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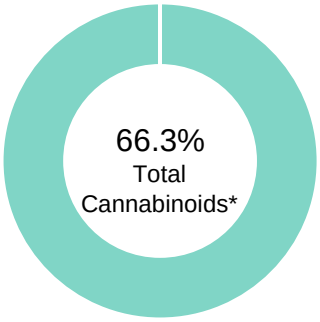
CERTIFICATE OF ANALYSIS

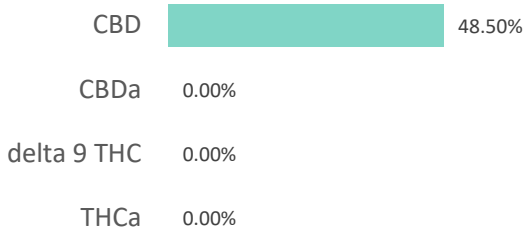
prepared for: GOOD CBD SHOP
1800 SANDY PLAINS IND PKWY SUITE 104
MARIETTA, GA 30066

BROAD SPECTRUM CRYSTAL RESISTANT DISTILLATE

Batch ID:	CRD190712	**Test ID:**	6764906.003
Reported:	18-Sep-2019	**Method:**	TM14
Type:	Concentrate		
Test:	Potency		

CANNABINOID PROFILE





Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.27	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.13	0.00	0.0
Cannabidiolic acid (CBDA)	0.16	0.00	0.0
Cannabidiol (CBD)	0.09	48.50	485.0
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.15	0.45	4.5
Cannabinolic Acid (CBNA)	0.36	0.00	0.0
Cannabinol (CBN)	0.16	6.03	60.3
Cannabigerolic acid (CBGA)	0.23	0.00	0.0
Cannabigerol (CBG)	0.13	2.53	25.3
Tetrahydrocannabivarinic Acid (THCVA)	0.23	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.12	0.00	0.0
Cannabidivarinic Acid (CBDVA)	0.15	0.00	0.0
Cannabidivarin (CBDV)	0.08	0.91	9.1
Cannabichromenic Acid (CBCA)	0.20	0.00	0.0
Cannabichromene (CBC)	0.24	7.88	78.8
Total Cannabinoids		**66.30**	**663.00**
Total Potential THC**		0.00	0.00
Total Potential CBD**		48.50	485.00

% = % (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))

NOTES:
N/A

FINAL APPROVAL

Samantha Smith
Sam Smith
18-Sep-2019
9:09 AM
PREPARED BY / DATE

David Green
18-Sep-2019
9:25 AM
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 #4329.02

CERTIFICATE OF ANALYSIS

Juniper Analytics, LLC
1334 NE 2nd Street, Bend, OR, 97701
541.382.3796
ORELAP: 4101 / OLCC: 010-10035537931

Client Name:	Global Cannabinoids
Contact Info:	Frank
Sample Type:	Extract
External Batch ID:	NA
Harvest/Prod. Date:	NA
Sample ID:	CRD 190712
METRC ID:	R&D
Juniper Batch #:	19JA1942.02
Intake Date:	2019-08-15

NOT FOR COMPLIANCE

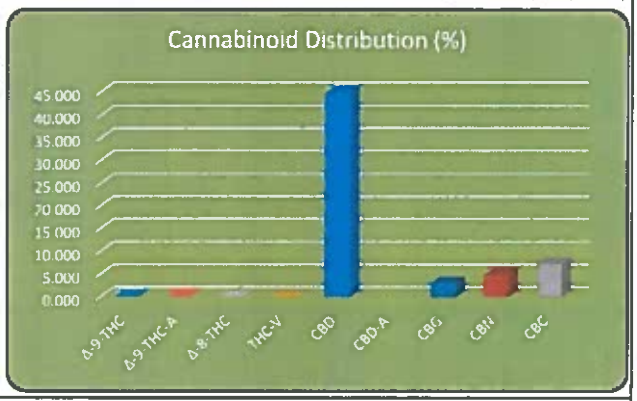
Sample not sampled per OAR 333-064-0100

Potency Analysis (Oregon Compliance Standard OAR 333-007-0430)

ANALYSIS DATE: 2019-08-16

Instrument: HPLC/DAD
Method: JA-Potency-Proprietary

Compound	Weight (%)	Concentration (mg/g)	LOQ * (mg/g)
Δ-9-THC	< LOQ	< LOQ	3.72
Δ-9-THC-A	< LOQ	< LOQ	3.72
Δ-8-THC	< LOQ	< LOQ	3.72
THC-V	< LOQ	< LOQ	3.72
CBD	44.911	449.11	3.72
CBD-A	< LOQ	< LOQ	3.72
CBG	3.040	30.40	3.72
CBN	4.690	46.90	3.72
CBC	7.208	72.08	3.72



TOTAL THC/CBD	Weight (%)	Conc (mg/g)
THC Total =	<LOQ	<LOQ

THC_{Total} = (THC-A * 0.877)+Δ9THC

CBD Total =	44.911	449.11

CBD_{Total} = (CBD-A * 0.877) +CBD

*** < LOQ - Less than the Limit of Quantification***

Residual Solvent Analysis (Oregon Compliance Standard OAR 333-007-0410)

ANALYSIS DATE: 2019-08-19

Instrument: GC/MS
Method: USP 467 - Modified

Solvent	Result (ppm)	Action Level / LOQ (ppm)
1,4-Dioxane	<LOQ	380 / 100
2-Butanol	<LOQ	5000 / 500
2-Ethoxyethanol	<LOQ	160 / 100
2-Propanol (IPA)	<LOQ	5000 / 500
Acetone	<LOQ	5000 / 500
Acetonitrile	<LOQ	410 / 100
Benzene	<LOQ	2 / 1
Cumene	<LOQ	70 / 50
Cyclohexane	<LOQ	3880 / 500
Dichloromethane	<LOQ	600 / 100
Ethyl acetate	<LOQ	5000 / 500
Ethyl ether	<LOQ	5000 / 500
Ethylene glycol	<LOQ	620 / 300
Ethylene oxide	<LOQ	50 / 10
Heptane	<LOQ	5000 / 500
Isopropyl acetate	<LOQ	5000 / 500
Methanol	<LOQ	3000 / 500
Propane	<LOQ	5000 / 500
Tetrahydrofuran	<LOQ	720 / 100
Toluene	<LOQ	890 / 100

Solvent	Result (ppm)	Action Level / LOQ (ppm)
Pentanes;	<LOQ	5000 / 500
-n-pentane	<LOQ	**
-iso-pentane	<LOQ	**
-neo-pentane	<LOQ	**
Butanes;	<LOQ	5000 / 500
-n-butane	<LOQ	**
-iso-butane	<LOQ	**
Hexanes;	<LOQ	290 / 50
-n-hexane	<LOQ	**
-2-methylpentane	<LOQ	**
-3-methylpentane	<LOQ	**
-2,2-dimethylbutane	<LOQ	**
-2,3-dimethylbutane	<LOQ	**
Xylenes;	<LOQ	2170 / 300
-1,2-dimethylbenzene	<LOQ	**
-1,3-dimethylbenzene	<LOQ	**
-1,4-dimethylbenzene	<LOQ	**
-Ethyl benzene	<LOQ	**

**Limit based on combined results

Residual Solvents	PASS

Tentatively Identified Compounds: None Detected

<LOQ - Less than the Limit of Quantification

APPROVAL

QA Review

Report Date: 2019-08-20

JuniperAnalytics
INTEGRITY AND ACCURACY IN EVERY STEP

Juniper Batch #:	19JA1942.02
Intake Date:	2019-08-15

Pesticide Analysis (Oregon Compliance Standard OAR 333-007-0400)

ANALYSIS DATE: 8/16/2019 & 8/19/2019 | Instrument: LC/MS/MS | Method: AOAC 2007.1-Mod

Pesticide	Result (ppm)	Action Level / LOQ (ppm)	Pesticide	Result (ppm)	Action Level / LOQ (ppm)
Abamectin	<LOQ	0.5 / 0.25	Imazalil	<LOQ	0.2 / 0.10
Acephate	<LOQ	0.4 / 0.20	Imidacloprid	<LOQ	0.4 / 0.20
Acequinocyl	<LOQ	2.0 / 1.00	Kresoxim-methyl	<LOQ	0.4 / 0.20
Acetamiprid	<LOQ	0.2 / 0.10	Malathion	<LOQ	0.2 / 0.10
Aldicarb	<LOQ	0.4 / 0.20	Metalaxyl	<LOQ	0.2 / 0.10
Azoxystrobin	<LOQ	0.2 / 0.10	Methiocarb	<LOQ	0.2 / 0.10
Bifenazate	<LOQ	0.2 / 0.10	Methomyl	<LOQ	0.4 / 0.20
Bifenthrin	<LOQ	0.2 / 0.10	Methyl Parathion	<LOQ	0.2 / 0.10
Boscalid	<LOQ	0.4 / 0.20	MGK-264	<LOQ	0.2 / 0.10
Carbaryl	<LOQ	0.2 / 0.10	Myclobutanil	<LOQ	0.2 / 0.10
Carbofuran	<LOQ	0.2 / 0.10	Naled	<LOQ	0.5 / 0.25
Chlorantraniliprole	<LOQ	0.2 / 0.10	Oxamyl	<LOQ	1.0 / 0.50
Chlorfenapyr	<LOQ	1.0 / 0.50	Paclobutrazol	<LOQ	0.4 / 0.20
Chlorpyrifos	<LOQ	0.2 / 0.10	Permethrins	<LOQ	0.2 / 0.10
Clofentezine	<LOQ	0.2 / 0.10	Phosmet	<LOQ	0.2 / 0.10
Cyfluthrin	<LOQ	1.0 / 0.50	Piperonyl butoxide	<LOQ	2.0 / 1.00
Cypermethrin	<LOQ	1.0 / 0.50	Prallethrin	<LOQ	0.2 / 0.10
Daminozide	<LOQ	1.0 / 0.50	Propiconazole	<LOQ	0.4 / 0.20
DDVP (Dichlorvos)	<LOQ	1.0 / 0.50	Propoxur	<LOQ	0.2 / 0.10
Diazinon	<LOQ	0.2 / 0.10	Pyrethrins	<LOQ	1.0 / 0.50
Dimethoate	<LOQ	0.2 / 0.10	Pyridaben	<LOQ	0.2 / 0.10
Ethoprophos	0.18	0.2 / 0.10	Spinosad	<LOQ	0.2 / 0.10
Etofenprox	<LOQ	0.4 / 0.20	Spiromesifen	<LOQ	0.2 / 0.10
Etoxazole	<LOQ	0.2 / 0.10	Spirotetramat	<LOQ	0.2 / 0.10
Fenoxycarb	<LOQ	0.2 / 0.10	Spiroxamine	<LOQ	0.4 / 0.20
Fenpyroximate	<LOQ	0.4 / 0.20	Tebuconazole	<LOQ	0.4 / 0.20
Fipronil	<LOQ	0.4 / 0.20	Thiacloprid	<LOQ	0.2 / 0.10
Flonicamid	<LOQ	1.0 / 0.50	Thiamethoxam	<LOQ	0.2 / 0.10
Fludioxonil	<LOQ	0.4 / 0.20	Trifloxystrobin	<LOQ	0.2 / 0.10
Hexythiazox	<LOQ	1.0 / 0.50			
Pesticide Screen	PASS				

LOQ = Limit of Quantification

Microbiological Contaminants (Oregon Compliance Standard OAR 333-007-0390)

ANALYSIS DATE: Not Tested

Microbiological screening	Colony count	CFU/g	Results:
Total coliforms	Not tested	Not tested	N/A
Escherichia coli (E. coli)	Not tested	Not tested	N/A

JuniperAnalytics
INTEGRITY AND ACCURACY IN EVERY STEP

Juniper Batch #:	19JA1942.02
Intake Date:	2019-08-15

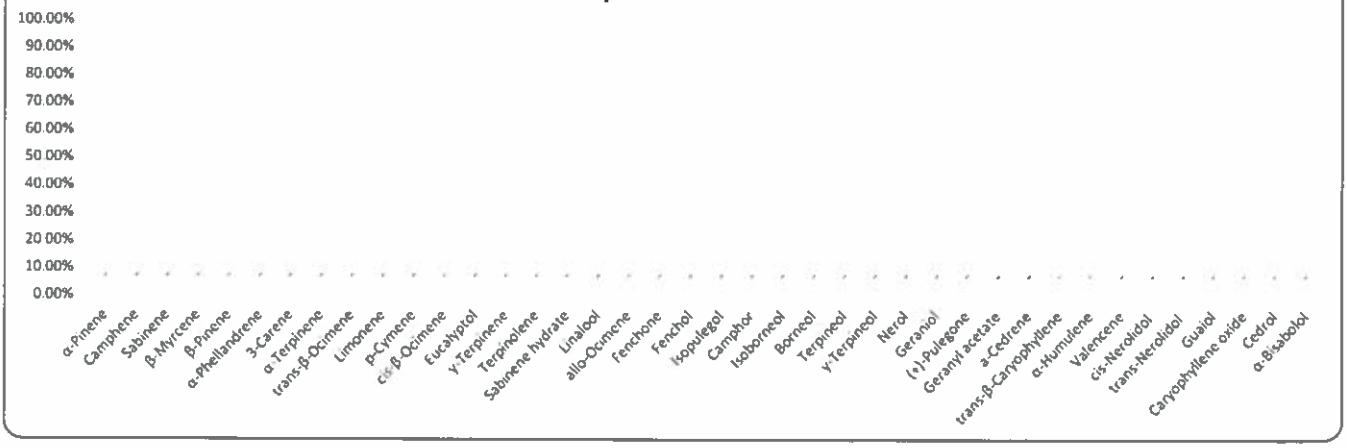
Terpene Profile

ANALYSIS DATE: Not Tested | Instrument: GC/MS | Method: JA-Terpene-Proprietary

Compound	µg/g	%
α-Pinene		
Camphene		
Sabinene		
β-Myrcene		
β-Pinene		
α-Phellandrene		
3-Carene		
α-Terpinene		
trans-β-Ocimene		
Limonene		
p-Cymene		
cis-β-Ocimene		
Eucalyptol		
γ-Terpinene		
Terpinolene		
Sabinene hydrate		
Linalool		
allo-Ocimene		
Fenchone		
Fenchol		

Compound	µg/g	%
Isopulegol		
Camphor		
Isoborneol		
Borneol		
Terpineol		
γ-Terpineol		
Nerol		
Geraniol		
(+)-Pulegone		
Geranyl acetate		
a-Cedrene		
trans-β-Caryophyllene		
α-Humulene		
Valencene		
cis-Nerolidol		
trans-Nerolidol		
Guaiol		
Caryophyllene oxide		
Cedrol		
α-Bisabolol		
TOTAL		

Terpene Profile*



* Profile expressed as a percent of total terpenes

Batch QC WorkGroup ID:

Potency PO-2019-08-15-02
Residual Solvents RS-2019-08-16-01
Pesticide Pest-2019-08-15-01

Disclaimer