

CERTIFICATE OF ANALYSIS

DATE ISSUED 06/18/2020

SAMPLE NAME: CBD Borage Cream 20163_#18

Infused, Non-Inhalable

CULTIVATOR / MANUFACTURER

Business Name: License Number:

Address:

SAMPLE DETAIL

Batch Number: 20163 Sample ID: 200615L001 **DISTRIBUTOR**

Business Name: Shikai Products

License Number:

Address:

Date Collected: 06/15/2020 Date Received: 06/15/2020

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: 4.645 mg/g

Total Cannabinoids: 4.654 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 = Δ 9THC + (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

Mycotoxins: NT

Residual Solvents: PASS

Heavy Metals: PASS

Microbial Impurities (PCR): PASS

Microbial Impurities (Plating): ND

Foreign Material: NT

Water Activity: 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) too numerous to count >250 cfu/plate (TNTC), colony-forming unit (cfu)

pproved by: Josh Wurzer, President ate: 06/18/2020



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

TOTAL CANNABINOIDS: 4.654 mg/g

 $\begin{array}{l} Total \ Cannabinoids \ (Total \ THC) + (Total \ CBD) + \\ (Total \ CBG) + (Total \ THCV) + (Total \ CBC) + \\ (Total \ CBDV) + \Delta 8 THC + CBL + CBN \end{array}$

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

CANNABINOID TEST RESULTS - 06/16/2020

	COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
Ī	CBD	0.004 / 0.011	±0.2225	4.645	0.4645
	CBDV	0.002 / 0.007	±0.0005	0.009	0.0009
	Δ9ΤΗС	0.002 / 0.005	N/A	ND	ND
	Δ8ΤΗC	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
	СВС	0.003 / 0.010	N/A	ND	ND
	CBCa	0.001 / 0.004	N/A	ND	ND
	SUM OF CANNAE	BINOIDS		4.654 mg/g	0.4654%

Unit Mass: / Serving Size:

Δ9THC per Unit	TM	
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		
Total Cannabinoids per Unit		
Total Cannabinoids per Serving		

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





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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 - 06/17/2020 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	
lmazalil				NT	
Methiocarb				NT	
Methyl parathion				NT	
Mevinphos				NT	
Paclobutrazol				NT	
Propoxur				NT	
Spiroxamine			ΓIVI	NT	
Thiacloprid				NT	

CATEGORY 2 PESTICIDE TEST RESULTS - 06/17/2020 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 - 06/17/2020 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*			ТМ	NT	
Permethrin	0.09	20	N/A	ND	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





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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 - 06/18/2020 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 - 06/18/2020 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 - 06/15/2020 **⊘ 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





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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

Analysis conducted by $3M^{TM}$ Petrifilm and plate counts of microbial impurities.

Method: QSP - (6794) Plating with $3M^{TM}$ PetrifilmTM

MICROBIAL IMPURITIES TEST RESULTS (PCR) - 06/18/2020

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

MICROBIAL IMPURITIES TEST RESULTS (PLATING) - 06/18/2020 ND

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

