



**Client Name:** River Organics



**Sample ID:** SAM-2021-534  
**Sample Name:** Organic CBD Pet Relief Balm  
**Sample Matrix:** Topical  
**Sample Type:** Topical  
**Sample Date:**  
**Sampling Method:**  
**Sampling Technician:**  
**Client Batch ID:**  
**Client Sample Size:**  
**Client State Tracking ID:**

## Results Summary

### Cannabinoids

12/09/2021

TESTED

### Terpenes

12/14/2021

TESTED

### Residual Solvents

12/16/2021

TESTED

### Pesticides

12/22/2021

IN PROGRESS

### Heavy Metals

12/10/2021

✓ PASS

### Microbial Impurities

12/20/2021

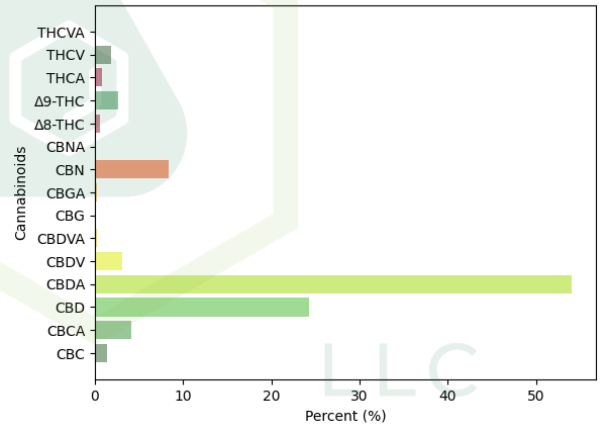
✓ PASS

### Mycotoxins

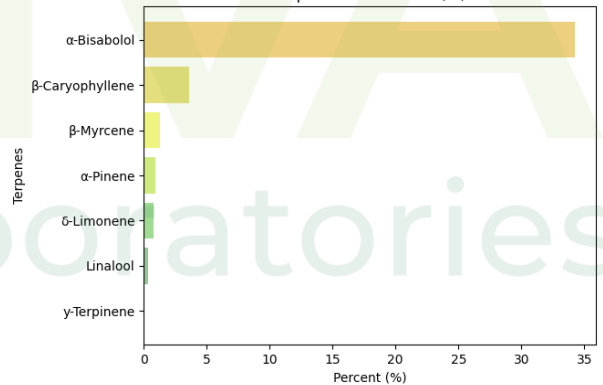
12/20/2021

✓ PASS

Cannabinoid Distribution (%)



Terpenes Distribution (%)



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## Cannabinoids

**Date Analyzed:** 12/07/2021  
**Instrument:** HPLC-UV/Vis

**Date Completed:** 12/09/2021  
**Method:** HP001/HP003

**Analyst:** B T

Cannabinoid	Result (%)	Result (mg/g)	LOQ (mg/g)
CBC	0.01	0.12	0.10
CBCA	0.04	0.36	0.10
CBD	0.21	2.12	0.10
CBDA	0.47	4.71	0.10
CBDV	0.03	0.27	0.10
CBDVA	<LOQ	<LOQ	0.10
CBG	<LOQ	<LOQ	0.10
CBGA	<LOQ	<LOQ	0.10
CBN	0.07	0.73	0.10
CBNA	<LOQ	<LOQ	0.10
Δ8-THC	<LOQ	<LOQ	0.10
Δ9-THC	0.02	0.23	0.10
THCA	<LOQ	<LOQ	0.10
THCV	0.02	0.16	0.10
THCVA	<LOQ	<LOQ	0.10
Total THC	0.02	0.23	-
Total CBD	0.63	6.25	-
Total Cannabinoids	0.87	8.72	-

LOQ= Limit of quantitation, ND = Not detected, NR = Not reported  
Total THC = THCa \* 0.877 + d9-THC, Total CBD = CBDa \* 0.877 + CBD

LLC

# SATIVA

## Testing Laboratories



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## Terpenes

**Date Analyzed:** 12/09/2021  
**Instrument:** HS-GC/MS

**Date Completed:** 12/14/2021  
**Method:** HP002

**Analyst:** A D

Terpene	Result (mg/g)	Result (%)	LOQ (mg/g)
α-Pinene	<LOQ	<LOQ	0.20
Camphene	<LOQ	<LOQ	0.20
β-Myrcene	<LOQ	<LOQ	0.20
β-Pinene	<LOQ	<LOQ	0.20
3-Carene	<LOQ	<LOQ	0.20
α-Terpinene	<LOQ	<LOQ	0.20
δ-Limonene	<LOQ	<LOQ	0.20
Eucalyptol	<LOQ	<LOQ	0.20
γ-Terpinene	<LOQ	<LOQ	0.20
Terpinolene	<LOQ	<LOQ	0.20
Linalool	<LOQ	<LOQ	0.20
Fenchone	<LOQ	<LOQ	0.20
Isopulegol	<LOQ	<LOQ	0.20
Borneol	<LOQ	<LOQ	0.20
Terpineol	<LOQ	<LOQ	0.20
Geraniol	<LOQ	<LOQ	0.20
β-Caryophyllene	<LOQ	<LOQ	0.20
α-Humulene	<LOQ	<LOQ	0.20
Valencene	<LOQ	<LOQ	0.20
cis-Nerolidol	<LOQ	<LOQ	0.20
trans-Nerolidol	<LOQ	<LOQ	0.20
Guaiol	2.18	0.22	0.20
α-Bisabolol	1.13	0.11	0.20

LOQ= Limit of quantitation, ND = Not detected, NR = Not reported

## Residual Solvents

**Date Analyzed:** 12/14/2021  
**Instrument:** HS-GC/MS

**Date Completed:** 12/16/2021  
**Method:** HP002

**Analyst:** A D

Residual Solvent	Result (ppm)	LOQ (ppm)	Status
Methanol	ND	10	Tested
Ethanol	ND	10	Tested
Acetone	ND	10	Tested
Isopropanol	ND	10	Tested
Acetonitrile	ND	10	Tested
n-Hexane	ND	10	Tested
Tetrahydrofuran	ND	10	Tested
Chloroform	ND	10	Tested
Carbon-Tetrachloride	ND	10	Tested
Benzene	ND	10	Tested
Heptane	ND	10	Tested
Toluene	ND	10	Tested
p+m Xylene	ND	10	Tested
o-Xylene	ND	10	Tested

LOQ= Limit of quantitation, ND = Not detected, NR = Not reported

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## Pesticides

**Date Analyzed:** 12/20/2021  
**Instrument:** LC-MS/MS

**Date Completed:** 12/22/2021  
**Method:** HP001/HP004

**Analyst:** B T

Pesticide	Result (ppb)	LOQ (ppb)	Limit (ppb)	Status
Oxamyl	<LOQ	100.0	1000	-
Daminozide	<LOQ	100.0	1000	-
Acephate	<LOQ	100.0	400	-
Methomyl	<LOQ	100.0	400	-
Thiamethoxam	<LOQ	100.0	200	-
Imidacloprid	<LOQ	100.0	400	-
Dimethoate	<LOQ	100.0	200	-
Acetamiprid	<LOQ	100.0	200	-
Aldicarb	<LOQ	100.0	400	-
Thiacloprid	<LOQ	100.0	200	-
Dichlorvos	<LOQ	100.0	100	-
Carbofuran	<LOQ	100.0	200	-
Propoxur	<LOQ	100.0	200	-
Carbaryl	<LOQ	100.0	200	-
Naled	<LOQ	100.0	500	-
Imazalil	<LOQ	100.0	200	-
Metalaxyl	<LOQ	100.0	200	-
Phosmet	<LOQ	100.0	200	-
Methiocarb	<LOQ	100.0	200	-
Chlorantraniliprole	<LOQ	100.0	200	-
Boscalid	<LOQ	100.0	400	-
Azoxystrobin	<LOQ	100.0	200	-
Spiroxamine	<LOQ	100.0	400	-
Paclobutrazol	<LOQ	100.0	400	-
Malathion	<LOQ	100.0	200	-
Mycobutanil	<LOQ	100.0	200	-
Bifenazate	<LOQ	100.0	200	-
Spirotetramat	<LOQ	100.0	200	-
Ethoprophos	<LOQ	100.0	200	-
Fenoxycarb	<LOQ	100.0	200	-
Propiconazole	<LOQ	100.0	400	-
Kresoxim-methyl	<LOQ	100.0	400	-
Tebuconazole	<LOQ	100.0	400	-
Diazinon	<LOQ	100.0	200	-
Clofentezine	<LOQ	100.0	200	-
Trifloxystrobin	<LOQ	100.0	200	-
MGK-264	<LOQ	100.0	200	-
Prallethrin	<LOQ	100.0	200	-
Chlorpyrifos	<LOQ	100.0	200	-
Hexythiazox	<LOQ	100.0	100	-
Piperonyl Butoxide	<LOQ	100.0	200	-
Spiromesifen	<LOQ	100.0	200	-
Etoxazole	<LOQ	100.0	200	-
Abamectin	<LOQ	100.0	500	-
Cyfluthrin	<LOQ	100.0	1000	-
Cypermethrin	<LOQ	100.0	1000	-
Fenpyroximate	<LOQ	100.0	400	-
Pyridaben	<LOQ	100.0	200	-
Bifenthrin	<LOQ	100.0	200	-
Etofenprox	<LOQ	100.0	400	-
Acequinocyl	<LOQ	100.0	2000	-

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Pesticide	Result (ppb)	LOQ (ppb)	Limit (ppb)	Status
Flonicamid	<LOQ	100.0	1000	-
Fludioxonil	<LOQ	100.0	400	-
Fipronil	<LOQ	100.0	400	-
Permethrins	ND	100.0	200	-
Chlorfenapyr	<LOQ	100.0	1000	-
Parathion Methyl	<LOQ	200.0	200	-
Pyrethrins	ND	100.0	1000	-
Spinosad	ND	100.0	200	-

LOQ= Limit of quantitation, ND = Not detected, NR = Not reported

## Heavy Metals

 **PASS**

**Date Analyzed:** 12/09/2021  
**Instrument:** ICP-OES, CVAA

**Date Completed:** 12/10/2021  
**Method:** HP600/601/602

**Analyst:** A K

Heavy Metals	Result (ppm)	LOQ (ppm)	Limit (ppm)	Status
Arsenic	ND	2.500	10.0	Pass
Cadmium	ND	2.500	4.1	Pass
Lead	ND	2.500	10.0	Pass
Mercury	ND	0.500	2.0	Pass

LOQ= Limit of quantitation, ND = Not detected, NR = Not reported

## Microbial Impurities

 **PASS**

**Date Analyzed:**  
**Instrument:** Culture and qPCR

**Date Completed:**  
**Method:** HP100/101

**Sample Collection Date:**  
**Analyst:** C M

Microbials	Result (CFU/g)	Analytical Sensitivity (CFU/g)	Limit (CFU/g)	Status
Aerobic Bacteria	ND	10	200	Pass
Yeast & Mold	ND	10	20	Pass
P. aeruginosa	ND	--	Presence/absence	Pass
S. aureus	ND	--	Presence/absence	Pass

LOQ= Limit of quantitation, ND = Not detected, NR = Not reported

TNTC = Too numerous to count, CFU = Colony forming units

**Comments:** Sample Collection Date: Not Provided on COC

Sample Amount: 1.01 g

Pass/Fail based on USP 1111 acceptance criteria

## Mycotoxins

 **PASS**

**Date Analyzed:** 12/17/2021  
**Instrument:** LC-MS/MS

**Date Completed:** 12/20/2021  
**Method:** HP001/HP004

**Analyst:** B T

Mycotoxins	Result (ppb)	LOQ (ppb)	Limit (ppb)	Status
B1	<LOQ	20.0	20	Pass
B2	<LOQ	20.0	20	Pass
G1	<LOQ	20.0	20	Pass
G2	<LOQ	20.0	20	Pass
Ochratoxin A	<LOQ	20.0	20	Pass

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Sativa Testing Laboratories LLC

10501 Trade Court  
N. Chesterfield, VA 23236  
Phone: 804-220-1122

# Certificate of Analysis



Brandon Thorpe, PhD  
Lab Director  
12/22/2021



LLC  
**SATIVA**  
Testing Laboratories



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