

Topical Patch

PASSSAMPLE ID
136397SAMPLE NAME
Topical PatchMATRIX
TopicalBATCH ID
091621COLLECTED
10/01/2019 11:41RECEIVED
10/01/2019 11:41SERVING SIZE
1SERVINGS PER PACKAGE
1MANUFACTURER INFO
CBD Living Water

Chemical Residue

malathion: 0.0703 ug/g

PASS

Chemical Residue GC

No Analytes Detected

PASS

Residual Solvent

Isopropyl Alcohol: 6.938 ug/g

PASS

Microbial qPCR

No Analytes Detected

PASS

Heavy Metals

Lead: 0.0858 ug/g, Arsenic: 0.0813 ug/g

PASS

Mycotoxins

No Analytes Detected

PASS

Potency

Not Tested

NT

Filth and Foreign Material

Not Tested

NT

CHEMICAL RESIDUE ANALYSIS PASS

UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Abamectin	ND	0.0200	0.0400	0.3000 Pass	Acephate	ND	0.0200	0.0400	5.000 Pass
Acequinocyl	ND	0.0200	0.0400	4.000 Pass	Acetamiprid	ND	0.0200	0.0400	5.000 Pass
Aldicarb	ND	0.0200	0.0400	0.0 Pass	Azoxystrobin	ND	0.0200	0.0400	40.00 Pass
Bifenazate	ND	0.0200	0.0400	5.000 Pass	Bifenthrin	ND	0.0200	0.0400	0.5000 Pass
Boscalid	ND	0.0200	0.0400	10.00 Pass	Carbaryl	ND	0.0200	0.0400	0.5000 Pass
Carbofuran	ND	0.0200	0.0400	0.0 Pass	Chlorantraniliprole	ND	0.0200	0.0400	40.00 Pass
Chlorfenapyr	ND	0.0200	0.0400	0.0 Pass	Chlorpyrifos	ND	0.0200	0.0400	0.0 Pass
Clofentezine	ND	0.0200	0.0400	0.5000 Pass	Coumaphos	ND	0.0200	0.0400	0.0 Pass
Cyfluthrin	ND	0.1000	0.2000	1.000 Pass	Cypermethrin	ND	0.0400	0.1000	1.000 Pass
Daminozide	ND	0.0200	0.0400	0.0 Pass	Diazinon	ND	0.0200	0.0400	0.2000 Pass
Dichlorvos	ND	0.0200	0.0400	0.0 Pass	Dimethoate	ND	0.0200	0.0400	0.0 Pass
Dimethomorph	ND	0.0099	0.0198	20.00 Pass	Ethoprophos	ND	0.0200	0.0400	0.0 Pass
Etofenprox	ND	0.0200	0.0400	0.0 Pass	Etoxazole	ND	0.0200	0.0400	1.500 Pass
Fenhexamid	ND	0.0200	0.0400	10.00 Pass	Fenoxycarb	ND	0.0200	0.0400	0.0 Pass
Fenpyroximate	ND	0.0200	0.0400	2.000 Pass	Fipronil	ND	0.0200	0.0400	0.0 Pass
Flonicamid	ND	0.0200	0.0400	2.000 Pass	Fludioxonil	ND	0.0200	0.0400	30.00 Pass
Hexythiazox	ND	0.0200	0.0400	2.000 Pass	Imazalil	ND	0.0200	0.0400	0.0 Pass
Imidacloprid	ND	0.0200	0.0400	3.000 Pass	KresoximMethyl	ND	0.0200	0.0400	1.000 Pass
Malathion	0.0703 ug/g	0.0200	0.0400	5.000 Pass	Metalaxyl	ND	0.0200	0.0400	15.00 Pass
Methiocarb	ND	0.0200	0.0400	0.0 Pass	Methomyl	ND	0.0200	0.0400	0.1000 Pass
Mevinphos	ND	0.0200	0.0400	0.0 Pass	Myclobutanil	ND	0.0200	0.0400	9.000 Pass
Naled	ND	0.0200	0.0400	0.5000 Pass	Oxamyl	ND	0.0200	0.0400	0.2000 Pass
Paclobutrazol	ND	0.0200	0.0400	0.0 Pass	Permethrins	ND	0.0200	0.0400	20.00 Pass
Phosmet	ND	0.0200	0.0400	0.2000 Pass	PiperonylButoxide	ND	0.0200	0.0400	8.000 Pass
Prallethrin	ND	0.0200	0.0400	0.4000 Pass	Propiconazole	ND	0.0200	0.0400	20.00 Pass
Propoxur	ND	0.0200	0.0400	0.0 Pass	Pyrethrins	ND	0.0178	0.0356	1.000 Pass
Pyridaben	ND	0.0200	0.0400	3.000 Pass	Spinetoram	ND	0.0200	0.0400	3.000 Pass
Spinosad	ND	0.0200	0.0400	3.000 Pass	Spiromesifen	ND	0.0200	0.0400	12.00 Pass
Spirotetramat	ND	0.0200	0.0400	13.00 Pass	Spiroxamine	ND	0.0200	0.0400	0.4000 Pass
Tebuconazole	ND	0.0200	0.0400	2.000 Pass	Thiacloprid	ND	0.0200	0.0400	0.0 Pass
Thiamethoxam	ND	0.0200	0.0400	4.500 Pass	Trifloxystrobin	ND	0.0200	0.0400	30.00 Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-002	Sample Prepped 10/04/2019 16:35	Sample Approved 10/08/2019 14:32
Instrument: LC-MS/MS	Sample Analyzed 10/04/2019 16:37	

CHEMICAL RESIDUE GC ANALYSIS PASS

UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL		ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	
Captan	ND	0.1000	0.2000	5.000	Pass	Chlordane	ND	0.0400	0.1000	0.0	Pass
MethylParathion	ND	0.0400	0.1000	0.0	Pass	PCNB	ND	0.0200	0.0400	0.2000	Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-010 Sample Prepped 10/04/2019 16:35 Sample Approved 10/07/2019 13:08
 Instrument: GC-MS/MS Sample Analyzed 10/04/2019 16:38

RESIDUAL SOLVENT ANALYSIS PASS

UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL		ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	
Acetone	ND	2.500	5.000	5000	Pass	Acetonitrile	ND	0.5000	1.000	410.0	Pass
Benzene	ND	0.5000	1.000	1.000	Pass	Butane	ND	24.00	48.00	5000	Pass
Chloroform	ND	0.5000	1.000	1.000	Pass	Ethanol	ND	1.000	2.500	5000	Pass
Ethyl Acetate	ND	2.500	5.000	5000	Pass	Ethyl Ether	ND	10.00	50.00	5000	Pass
Ethylene oxide	ND	0.5000	1.000	1.000	Pass	Heptane	ND	0.2500	0.5000	5000	Pass
Hexane	ND	0.2500	0.5000	290.0	Pass	Isopropyl Alcohol	6.938 ug/g	0.2500	0.5000	5000	Pass
Methanol	ND	1.000	2.500	3000	Pass	Methylene chloride	ND	0.2500	0.5000	1.000	Pass
Pentane	ND	1.000	2.500	5000	Pass	Propane	ND	5.000	10.00	5000	Pass
Toluene	ND	0.2500	0.5000	890.0	Pass	Xylenes	ND	0.5000	1.000	2170	Pass
Trichloroethylene	ND	0.2500	0.5000	1.000	Pass	1,2-Dichloroethane	ND	0.2500	0.5000	1.000	Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-021 Sample Prepped 10/07/2019 12:13 Sample Approved 10/08/2019 11:08
 Instrument: HS-GC-MS/FID Sample Analyzed 10/07/2019 12:13

MICROBIAL ANALYSIS PASS

UNIT OF MEASUREMENT: Cycle Threshold (Ct)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL		ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	
A.fumigatus	ND	33.00	0.0	0.0	Pass	A. flavus	ND	33.00	0.0	0.0	Pass
A. niger	ND	33.00	0.0	0.0	Pass	A. terreus	ND	33.00	0.0	0.0	Pass
STEC	ND	33.00	0.0	0.0	Pass	Salmonella spp	ND	33.00	0.0	0.0	Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-016, SOP-TECH-022 Sample Prepped 10/04/2019 06:30 Sample Approved 10/04/2019 13:20
 Instrument: qPCR Sample Analyzed 10/04/2019 06:32

HEAVY METALS ANALYSIS PASS

UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Arsenic	0.0813 ug/g	0.0200	0.0500	1.500 Pass	Cadmium	ND	0.0050	0.0500	0.5000 Pass
Lead	0.0858 ug/g	0.0100	0.0500	0.5000 Pass	Mercury	ND	0.0030	0.0500	3.000 Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-013 Sample Prepped 10/04/2019 11:19 Sample Approved 10/04/2019 20:16
 Instrument: ICP-MS Sample Analyzed 10/04/2019 11:21

MYCOTOXINS ANALYSIS PASS

UNIT OF MEASUREMENT: Micrograms per Kilogram(ug/kg)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Aflatoxin B1	ND	1.000	2.000	N/A	Aflatoxin B2	ND	2.000	5.000	N/A
Aflatoxin G1	ND	2.000	5.000	N/A	Aflatoxin G2	ND	2.000	5.000	N/A
Total Aflatoxins	ND	10.00	14.00	20.00 Pass	Ochratoxin A	ND	1.000	2.000	20.00 Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-020 Sample Prepped 10/04/2019 16:34 Sample Approved 10/07/2019 14:33
 Instrument: LC-MS/MS Sample Analyzed 10/04/2019 16:36

This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented, or abstracted in any manner. Any violation of these conditions renders the report and its results void.

All LQC samples required by state regulations were performed and met the acceptance criteria.

DATA REVIEWED AND APPROVED BY



10/08/2019

Swetha Kaul, PhD
Chief Scientific Officer

Date

Topical Patch

FARM BILL
COMPLIANT



SAMPLE ID
160153

SAMPLE NAME
Topical Patch

MATRIX
Topical

BATCH ID
091621

COLLECTED
12/23/2019 15:52

RECEIVED
12/23/2019 15:52

SERVING SIZE
1 patch

SERVINGS PER PACKAGE
1

MANUFACTURER INFO
**CBD Living Water
Not Available**

**TOTAL
CBD**

66.18
MG PER SERVING

**TOTAL
THC**

ND
MG PER SERVING

**TOTAL
CANNABINOIDS**

66.18
MG PER SERVING

 Indicates that the hemp product passes some of the strictest testing standards available for cannabis and hemp.



CANNABINOID ANALYSIS

TOTAL THC: ND per serving (ND) (ND)
 TOTAL CBD: 66.18 mg per serving (132.4 mg/g) (13.24 %)
 TOTAL CANNABINOIDS: 66.18 mg per serving (132.4 mg/g) (13.24 %)

UNIT OF MEASUREMENT: Milligrams per Gram(mg/g)

ANALYTE	RESULT	LOD	LLOQ	ANALYTE	RESULT	LOD	LLOQ
THCa	ND	0.1000	0.2000	CBDv	ND	0.1000	0.2000
D9THC	ND	0.1000	0.2000	CBGa	ND	0.1000	0.2000
D8THC	ND	0.1000	0.2000	CBG	ND	0.1000	0.2000
THCv	ND	0.1000	0.2000	CBN	ND	0.1000	0.2000
CBDa	ND	0.1000	0.2000	CBC	ND	0.1000	0.2000
CBD	132.4 mg/g (13.24 %)	0.1000	0.2000				

ADDITIONAL INFORMATION

Method: SOP-TECH-001
 Instrument: UPLC-DAD

Sample Prepped 12/26/2019 15:32
 Sample Analyzed 12/26/2019 15:33

Sample Approved 12/27/2019 11:17

This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented, or abstracted in any manner. Any violation of these conditions renders the report and its results void.

All LQC samples required by state regulations were performed and met the acceptance criteria.

THIS COA WAS REVIEWED AND APPROVED ON 12/27/2019, BY THE FOLLOWING:



Cody Sheppard, PhD
 Co-Scientific Director



Kathryn Riker
 Quality Control Manager

