



**Client Name:** River Organics



**Sample ID:** SAM-2021-668  
**Sample Name:** Peanut Butter Tincture  
**Sample Matrix:** Oil  
**Sample Type:** Edible  
**Sample Date:**  
**Sampling Method:**  
**Sampling Technician:**  
**Client Batch ID:**  
**Client Sample Size:**  
**Client State Tracking ID:**

## Results Summary

### Cannabinoids

12/30/2021

TESTED

### Terpenes

01/04/2022

TESTED

### Residual Solvents

12/30/2021

TESTED

### Pesticides

12/31/2021

✓ PASS

### Heavy Metals

12/30/2021

✓ PASS

### Microbial Impurities

01/07/2022

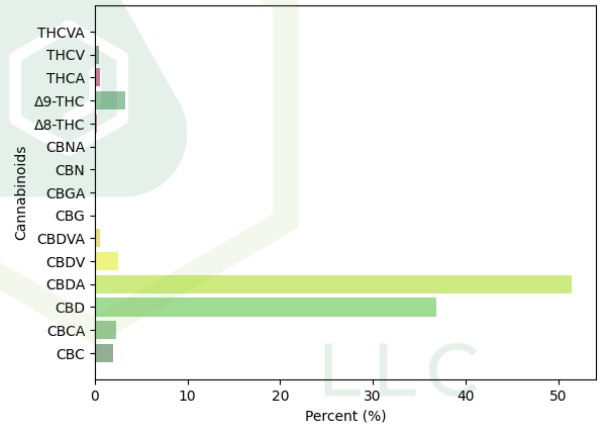
✓ PASS

### Mycotoxins

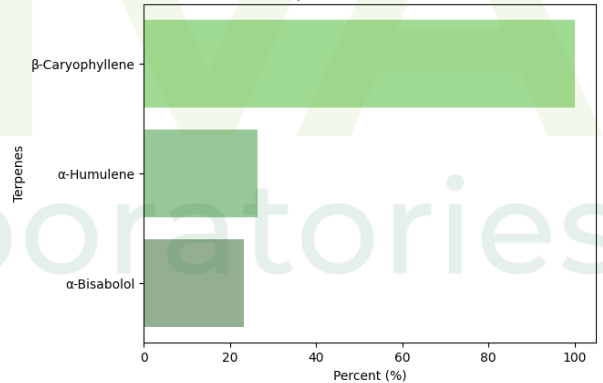
12/30/2021

✓ PASS

Cannabinoid Distribution (%)



Terpenes Distribution (%)



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## Cannabinoids

**Date Analyzed:** 12/29/2021  
**Instrument:** HPLC-UV/Vis

**Date Completed:** 12/30/2021  
**Method:** HP001/HP003

**Analyst:** K J

GCFID Cannabinoid	Result (%)	Result (mg/mL)	LOQ (mg/mL)
CBC	0.05	0.49	0.09
CBCA	0.06	0.60	0.09
CBD	1.02	9.44	0.09
CBDA	1.42	13.20	0.09
CBDV	0.07	0.63	0.09
CBDVA	0.02	0.14	0.09
CBG	<LOQ	<LOQ	0.09
CBGA	<LOQ	<LOQ	0.09
CBN	<LOQ	<LOQ	0.09
CBNA	<LOQ	<LOQ	0.09
Δ8-THC	<LOQ	<LOQ	0.09
Δ9-THC	0.09	0.85	0.09
THCA	0.02	0.15	0.09
THCV	0.01	0.12	0.09
THCVA	<LOQ	<LOQ	0.09
Total THC	0.11	0.99	-
Total CBD	2.26	21.01	-
Total Cannabinoids	2.76	25.63	-

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:** 12/30/2021  
**Instrument:** HS-GC/MS

**Date Completed:** 01/04/2022  
**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	0.29	0.03	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	<LOQ	<LOQ	0.20
α-Bisabolol	<LOQ	<LOQ	0.20

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

## Residual Solvents

**Date Analyzed:** 12/29/2021  
**Instrument:** HS-GC/MS

**Date Completed:** 12/30/2021  
**Method:** HP002

**Analyst:** A D

Residual Solvent	Result (ppm)	LOQ (ppm)	Status
Methanol	<LOQ	20	Tested
n-Pentane	<LOQ	10	Tested
Ethanol	<LOQ	10	Tested
Acetone	<LOQ	10	Tested
Isopropanol	<LOQ	10	Tested
Acetonitrile	<LOQ	10	Tested
n-Hexane	<LOQ	10	Tested
Tetrahydrofuran	<LOQ	10	Tested
Chloroform	<LOQ	10	Tested
Carbon-Tetrachloride	<LOQ	10	Tested
Benzene	<LOQ	10	Tested
Heptane	<LOQ	10	Tested
Toluene	<LOQ	10	Tested
p+m Xylene	<LOQ	10	Tested
o-Xylene	<LOQ	10	Tested

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 **PASS**

## Pesticides

**Date Analyzed:** 12/30/2021  
**Instrument:** LC-MS/MS

**Date Completed:** 12/31/2021  
**Method:** HP001/HP004

**Analyst:** B T

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

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

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

## Heavy Metals

 **PASS**

**Date Analyzed:** 12/30/2021  
**Instrument:** ICP-OES, CVAA

**Date Completed:** 12/30/2021  
**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:** 01/05/2022  
**Instrument:** Culture and qPCR

**Date Completed:** 01/07/2022  
**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	2000	Pass
Yeast & Mold	ND	10	200	Pass
E.coli	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 Amount: 1.00 g

Collection Date: Not Provided on COC

Pass/Fail based on USP 1111 acceptance criteria

Date TAMC Read: 1/3/22

Date TYMC Read: 1/6/22

Date of PCR Analysis: 1/7/22

## Mycotoxins

 **PASS**

**Date Analyzed:** 12/30/2021  
**Instrument:** LC-MS/MS

**Date Completed:** 12/30/2021  
**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

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Phone: 804-220-1122

# Certificate of Analysis



Brandon Thorpe, PhD  
Lab Director  
01/08/2022



LLC  
**SATIVA**  
Testing Laboratories



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