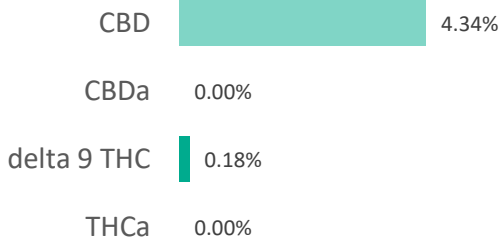
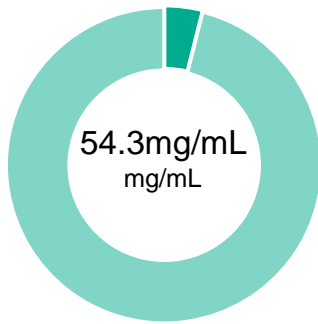


HL-WS1500 LOT: 2000058

Batch ID:	PJ-12363	Test ID:	5324461.0068
Reported:	17-Jun-2020	Method:	TM14
Type:	Solution		
Test:	Potency		

CANNABINOID PROFILE


Compound	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	1.69	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.84	2.20	1.8
Cannabidiolic acid (CBDA)	0.80	ND	ND
Cannabidiol (CBD)	0.45	54.30	43.4
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.92	ND	ND
Cannabinolic Acid (CBNA)	2.32	ND	ND
Cannabinol (CBN)	1.03	ND	ND
Cannabigerolic acid (CBGA)	1.48	ND	ND
Cannabigerol (CBG)	0.83	ND	ND
Tetrahydrocannabivarinic Acid (THCVA)	1.45	ND	ND
Tetrahydrocannabivarin (THCV)	0.75	ND	ND
Cannabidivarinic Acid (CBDVA)	0.74	ND	ND
Cannabidivarin (CBDV)	0.41	ND	ND
Cannabichromenic Acid (CBCA)	1.27	ND	ND
Cannabichromene (CBC)	1.53	ND	ND
Total Cannabinoids		56.50	45.19
Total Potential THC**		2.20	1.77
Total Potential CBD**		54.30	43.42

% = % (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 = 1.25g/mL
 N/A

FINAL APPROVAL


 Michelle Gagnon
 17-Jun-2020
 2:09 PM


 Greg Zimpfer
 17-Jun-2020
 8:19 PM

PREPARED BY / DATE

APPROVED BY / DATE

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Certificate of Analysis

Sample Information

CTLA ID: 18174
 Date Received: 6/12/2020
 Sample Name: HL-WS1500 60ml Syringe
 Lot Number: 2000058
 Customer: HempLucid

Analysis	Method	MDL Specification	Result	Units
Complete Micro				
Total Plate Count	USP <2021>	100 Report	<100	cfu/g
Total Coliforms	BAM CH.4	10 Report	<10	cfu/g
<i>Escherichia coli</i>	USP <2022>	Report	Negative	
<i>Salmonella</i>	USP <2022>	Report	Negative	
<i>Staphylococcus aureus</i>	USP <2022>	Report	Negative	
Yeast & Mold	USP <2021>	100 Report	<100	cfu/g
Heavy Metals				
Arsenic	USP <2232>	.001 Report	<0.001	ppm
Cadmium	USP <2232>	.001 Report	0.001	ppm
Lead	USP <2232>	.001 Report	0.017	ppm
Mercury	USP <2232>	.001 Report	0.002	ppm

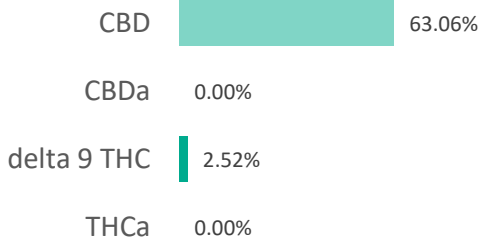
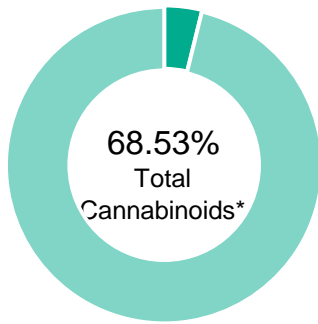
6/16/2020
DATE


Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.

CBD Oil Concentrate

Batch ID:	CO2-YP5-14220-BULK18	Test ID:	5452589.001
Reported:	9-Jun-2020	Method:	TM14
Type:	Concentrate		
Test:	Potency		


CANNABINOID PROFILE



Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.18	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.09	2.52	25.2
Cannabidiolic acid (CBDA)	0.24	ND	ND
Cannabidiol (CBD)	0.13	63.06	630.6
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.10	0.14	1.4
Cannabinolic Acid (CBNA)	0.24	ND	ND
Cannabinol (CBN)	0.11	0.23	2.3
Cannabigerolic acid (CBGA)	0.15	ND	ND
Cannabigerol (CBG)	0.09	0.70	7.0
Tetrahydrocannabivarinic Acid (THCVA)	0.15	ND	ND
Tetrahydrocannabivarin (THCV)	0.08	ND	ND
Cannabidivarinic Acid (CBDVA)	0.22	ND	ND
Cannabidivarin (CBDV)	0.12	0.12	1.2
Cannabichromenic Acid (CBCA)	0.13	ND	ND
Cannabichromene (CBC)	0.16	1.76	17.6
Total Cannabinoids		68.53	685.30
Total Potential THC**		2.52	25.20
Total Potential CBD**		63.06	630.60

% = % (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:
N/A

FINAL APPROVAL


 Tyler Wiese
 9-Jun-2020
 6:41 PM


 Ben Minton
 9-Jun-2020
 7:03 PM

PREPARED BY / DATE

APPROVED BY / DATE

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CBD Oil Concentrate

Batch ID:	CO2-YP5-14220-BULK18	Test ID:	T000079889
Reported:	14-Jun-2020	Method:	Concentrate - Test Methods: TM05, TM06
Type:	Concentrate		
Test:	Microbial Contaminants		

MICROBIAL CONTAMINANTS

Contaminant	Result (CFU/g)*
Total Aerobic Count**	None Detected
Total Coliforms**	None Detected
Total Yeast and Molds**	None Detected
<i>E. coli</i>	None Detected
<i>Salmonella</i>	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
13-Jun-2020
12:16 PM



Mike Branvold
14-Jun-2020
7:55 PM

PREPARED BY / DATE

APPROVED BY / DATE

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Certificate #4329.03

CBD Oil Concentrate

Batch ID:	CO2-YP5-14220-BULK18	Test ID:	T000079892
Reported:	12-Jun-2020	Method:	TM19
Type:	Concentrate		
Test:	Metals		

HEAVY METALS

Analyte	Dynamic Range (ppm)	Result (ppm)
Arsenic	0.087 - 8.75	ND
Cadmium	0.089 - 8.90	ND
Mercury	0.078 - 7.80	ND
Lead	0.089 - 8.87	ND

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

FINAL APPROVAL

Morgan Ingraham
12-Jun-2020
12:43 PM

PREPARED BY / DATE

Ben Minton
12-Jun-2020
4:35 PM

APPROVED BY / DATE

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CBD Oil Concentrate

Batch ID:	CO2-YP5-14220-BULK18	Test ID:	T000079888
Reported:	11-Jun-2020	Method:	TM04
Type:	Concentrate		
Test:	Residual Solvents		

RESIDUAL SOLVENTS


Solvent	Dynamic Range (ppm)	Result (ppm)
Propane	103 - 2053	*ND
Butanes (Isobutane, n-Butane)	174 - 3475	*ND
Methanol	68 - 1365	*ND
Pentane	98 - 1960	*ND
Ethanol	107 - 2143	*ND
Acetone	106 - 2123	*ND
Isopropyl Alcohol	123 - 2450	*ND
Hexane	7 - 132	*ND
Ethyl Acetate	110 - 2198	*ND
Benzene	0.2 - 4.3	*ND
Heptanes	100 - 1998	*ND
Toluene	19 - 390	*ND
Xylenes (m,p,o-Xylenes)	141 - 2825	*ND

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

NOTES:
N/A**FINAL APPROVAL**

Ryan Weems
11-Jun-2020
2:59 PM

PREPARED BY / DATE



Ben Minton
11-Jun-2020
6:01 PM

APPROVED BY / DATE

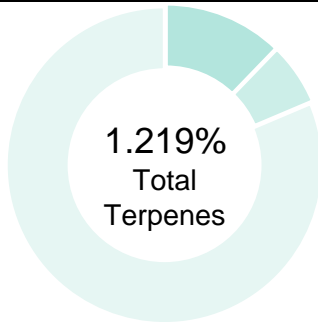
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Certificate #4329.02

CBD Oil Concentrate

Batch ID:	CO2-YP5-14220-BULK18	Test ID:	4433744.0011
Reported:	18-Jun-2020	Method:	TM10
Type:	Concentrate		
Test:	Terpenes		

TERPENE PROFILE




Compound	%(w/w)	mg/g
(-)-alpha-Bisabolol	0.992	9.92
Camphene	0.000	0
delta-3-Carene	0.000	0
beta-Caryophyllene	0.149	1.49
(-)-Caryophyllene Oxide	0.000	0
p-Cymene	0.000	0
Eucalyptol	0.000	0
Geraniol	0.000	0
alpha-Humulene	0.078	0.78
(-)-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
	1.219%	12.19

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	0.149%
alpha-Humulene	0.078%
(-)-alpha-Bisabolol	0.992%

 NOTES:
 0

FINAL APPROVAL

 Ryan Weems 11-Jun-2020 5:36 PM	 Ben Minton 18-Jun-2020 7:57 AM
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APPROVED BY / DATE

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