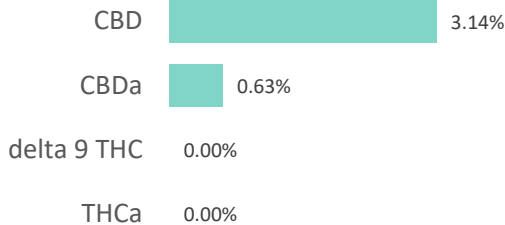
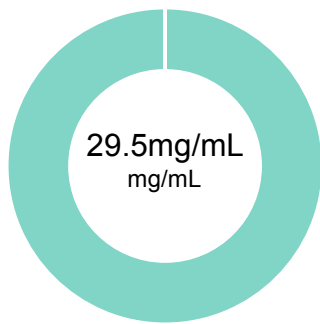


TWL OIL - NATURAL

Batch ID:	20190001	Test ID:	1200193.0033
Reported:	21-Jan-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)	1.44	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.72	0.00	0.0
Cannabidiolic acid (CBDA)	1.54	5.90	6.3
Cannabidiol (CBD)	0.86	29.50	31.4
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.79	0.00	0.0
Cannabinolic Acid (CBNA)	1.97	0.00	0.0
Cannabinol (CBN)	0.87	0.00	0.0
Cannabigerolic acid (CBGA)	1.26	0.00	0.0
Cannabigerol (CBG)	0.71	0.00	0.0
Tetrahydrocannabivarinic Acid (THCVA)	1.23	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.64	0.00	0.0
Cannabidivarinic Acid (CBDVA)	1.43	0.00	0.0
Cannabidivarin (CBDV)	0.78	0.00	0.0
Cannabichromenic Acid (CBCA)	1.08	0.00	0.0
Cannabichromene (CBC)	1.30	1.90	2.0
Total Cannabinoids		37.30	39.62
Total Potential THC**		0.00	0.00
Total Potential CBD**		34.67	36.86

NOTES:

Density = 0.940111g/mL


N/A

% = % (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))

FINAL APPROVAL


Tyler Wiese
21-Jan-2020
1:33 PM

PREPARED BY / DATE



Greg Zimpfer
21-Jan-2020
3:46 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. ISO/IEC 17025:2005 Accredited A2LA Certificate Number 4329.02



TWL OIL - NATURAL

Batch ID:	20190001	Test ID:	T000052991
Reported:	19-Jan-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
E. coli	None Detected
Salmonella	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:

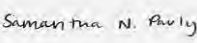
Free from visual mold, mildew, and foreign matter

TYM: None Detected

Total Aerobic: None Detected

Coliforms: None Detected

FINAL APPROVAL


Samantha Pauly
19-Jan-2020
3:44 PM
Mike Branvold
19-Jan-2020
5:05 PM

PREPARED BY / DATE

APPROVED BY / DATE

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Certificate #4329.03

TWL OIL - NATURAL

Batch ID:	20190001	Test ID:	6403043.018
Reported:	21-Jan-2020	Method:	TM04
Type:	Concentrate		
Test:	Residual Solvents		



RESIDUAL SOLVENTS

Solvent	Reportable Range (ppm)	Result (ppm)
Propane	100 - 2000	0
Butanes (Isobutane, n-Butane)	100 - 2000	0
Pentane	100 - 2000	0
Ethanol	100 - 2000	0
Acetone	100 - 2000	0
Isopropyl Alcohol	100 - 2000	0
Hexane	6 - 120	0
Benzene	0.2 - 4	0.0
Heptanes	100 - 2000	0
Toluene	18 - 360	0
Xylenes (m,p,o-Xylenes)	43 - 860	0

NOTES:

Free from visual mold, mildew, and foreign matter.

FINAL APPROVAL

 Alex Smith 21-Jan-2020 2:23 PM	 Greg Zimpfer 21-Jan-2020 4:39 PM
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PREPARED BY / DATE

APPROVED BY / DATE

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