botanacor

CERTIFICATE OF ANALYSIS

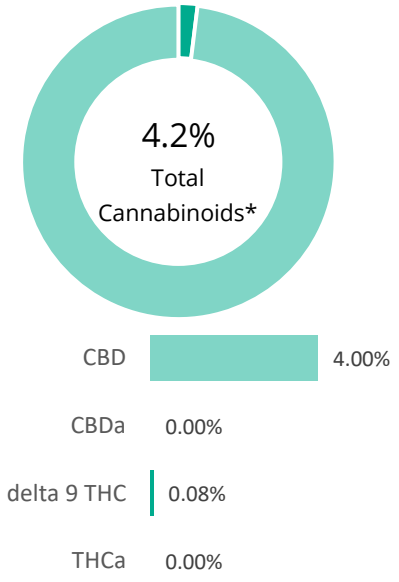
prepared for: Beak and Skiff Research

4473 Cherry Valley Tpke
Lafayette, NY 13084

O_CBD_DOIL_ORG_1200

Batch ID:	T0044	**Test ID:**	t000186266
Type:	Concentrate	**Submitted:**	01/10/2022 @ 10:49 AM
Test:	Potency	**Started:**	1/11/2022
Method:	TM14 (HPLC-DAD)	**Reported:**	1/11/2022

CANNABINOID PROFILE



Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.01	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.01	0.08	0.8
Cannabidiolic acid (CBDA)	0.01	ND	ND
Cannabidiol (CBD)	0.01	4.00	40.0
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.01	ND	ND
Cannabinolic Acid (CBNA)	0.01	ND	ND
Cannabinol (CBN)	0.00	ND	ND
Cannabigerolic acid (CBGA)	0.01	ND	ND
Cannabigerol (CBG)	0.00	0.04	0.4
Tetrahydrocannabivarinic Acid (THCVA)	0.01	ND	ND
Tetrahydrocannabivarin (THCV)	0.00	ND	ND
Cannabidivarinic Acid (CBDVA)	0.01	ND	ND
Cannabidivarin (CBDV)	0.00	0.03	0.3
Cannabichromenic Acid (CBCA)	0.00	ND	ND
Cannabichromene (CBC)	0.00	0.05	0.5
Total Cannabinoids		**4.20**	**42.0**
Total Potential THC**		0.08	0.8
Total Potential CBD**		4.00	40.0

% = % (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

Samantha Smith	Sam Smith 11-Jan-2022 2:39 PM
PREPARED BY / DATE	
Jacob Miller	Jacob Miller 11-Jan-2022 2:50 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

ilac-MRA A2LA ACCREDITED
Certificate #4329.02

Botanacor Laboratories™, All Rights Reserved | 1301 S Jason St Unit K, Denver, CO 80223 | 888.800.8223 | www.botanacor.com

botanacor

CERTIFICATE OF ANALYSIS

Prepared for:

O_CBD_DOIL_ORG_1200

Beak and Skiff Research

Batch ID or Lot Number:	Test:	Reported:	Location:
T0044	**Residual Solvents**	**1/12/22**	4473 Cherry Valley Tpke Lafayette, NY 13084

Matrix:	Test ID:	Started:	USDA License:
N/A	T000186270	1/11/22	N/A

Status:	Methods:	Received:	Sampler ID:
N/A	TM04 (GC-MS): Residual Solvents	01/10/2022 @ 10:49 AM	N/A

RESIDUAL SOLVENTS DETERMINATION

Solvent	Dynamic Range (ppm)	Result (ppm)
Propane	93 - 1860	*ND
Butanes (Isobutane, n-Butane)	177 - 3543	*ND
Methanol	58 - 1156	*ND
Pentane	93 - 1861	*ND
Ethanol	89 - 1789	*ND
Acetone	96 - 1914	*ND
Isopropyl Alcohol	97 - 1933	*ND
Hexane	6 - 118	*ND
Ethyl Acetate	95 - 1900	*ND
Benzene	0.2 - 3.7	*ND
Heptanes	93 - 1868	*ND
Toluene	17 - 345	*ND
Xylenes (m,p,o-Xylenes)	125 - 2500	*ND

Notes

Ryan Weems
12-Jan-22
3:08 PM

PREPARED BY / DATE

Sam Smith
12-Jan-22
3:11 PM

APPROVED BY / DATE

Definitions

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

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.

ilac-MRA A2LA ACCREDITED
Certificate #4329.02

botanacor

CERTIFICATE OF ANALYSIS

Prepared for:

O_CBD_DOIL_ORG_1200

Beak and Skiff Research

Batch ID or Lot Number:	Test:	Reported:	Location:
T0044	**Pesticides**	**1/14/22**	4473 Cherry Valley Tpke Lafayette, NY 13084

Matrix:	Test ID:	Started:	USDA License:
Concentrate	T000186267	1/13/22	N/A

Status:	Method:	Received:	Sampler ID:
N/A	TM17(LC-QQQ LC MS/MS):	01/10/2022 @ 10:49 AM	N/A

PESTICIDE DETERMINATION

Compound	LOQ (ppb)	Result (ppb)	Compound	LOQ (ppb)	Result (ppb)	Compound	LOQ (ppb)	Result (ppb)
Acephate	39	ND	**Fenoxycarb**	39	ND	**Paclobutrazol**	41	ND
Acetamiprid	40	ND	**Fipronil**	47	ND	**Permethrin**	263	ND
Avermectin	307	ND	**Flonicamid**	43	ND	**Phosmet**	42	ND
Azoxystrobin	43	ND	**Fludioxonil**	284	ND	**Prophos**	280	ND
Bifenazate	41	ND	**Hexythiazox**	41	ND	**Propoxur**	42	ND
Boscalid	49	ND	**Imazalil**	271	ND	**Pyridaben**	294	ND
Carbaryl	39	ND	**Imidacloprid**	43	ND	**Spinosad A**	34	ND
Carbofuran	42	ND	**Kresoxim-methyl**	150	ND	**Spinosad D**	50	ND
Chlorantraniliprole	46	ND	**Malathion**	281	ND	**Spiromesifen**	284	ND
Chlorpyrifos	500	ND	**Metalaxyl**	40	ND	**Spirotetramat**	281	ND
Clofentezine	281	ND	**Methiocarb**	45	ND	**Spiroxamine 1**	19	ND
Diazinon	269	ND	**Methomyl**	42	ND	**Spiroxamine 2**	25	ND
Dichlorvos	284	ND	**MGK 264 1**	176	ND	**Tebuconazole**	296	ND
Dimethoate	40	ND	**MGK 264 2**	108	ND	**Thiacloprid**	41	ND
E-Fenpyroximate	291	ND	**Myclobutanil**	40	ND	**Thiamethoxam**	40	ND
Etofenprox	43	ND	**Naled**	48	ND	**Trifloxystrobin**	43	ND
Etoxazole	297	ND	**Oxamyl**	1500	ND			

K Winternheimer

Karen Winternheimer
1/14/2022
10:52:00 AM

PREPARED BY / DATE

Samantha Smith

Sam Smith
1/14/2022
10:59:00 AM

APPROVED BY / DATE

Definitions

LOQ = Limit of Quantification
ppb = Parts per Billion

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.

ilac-MRA A2LA ACCREDITED
Certificate #4329.02

botanacor

CERTIFICATE OF ANALYSIS

Prepared for:

O_CBD_DOIL_ORG_1200

Beak and Skiff Research

Batch ID or Lot Number:	Test:	Reported:	Location:
T0044	**Metals**	**1/13/22**	4473 Cherry Valley Tpke Lafayette, NY 13084

Matrix:	Test ID:	Started:	USDA License:
Unit	T000186269	1/12/22	N/A

Status:	Method:	Received:	Sampler ID:
N/A	TM19 (ICP-MS): Heavy Metals	01/10/2022 @ 10:49 AM	N/A

HEAVY METALS DETERMINATION

Compound	Dynamic Range (ppm)	Result (ppm)
Arsenic	0.044 - 4.43	ND
Cadmium	0.044 - 4.42	ND
Mercury	0.044 - 4.40	ND
Lead	0.050 - 5.01	ND

Notes

Daniel Weidensaul
13-Jan-22
12:51 PM

PREPARED BY / DATE

Sam Smith
13-Jan-22
1:08 PM

APPROVED BY / DATE

Definitions

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

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.

ilac-MRA A2LA ACCREDITED
Certificate #4329.02

botanacor

CERTIFICATE OF ANALYSIS

prepared for: BEAK AND SKIFF RESEARCH
4473 CHERRY VALLEY TPKE
LAFAYETTE, NY 13084

O_CBD_DOIL_ORG_1200

Batch ID:	T0044	**Test ID:**	T000186268
Matrix:	Finished Product	**Received:**	01/10/2022 @ 10:49 AM
Test:	Microbial Contaminants	**Started:**	1/10/2022
Methods:	TM25 (PCR) TM24, TM26, TM27 (Culture Plating)	**Reported:**	1/13/2022

MICROBIAL CONTAMINANTS

Contaminant	Method	LOD	Quantitation Range	Result
Total Yeast and Mold*	TM-24 Culture Plating	10^1 CFU/g	1.0x10^2 - 1.5x10^4 CFU/g	**None Detected**
Total Aerobic Bacteria*	TM-26 Culture Plating	10^2 CFU/g	1.0x10^3 - 1.5x10^5 CFU/g	**None Detected**
Total Coliforms*	TM-27 Culture Plating	10^1 CFU/g	1.0x10^2 - 1.5x10^4 CFU/g	**None Detected**
STEC	TM-25 PCR	10^0 CFU/g	N/A	**Absent**
Salmonella	TM-25 PCR	10^0 CFU/g	N/A	**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 | STEC = Shiga toxin-producing E. coli
LLOQ = Lower Limit of Quantitation | ULOQ = Upper Limit of Quantitation

FINAL APPROVAL

Brianne Maillot
1/13/2022
1:37:00 PM
PREPARED BY / DATE

Eden Thompson-Wright
1/13/2022
4:29:00 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. ISO/IEC 17025:2005 Accredited A2LA Certificate Number 4329.03. Testing associated with this certificate of analysis performed by an external ISO17025 accredited provider.

ilac-MRA A2LA ACCREDITED
Certificate #4329.03