Hemp Quality Assurance Testing

CERTIFICATE OF ANALYSIS

DATE ISSUED 06/07/2020

SAMPLE NAME: CBD Mentholated Balm 20155_#03

Infused, Non-Inhalable

CULTIVATOR / MANUFACTURER

Business Name:
License Number:
Address:

DISTRIBUTOR

Business Name: Shikai Products
License Number:
Address:

SAMPLE DETAIL

Batch Number: 20155
Sample ID: 200605U004

Date Collected: 06/05/2020
Date Received: 06/05/2020
Batch Size:
Sample Size:
Unit Mass:
Serving Size:

Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: Not Detected

Total CBD: 9.496 mg/g

Total Cannabinoids: 9.539 mg/g

Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during the decarboxylation step:

Total THC = Δ9THC + (THCa (0.877))
Total CBD = CBD + (CBDa (0.877))
Total Cannabinoids = (Δ9THC+0.877*THCa) + (CBD+0.877*CBDa) + (CBG+0.877*CBGa) + (THCV+0.877*THCVa) + (CBC+0.877*CBCa) + (CBDV+0.877*CBDVa) + Δ8THC + CBL + CBN

Moisture: NT

Density: NT

Viscosity: NT

SAFETY ANALYSIS - SUMMARY

Pesticides: PASS

Heavy Metals: PASS

Foreign Material: NT

Mycotoxins: NT

Microbial Impurities (PCR): PASS

Water Activity: NT

Residual Solvents: PASS

Microbial Impurities (Plating): NT

Vitamin E Acetate: NT

For quality assurance purposes. Not a Pre-Harvest Hemp Lab Test Report. These results relate only to the sample included on this report. This report shall not be reproduced, except in full, without written approval of the laboratory.

Sample Certification: California Code of Regulations Title 16 Effect Date January 16, 2019. Authority: Section 26013 Business and Professions Code. Reference: Sections 26100, 26104 and 26110, Business and Professions Code.

Decision Rule: Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account. Where statements of conformity are made in this report, the following decision rules are applied: PASS – Results within limits/specifications, FAIL – Results exceed limits/specifications.

References: limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT)

LOQ verified by: Cecilia Condes
Date: 06/07/2020

Approved by: Josh Wurzer, President
Date: 06/07/2020

 Result Summary CoA ID: 200605U004-001

Cannabinoid Analysis

Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD).

Method: QSP - (1157) Analysis of Cannabinoids by HPLC-DAD

TOTAL THC: Not Detected
Total THC (Δ9THC+0.877*THCa)

TOTAL CBD: 9.496 mg/g
Total CBD (CBD+0.877*CBDa)

TOTAL CANNABINOIDS: 9.539 mg/g
Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) + Δ8THC + CBL + CBN

TOTAL CBG: ND
Total CBG (CBG+0.877*CBGa)

TOTAL THCV: ND
Total THCV (THCV+0.877*THCVa)

TOTAL CBC: ND
Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: 0.043 mg/g
Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 06/06/2020

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	*0.004 / 0.011*	*±0.4549*	**9.496**	**0.9496**
CBDV	*0.002 / 0.007*	*±0.0023*	**0.043**	**0.0043**
Δ9THC	*0.002 / 0.005*	*N/A*	**ND**	**ND**
Δ8THC	*0.01 / 0.02*	*N/A*	**ND**	**ND**
THCa	*0.001 / 0.002*	*N/A*	**ND**	**ND**
THCV	*0.002 / 0.008*	*N/A*	**ND**	**ND**
THCVa	*0.002 / 0.005*	*N/A*	**ND**	**ND**
CBDa	*0.001 / 0.003*	*N/A*	**ND**	**ND**
CBDVa	*0.001 / 0.003*	*N/A*	**ND**	**ND**
CBG	*0.002 / 0.005*	*N/A*	**ND**	**ND**
CBGa	*0.002 / 0.006*	*N/A*	**ND**	**ND**
CBL	*0.003 / 0.008*	*N/A*	**ND**	**ND**
CBN	*0.001 / 0.004*	*N/A*	**ND**	**ND**
CBC	*0.003 / 0.010*	*N/A*	**ND**	**ND**
CBCa	*0.001 / 0.004*	*N/A*	**ND**	**ND**
SUM OF CANNABINOIDS			**9.539 mg/g**	**0.9539%**

Unit Mass: / Serving Size:

Δ9THC per Unit		
Δ9THC per Serving		
Total THC per Unit		
Total THC per Serving		
CBD per Unit		
CBD per Serving		
Total CBD per Unit		
Total CBD per Serving		
Sum of Cannabinoids per Unit		
Sum of Cannabinoids per Serving		

MOISTURE TEST RESULT	DENSITY TEST RESULT	VISCOSITY TEST RESULT
Not Tested	Not Tested	Not Tested

Pesticide Analysis

CATEGORY 1 AND 2 PESTICIDES

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS). *GC-MS utilized where indicated.

Method: QSP - (1212) Analysis of Pesticides and Mycotoxins by LC-MS or QSP - (1213) Analysis of Pesticides by GC-MS

CATEGORY 1 PESTICIDE TEST RESULTS - 06/07/2020 PASS

COMPOUND	REPORTING LIMIT (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Aldicarb				NT	
Carbofuran				NT	
Chlordane*				NT	
Chlorfenapyr*				NT	
Chlorpyrifos	*0.06*	*≥ LOD*	*N/A*	**ND**	**PASS**
Coumaphos				NT	
Daminozide				NT	
DDVP (Dichlorvos)				NT	
Dimethoate				NT	
Ethoprop(hos)				NT	
Etofenprox				NT	
Fenoxycarb				NT	
Fipronil				NT	
Imazalil				NT	
Methiocarb				NT	
Methyl parathion				NT	
Mevinphos				NT	
Paclobutrazol				NT	
Propoxur				NT	
Spiroxamine				NT	
Thiacloprid				NT	

CATEGORY 2 PESTICIDE TEST RESULTS - 06/07/2020 PASS

Abamectin	*0.10*	*0.3*	*N/A*	**ND**	**PASS**
Acephate				NT	
Acequinocyl				NT	
Acetamiprid				NT	
Azoxystrobin	*0.04*	*40*	*N/A*	**ND**	**PASS**
Bifenazate	*0.02*	*5*	*N/A*	**ND**	**PASS**
Bifenthrin	*0.02*	*0.5*	*N/A*	**ND**	**PASS**
Boscalid	*0.06*	*10*	*N/A*	**ND**	**PASS**
Captan				NT	
Carbaryl				NT	
Chlorantraniliprole				NT	

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Pesticide Analysis *Continued*

CATEGORY 1 AND 2 PESTICIDES

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS). *GC-MS utilized where indicated.

Method: QSP - (1212) Analysis of Pesticides and Mycotoxins by LC-MS or QSP - (1213) Analysis of Pesticides by GC-MS

CATEGORY 2 PESTICIDE TEST RESULTS - 06/07/2020 *continued* ✓ PASS

COMPOUND	REPORTING LIMIT (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Clofentezine				NT	
Cyfluthrin				NT	
Cypermethrin	*0.3*	*1*	*N/A*	**ND**	**PASS**
Diazinon				NT	
Dimethomorph				NT	
Etoxazole	*0.028*	*1.5*	*N/A*	**ND**	**PASS**
Fenhexamid				NT	
Fenpyroximate				NT	
Flonicamid				NT	
Fludioxonil				NT	
Hexythiazox	*0.04*	*2*	*N/A*	**ND**	**PASS**
Imidacloprid	*0.04*	*3*	*N/A*	**ND**	**PASS**
Kresoxim-methyl				NT	
Malathion	*0.05*	*5*	*N/A*	**ND**	**PASS**
Metalaxyl				NT	
Methomyl				NT	
Myclobutanil	*0.1*	*9*	*N/A*	**ND**	**PASS**
Naled				NT	
Oxamyl				NT	
Pentachloronitrobenzene*				NT	
Permethrin	*0.09*	*20*	*N/A*	**<LOQ**	**PASS**
Phosmet				NT	
Piperonylbutoxide	*0.009*	*8*	*N/A*	**ND**	**PASS**
Prallethrin				NT	
Propiconazole	*0.03*	*20*	*N/A*	**ND**	**PASS**
Pyrethrins				NT	
Pyridaben				NT	
Spinetoram				NT	
Spinosad				NT	
Spiromesifen	*0.05*	*12*	*N/A*	**ND**	**PASS**
Spirotetramat				NT	
Tebuconazole	*0.07*	*2*	*N/A*	**ND**	**PASS**
Thiamethoxam				NT	
Trifloxystrobin	*0.03*	*30*	*N/A*	**ND**	**PASS**

Residual Solvents Analysis

CATEGORY 1 AND 2 RESIDUAL SOLVENTS
Residual Solvent analysis utilizing gas chromatography-mass spectrometry (GC-MS).

Method: QSP - (1204) Analysis of Residual Solvents by GC-MS

CATEGORY 1 RESIDUAL SOLVENTS TEST RESULTS - 06/07/2020 PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
1,2-Dichloroethane	0.05 / 0.1	1	N/A	ND	PASS
Benzene	0.03 / 0.09	1	N/A	ND	PASS
Chloroform	0.1 / 0.2	1	N/A	ND	PASS
Ethylene Oxide	0.1 / 0.4	1	N/A	ND	PASS
Methylene chloride	0.3 / 0.9	1	N/A	ND	PASS
Trichloroethylene	0.1 / 0.3	1	N/A	ND	PASS

CATEGORY 2 RESIDUAL SOLVENTS TEST RESULTS - 06/07/2020 PASS

Acetone	20 / 50	5000	N/A	ND	PASS
Acetonitrile	2 / 7	410	N/A	ND	PASS
Butane	10 / 50	5000	N/A	ND	PASS
Ethanol	20 / 50	5000	N/A	ND	PASS
Ethyl acetate	20 / 60	5000	N/A	ND	PASS
Ethyl ether	20 / 50	5000	N/A	ND	PASS
Heptane	20 / 60	5000	N/A	ND	PASS
Hexane	2 / 5	290	N/A	ND	PASS
Isopropyl Alcohol	10 / 40	5000	N/A	ND	PASS
Methanol	50 / 200	3000	N/A	ND	PASS
Pentane	20 / 50	5000	N/A	ND	PASS
Propane	10 / 20	5000	N/A	ND	PASS
Toluene	7 / 21	890	N/A	ND	PASS
Total Xylenes	50 / 160	2170	N/A	ND	PASS

Heavy Metals Analysis

Heavy metal analysis utilizing inductively coupled plasma-mass spectrometry (ICP-MS).

Method: QSP - (1160) Analysis of Heavy Metals by ICP-MS

HEAVY METALS TEST RESULTS - 06/06/2020 PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Cadmium	0.02 / 0.05	0.5	N/A	ND	PASS
Lead	0.04 / 0.1	0.5	N/A	ND	PASS
Arsenic	0.02 / 0.1	1.5	N/A	ND	PASS
Mercury	0.002 / 0.01	3	N/A	ND	PASS

Microbial Impurities Analysis

PCR AND PLATING

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbial impurities.

Method: QSP - (1221) Analysis of Microbial Impurities

MICROBIAL IMPURITIES TEST RESULTS (PCR) - 06/06/2020 PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Shiga toxin-producing *Escherichia coli*	*Detect*	**ND**	**PASS**
***Salmonella* spp.**	*Detect*	**ND**	**PASS**
Aspergillus fumigatus		NT	
Aspergillus flavus		NT	
Aspergillus niger		NT	
Aspergillus terreus		NT	

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbial impurities.

Method: QSP - (6794) Plating with 3M™ Petrifilm™

MICROBIAL IMPURITIES TEST RESULTS (PLATING)

COMPOUND	RESULT (cfu/g)
Aerobic Plate Count	NT
Total Yeast and Mold	NT