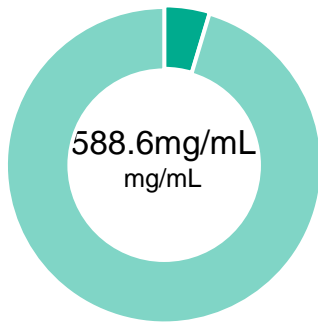
Greg Zimpfer  
6-May-2020  
3:53 PM

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**Organic CBD Oil**

<b>Batch ID:</b>	O-CO2-YP5-07820-B1	<b>Test ID:</b>	6080869.002
<b>Reported:</b>	6-Apr-2020	<b>Method:</b>	TM14
<b>Type:</b>	Solution		
<b>Test:</b>	Potency		


**CANNABINOID PROFILE**



Compound	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	2.82	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	1.41	28.60	28.6
Cannabidiolic acid (CBDA)	1.89	ND	ND
Cannabidiol (CBD)	1.06	588.60	588.6
Delta 8-Tetrahydrocannabinol (Delta 8THC)	1.54	ND	ND
Cannabinolic Acid (CBNA)	3.87	ND	ND
Cannabinol (CBN)	1.71	ND	ND
Cannabigerolic acid (CBGA)	2.46	ND	ND
Cannabigerol (CBG)	1.39	9.50	9.5
Tetrahydrocannabivarinic Acid (THCVA)	2.42	ND	ND
Tetrahydrocannabivarin (THCV)	1.26	ND	ND
Cannabidivarinic Acid (CBDVA)	1.76	ND	ND
Cannabidivarin (CBDV)	0.96	ND	ND
Cannabichromenic Acid (CBCA)	2.11	ND	ND
Cannabichromene (CBC)	2.55	19.50	19.5
<b>Total Cannabinoids</b>		<b>646.20</b>	<b>646.14</b>
Total Potential THC**		28.60	28.60
Total Potential CBD**		588.60	588.60

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)  
 \* Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.  
 \*\* Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.  
 Total THC = THC + (THCa \* (0.877)) and Total CBD = CBD + (CBDa \* (0.877))  
 ND = None Detected (Defined by Dynamic Range of the method)

NOTES:  
 Density = 1g/mL  
 N/A

**FINAL APPROVAL**

  
 Ryan Weems  
 6-Apr-2020  
 12:58 PM

  
 Ben Minton  
 6-Apr-2020  
 4:02 PM

PREPARED BY / DATE

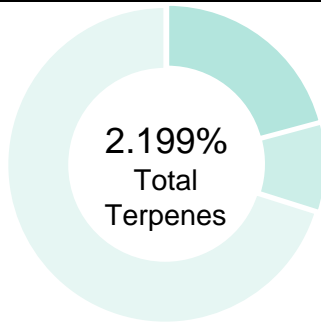
APPROVED BY / DATE

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**Organic CBD Oil**

<b>Batch ID:</b>	O-CO2-YP5-07820-B1	<b>Test ID:</b>	5908109.0027
<b>Reported:</b>	3-Apr-2020	<b>Method:</b>	TM10
<b>Type:</b>	Concentrate		
<b>Test:</b>	Terpenes		

**TERPENE PROFILE**


Compound	%(w/w)	mg/g
(-)-alpha-Bisabolol	1.542	15.42
Camphene	N/A	N/A
delta-3-Carene	0.000	0
beta-Caryophyllene	0.458	4.58
(-)-Caryophyllene Oxide	0.000	0
p-Cymene	0.000	0
Eucalyptol	0.000	0
Geraniol	0.000	0
alpha-Humulene	0.199	1.99
(-)-Isopulegol	0.000	0
d-Limonene	0.000	0
Linalool	0.000	0
beta-Myrcene	0.000	0
cis-Nerolidol	0.000	0
trans-Nerolidol	0.000	0
Ocimene	0.000	0
beta-Ocimene	0.000	0
alpha-Pinene	0.000	0
(-)-beta-Pinene	0.000	0
alpha-Terpinene	0.000	0
gamma-Terpinene	0.000	0
Terpinolene	0.000	0
	<b>2.199%</b>	<b>21.99</b>



**PREDOMINANT TERPENES**

alpha-Pinene	0.000%
(-)-beta-Pinene	0.000%
beta-Myrcene	0.000%
delta-3-Carene	0.000%
alpha-Terpinene	0.000%
d-Limonene	0.000%
Linalool	0.000%
beta-Caryophyllene	0.458%
alpha-Humulene	0.199%
(-)-alpha-Bisabolol	1.542%

**NOTES:**

0

**FINAL APPROVAL**

 Ryan Weems 3-Apr-2020 7:31 PM	 Greg Zimpfer 3-Apr-2020 9:02 PM
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PREPARED BY / DATE

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Certificate #4329.02

## Organic CBD Oil

<b>Batch ID:</b>	O-CO2-YP5-07820-B1	<b>Test ID:</b>	T000070075
<b>Reported:</b>	9-Apr-2020	<b>Method:</b>	Concentrate - Test Methods: TM05, TM06
<b>Type:</b>	Concentrate		
<b>Test:</b>	Microbial Contaminants		

## MICROBIAL CONTAMINANTS

Contaminant	Result (CFU/g)*
<b>Total Aerobic Count**</b>	None Detected
<b>Total Coliforms**</b>	None Detected
<b>Total Yeast and Molds**</b>	None Detected
<b><i>E. coli</i></b>	None Detected
<b><i>Salmonella</i></b>	None Detected

\* CFU/g = Colony Forming Unit per Gram

\*\* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form.

Examples:  $10^2 = 100$  CFU  
 $10^3 = 1,000$  CFU  
 $10^4 = 10,000$  CFU  
 $10^5 = 100,000$  CFU

## NOTES:


Free from visual mold, mildew, and foreign matter

TYM: None Detected

Total Aerobic: None Detected


Coliforms: None Detected

## FINAL APPROVAL



Robert Belfon  
9-Apr-2020  
10:42 AM

PREPARED BY / DATE



Greg Zimpfer  
9-Apr-2020  
11:01 AM

APPROVED BY / DATE

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Certificate #4329.03

**Organic CBD Oil**

<b>Batch ID:</b>	O-CO2-YP5-07820-B1	<b>Test ID:</b>	4614057.0019
<b>Reported:</b>	7-Apr-2020	<b>Method:</b>	TM17
<b>Type:</b>	Concentrate		
<b>Test:</b>	Pesticides		


**PESTICIDE RESIDUE**


Compound	Dynamic Range (ppb)	Result (ppb)	Compound	Dynamic Range (ppb)	Result (ppb)
Acephate	53 - 2447	ND*	Malathion	317 - 2447	ND*
Acetamiprid	53 - 2447	ND*	Metalaxyl	53 - 2447	ND*
Abamectin	>317	ND*	Methiocarb	53 - 2447	ND*
Azoxystrobin	53 - 2447	ND*	Methomyl	53 - 2447	ND*
Bifenazate	53 - 2447	ND*	MGK 264 1	317 - 2447	ND*
Boscalid	53 - 2447	ND*	MGK 264 2	317 - 2447	ND*
Carbaryl	53 - 2447	ND*	Myclobutanil	53 - 2447	ND*
Carbofuran	53 - 2447	ND*	Naled	53 - 2447	ND*
Chlorantraniliprole	53 - 2447	ND*	Oxamyl	53 - 2447	ND*
Chlorpyrifos	53 - 2447	ND*	Paclobutrazol	53 - 2447	ND*
Clofentezine	317 - 2447	ND*	Permethrin	317 - 2447	ND*
Diazinon	317 - 2447	ND*	Phosmet	53 - 2447	ND*
Dichlorvos	>317	ND*	Prophos	317 - 2447	ND*
Dimethoate	53 - 2447	ND*	Propoxur	53 - 2447	ND*
E-Fenpyroximate	53 - 2447	ND*	Pyridaben	53 - 2447	ND*
Etofenprox	53 - 2447	ND*	Spinosad A	53 - 2447	ND*
Etoxazole	317 - 2447	ND*	Spinosad D	317 - 2447	ND*
Fenoxycarb	>53	ND*	Spiromesifen	>317	ND*
Fipronil	53 - 2447	ND*	Spirotetramat	>317	ND*
Flonicamid	53 - 2447	ND*	Spiroxamine 1	53 - 2447	ND*
Fludioxonil	>317	ND*	Spiroxamine 2	53 - 2447	ND*
Hexythiazox	53 - 2447	ND*	Tebuconazole	317 - 2447	ND*
Imazalil	317 - 2447	ND*	Thiacloprid	53 - 2447	ND*
Imidacloprid	53 - 2447	ND*	Thiamethoxam	53 - 2447	ND*
Kresoxim-methyl	53 - 2447	ND*	Trifloxystrobin	53 - 2447	ND*

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

N/A

**FINAL APPROVAL**

  
 Tyler Wiese  
 7-Apr-2020  
 3:00 PM  
 PREPARED BY / DATE

  
 Greg Zimpfer  
 7-Apr-2020  
 7:53 PM  
 APPROVED BY / DATE

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**CBD Oil Concentrate**

<b>Batch ID:</b>	O-CO2-YP5-07820-B1	<b>Test ID:</b>	T000072777
<b>Reported:</b>	28-Apr-2020	<b>Method:</b>	TM04
<b>Type:</b>	Concentrate		
<b>Test:</b>	Residual Solvents		

**RESIDUAL SOLVENTS**


Solvent	Dynamic Range (ppm)	Result (ppm)
<b>Propane</b>	75 - 1491	*ND
<b>Butanes</b> (Isobutane, n-Butane)	153 - 3068	*ND
<b>Methanol</b>	66 - 1317	*ND
<b>Pentane</b>	93 - 1851	*ND
<b>Ethanol</b>	100 - 1993	*ND
<b>Acetone</b>	106 - 2116	*ND
<b>Isopropyl Alcohol</b>	112 - 2239	*ND
<b>Hexane</b>	6 - 127	*ND
<b>Ethyl Acetate</b>	108 - 2165	*ND
<b>Benzene</b>	0.2 - 4.4	*ND
<b>Heptanes</b>	101 - 2019	*ND
<b>Toluene</b>	20 - 396	*ND
<b>Xylenes</b> (m,p,o-Xylenes)	145 - 2901	*ND

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

NOTES:  
N/A**FINAL APPROVAL**

Ryan Weems  
28-Apr-2020  
2:34 PM

PREPARED BY / DATE



Ben Minton  
28-Apr-2020  
2:51 PM

APPROVED BY / DATE

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