botanacor

CERTIFICATE OF ANALYSIS

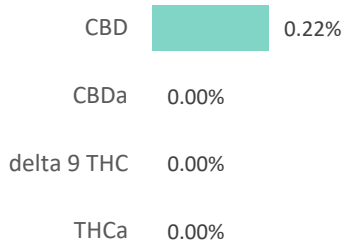
prepared for: NULEAF NATURALS

1550 LARIMER ST. #964
DENVER, CO 80202

G144

Batch ID:	R60-BBG	**Test ID:**	T000174015
Type:	Solution	**Submitted:**	11/02/2021 @ 10:40 AM
Test:	Potency	**Started:**	11/3/2021
Method:	TM14 (HPLC-DAD)	**Reported:**	11/4/2021

CANNABINOID PROFILE



Compound	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.70	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.80	ND	ND
Cannabidiolic acid (CBDA)	0.90	ND	ND
Cannabidiol (CBD)	0.87	2.05	2.2
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.88	1.73	1.9
Cannabinolic Acid (CBNA)	0.50	ND	ND
Cannabinol (CBN)	0.23	1.77	1.9
Cannabigerolic acid (CBGA)	0.74	ND	ND
Cannabigerol (CBG)	0.18	56.69	61.6
Tetrahydrocannabivarinic Acid (THCVA)	0.62	ND	ND
Tetrahydrocannabivarin (THCV)	0.16	ND	ND
Cannabidivarinic Acid (CBDVA)	0.37	ND	ND
Cannabidivarin (CBDV)	0.21	ND	ND
Cannabichromenic Acid (CBCA)	0.28	ND	ND
Cannabichromene (CBC)	0.31	1.88	2.0
Total Cannabinoids		**64.12**	**69.7**
Total Potential THC**		ND	ND
Total Potential CBD**		2.05	2.2

% = % (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 = 0.92g/mL

FINAL APPROVAL

Iacob Miller
4-Nov-2021
12:18 PM
PREPARED BY / DATE

Rvan Weems
4-Nov-2021
12:20 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

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CERTIFICATE OF ANALYSIS

Prepared for:

G144

NULEAF NATURALS

Batch ID or Lot Number:	Test:	Reported:	Location:
R60-BBG	**Metals**	**11/5/21**	1550 LARIMER ST. #964 DENVER, CO 80202

Matrix:	Test ID:	Started:	USDA License:
Unit	T000174018	11/4/21	N/A

Status:	Method:	Received:	Sampler ID:
N/A	TM19 (ICP-MS): Heavy Metals	11/02/2021 @ 10:40 AM	N/A

HEAVY METALS DETERMINATION

Compound	Dynamic Range (ppm)	Result (ppm)
Arsenic	0.044 - 4.35	ND
Cadmium	0.044 - 4.36	ND
Mercury	0.043 - 4.33	ND
Lead	0.043 - 4.31	ND

Notes

Daniel Weidensaul
5-Nov-21
10:08 AM

PREPARED BY / DATE

Ryan Weems
5-Nov-21
10:10 AM

APPROVED BY / DATE

Definitions

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

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CERTIFICATE OF ANALYSIS

prepared for: NULEAF NATURALS
1550 LARIMER ST. #964
DENVER, CO 80202

G144

Batch ID:	R60-BBG	**Test ID:**	T000174017
Matrix:	Finished Product	**Received:**	11/02/2021 @ 10:40 AM
Test:	Microbial Contaminants	**Started:**	11/2/2021
Method:	TM25 (qPCR) TM24, TM26, TM27, TM28 (Culture Plating)	**Reported:**	11/5/2021

MICROBIAL CONTAMINANTS

Contaminant	Method	LOD	LLOQ	ULOQ	Result
Total Aerobic Count*	TM-26 Culture Plating	10^2 CFU/g	10^3 CFU/g	1.5x10^5 CFU/g	**None Detected**
Total Coliforms*	TM-27 Culture Plating	10^1 CFU/g	10^2 CFU/g	1.5x10^4 CFU/g	**None Detected**
Total Yeast and Molds*	TM-24 Culture Plating	10^1 CFU/g	10^2 CFU/g	1.5x10^4 CFU/g	**None Detected**
E. coli	TM-28 Culture Plating	1 CFU/g	NA	NA	**Absent**
***E. coli* (STEC)**	TM-25 PCR	1 CFU/g	NA	NA	**Absent**
Salmonella	TM-25 PCR	1 CFU/g	NA	NA	**Absent**

** 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

DEFINITIONS:
CFU/g = Colony Forming Units per Gram.
LOD = Limit of Detection
ULOQ = Upper Limit of Quantitation
LLOQ = Lower Limit of Quantitation

FINAL APPROVAL

Jackson Osaghae-Nosa
11/5/2021
10:25:00 AM
PREPARED BY / DATE

Carly Bader
11/5/2021
10:28:00 AM
APPROVED BY / DATE

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CERTIFICATE OF ANALYSIS

Prepared for:

G144

NULEAF NATURALS

Batch ID or Lot Number:	Test:	Reported:	Location:
R60-BBG	**Pesticides**	**11/9/21**	1550 LARIMER ST. #964 DENVER, CO 80202

Matrix:	Test ID:	Started:	USDA License:
Concentrate	T000174016	11/8/21	N/A

Status:	Method:	Received:	Sampler ID:
N/A	TM17(LC-QQQ LC MS/MS):	11/02/2021 @ 10:40 AM	N/A

PESTICIDE DETERMINATION

Compound	LOQ (ppb)	Result (ppb)	Compound	LOQ (ppb)	Result (ppb)	Compound	LOQ (ppb)	Result (ppb)
Acephate	54	ND	**Fenoxycarb**	56	ND	**Paclobutrazol**	58	ND
Acetamiprid	60	ND	**Fipronil**	92	ND	**Permethrin**	297	ND
Avermectin	341	ND	**Flonicamid**	61	ND	**Phosmet**	57	ND
Azoxystrobin	57	ND	**Fludioxonil**	326	ND	**Prophos**	278	ND
Bifenazate	54	ND	**Hexythiazox**	55	ND	**Propoxur**	55	ND
Boscalid	60	ND	**Imazalil**	284	ND	**Pyridaben**	303	ND
Carbaryl	54	ND	**Imidacloprid**	62	ND	**Spinosad A**	43	ND
Carbofuran	57	ND	**Kresoxim-methyl**	150	ND	**Spinosad D**	56	ND
Chlorantraniliprole	67	ND	**Malathion**	296	ND	**Spiromesifen**	301	ND
Chlorpyrifos	500	ND	**Metalaxyl**	55	ND	**Spirotetramat**	307	ND
Clofentezine	290	ND	**Methiocarb**	60	ND	**Spiroxamine 1**	25	ND
Diazinon	305	ND	**Methomyl**	56	ND	**Spiroxamine 2**	32	ND
Dichlorvos	290	ND	**MGK 264 1**	172	ND	**Tebuconazole**	300	ND
Dimethoate	57	ND	**MGK 264 2**	125	ND	**Thiacloprid**	57	ND
E-Fenpyroximate	250	ND	**Myclobutanil**	48	ND	**Thiamethoxam**	58	ND
Etofenprox	58	ND	**Naled**	57	ND	**Trifloxystrobin**	56	ND
Etoxazole	307	ND	**Oxamyl**	1500	ND			

Daniel Weidensaul
11/9/2021
3:30:00 PM

PREPARED BY / DATE

Sam Smith
11/9/2021
3:36:00 PM

APPROVED BY / DATE

Definitions

LOQ = Limit of Quantification

ppb = Parts per Billion

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G144

NULEAF NATURALS

Batch ID or Lot Number:	Test:	Reported:	Location:
R60-BBG	**Residual Solvents**	**11/3/21**	1550 LARIMER ST. #964 DENVER, CO 80202

Matrix:	Test ID:	Started:	USDA License:
N/A	T000174019	11/2/21	N/A

Status:	Methods:	Received:	Sampler ID:
N/A	TM04 (GC-MS): Residual Solvents	11/02/2021 @ 10:40 AM	N/A

RESIDUAL SOLVENTS DETERMINATION

Solvent	Dynamic Range (ppm)	Result (ppm)
Propane	74 - 1483	*ND
Butanes (Isobutane, n-Butane)	147 - 2931	*ND
Methanol	58 - 1168	*ND
Pentane	83 - 1663	*ND
Ethanol	87 - 1743	*ND
Acetone	93 - 1857	*ND
Isopropyl Alcohol	99 - 1979	*ND
Hexane	5 - 98	*ND
Ethyl Acetate	100 - 2003	*ND
Benzene	0.2 - 3.9	*ND
Heptanes	91 - 1817	*ND
Toluene	17 - 333	*ND
Xylenes (m,p,o-Xylenes)	123 - 2455	*ND

Notes

Hannah Wright
3-Nov-21
1:18 PM

PREPARED BY / DATE

Ryan Weems
3-Nov-21
1:19 PM

APPROVED BY / DATE

Definitions

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

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