



# Full Spectrum Hemp-Derived CBG 2000mg CBG:CBD Tincture *Natural*

## Batch Specific Information

<b>Product Name:</b>	Kōkua CBG:CBD Tincture, 1000mg CBG 1000mg CBD, <i>Natural</i>
<b>Product Description:</b>	Full Spectrum Oil-Based Tincture, 1 fl oz (30 mL)
<b>Product Ingredients:</b>	Coconut MCT Oil*, Full Spectrum Hemp Extract^
<b>Batch No.:</b>	BP01T35
<b>Best if Used By:</b>	July 2021
<b>Date of Production:</b>	June 2020
<b>Hemp Extraction Method:</b>	CO <sub>2</sub> Extraction, Winterization
<b>Farm Location:</b>	Crestwood, Kentucky

**Produced By:**  
Botanical Processing LLC  
PO Box 32127  
Louisville, KY 40232  
(502) 742-7151  
customer@botanical-processing.com  
aloha@kokuacreations.com

\*USDA Certified Organic Ingredient  
^Produced in-house from locally sourced hemp flower

This product contains less than 0.3% THC.  
These statements have not been evaluated by the Food  
and Drug Administration. This product is not intended to  
diagnose, treat, cure, or prevent any disease.



**Marie Grinstead, PhD**  
*Born in Hawai'i, Raised in Kentucky.*

## ABOUT KŌKUA

In 2015, Marie founded Botanical Processing, a CO<sub>2</sub> extraction laboratory, while working towards her doctorate in engineering. As an extraction scientist, she focuses on researching and developing optimal CO<sub>2</sub> extraction methods as part of producing safe and effective natural products. Marie is humbled by the opportunity to share her wellness creations, and Kōkua is uniquely made using her preferred ingredients and methods.

With no better way to express her motivation behind the brand, she chose the Hawaiian word, Kōkua, meaning *the desire to help, aid, and assist others*. When she is not in the lab, Marie spends time with her family and devotes efforts towards her dance studio, 'Ike Roa, which exists to share and perpetuate the beautiful, diverse cultures of Polynesia.

**Kōkua** *the deep, self-less desire to help, aid, and assist others.*

**KokuaCreations.com**



Sample: MO00728002-001  
Harvest/Lot ID: BP01T35  
Seed to Sale #N/A  
Batch Date :N/A  
Batch#: BP01T35  
Sample Size Received: 3 ml  
Retail Product Size: 30 ml  
Ordered : 07/27/20  
Sampled : 07/27/20  
Completed: 07/29/20 Expires: 07/29/21  
Sampling Method: SOP Client Method

# Certificate of Analysis

Jul 29, 2020 | Botanical Processing LLC

4484 Robards Lane  
Louisville, Kentucky, 40218, United States



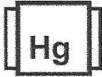









**PASSED**

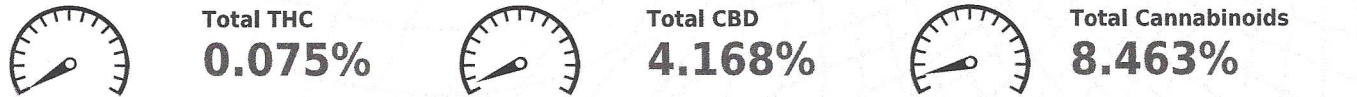
Page 1 of 1

PRODUCT IMAGE SAFETY RESULTS

MISC.

									
	Pesticides NOT TESTED	Heavy Metals NOT TESTED	Microbials NOT TESTED	Mycotoxins NOT TESTED	Residuals Solvents NOT TESTED	Filtth NOT TESTED	Water Activity NOT TESTED	Moisture NOT TESTED	Terpenes NOT TESTED

CANNABINOID RESULTS



	D9-THC	THCA	CBD	CBDa	D8-THC	THCV	CBN	CBDV	CBC	CBG	CBGA
	0.075%	ND	3.966%	0.231%	ND	ND	ND	0.081%	0.185%	3.925%	ND
	0.750 mg/g	ND	39.660 mg/g	2.310 mg/g	ND	ND	ND	0.810 mg/g	1.850 mg/g	39.250 mg/g	ND
LOD	0.0001 %	0.001 %	0.0001 %	0.001 %	0.001 %	0.001 %	0.001 %	0.001 %	0.001 %	0.001 %	0.001 %

Cannabinoid Profile Test

Analyzed by 19	Weight 3.0276g	Extraction date : NA	Extracted By : NA
Analysis Method -SOP.T.40.020, SOP.T.30.050		Reviewed On - 07/29/20 15:40:07	
Analytical Batch -MO000853POT		Instrument Used : HPLC Potency Analyzer	Batch Date : 07/28/20 16:13:32
Reagent	Dilution	Consums. ID	
	40		

Full spectrum cannabinoid analysis utilizing High Performance Liquid Chromatography with UV detection (HPLC-UV). (Method: SOP.T.30.050 for sample prep and Shimadzu High Sensitivity Method SOP.T.40.020 for analysis. LOQ for all cannabinoids is 1 mg/L. Measurement of Uncertainty: 2.7%

This report shall not be reproduced, unless in its entirety, without written approval from Kaycha Labs. This report is an Kaycha Labs certification. The results relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Void after 1 year from test end date. Cannabinoid content of batch material may vary depending on sampling error. IC=In-control QC parameter. NC=Non-controlled QC parameter. ND=Not Detected, NA=Not Analyzed. ppm=Parts Per Million, ppb=Parts Per Billion. Limit of Detection (LoD) and Limit Of Quantitation (LoQ) are terms used to describe the smallest concentration that can be reliably measured by an analytical procedure. RPD=Reproducibility of two measurements. Action Levels are State determined thresholds for human safety for consumption and/or inhalation. The result >99% are variable based on uncertainty of measurement (UM) for the analyte. The UM error is available from the lab upon request. The "Decision Rule" for the pass/fail does not include the UM. The limits are based on F.S. Rule 64-4.310.

David Greene  
Lab Director  
State License # 19-05-02P  
ISO Accreditation #  
17025:2017 #97164

  
Signature

07/29/2020  
Signed On

# CERTIFICATE OF ANALYSIS

## ISO/IEC 17025:2017 ACCREDITATION #103104



Order #: 56748  
 Order Name: CBD + CBG  
 Tincture  
 Batch#: BP01T35  
 Received: 06/26/2020  
 Completed: 07/08/2020



Botanical Processing LLC  
 marie@botanical-processing.com



### PESTICIDE ANALYSIS:

GSL SOP 401

PREPARED: 06/29/2020 16:41:17

LCMS-MS - Shimadzu LCMS-8060

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)	Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
ABAMECTIN B1A	0.100	N/D	0.005	0.001	IMIDACLOPRID	5.000	N/D	0.005	0.001
ACEPHATE	0.100	N/D	0.001	0.001	KRESOXIM-METHYL	0.100	N/D	0.010	0.005
ACEQUINOCYL	0.100	N/D	0.001	0.001	MALATHION	0.500	N/D	0.005	0.001
ACETAMIPRID	0.100	N/D	0.005	0.001	METALAXYL	2.000	N/D	0.001	0.001
ALDICARB	0.100	N/D	0.005	0.001	METHIOCARB	0.100	N/D	0.005	0.001
AZOXYSTROBIN	0.100	N/D	0.001	0.001	METHOMYL	1.000	N/D	0.001	0.001
BIFENAZATE	0.100	N/D	0.005	0.001	MEVINPHOS	0.100	N/D	0.001	0.001
BIFENTHRIN	3.000	N/D	0.005	0.001	MYCLOBUTANIL	0.100	N/D	0.005	0.001
BOSCALID	0.100	N/D	0.005	0.001	NALED	0.100	N/D	0.005	0.001
CARBARYL	0.500	N/D	0.003	0.001	OXAMYL	0.500	N/D	0.001	0.001
CARBOFURAN	0.100	N/D	0.001	0.001	PACLOBUTRAZOL	0.100	N/D	0.005	0.001
CHLORANTRANILIPROLE	10.000	N/D	0.005	0.005	PERMETHRINS	0.500	N/D	0.005	0.001
CHLORPYRIFOS	0.100	N/D	0.001	0.001	PHOSMET	0.100	N/D	0.005	0.001
CLOFENTEZINE	0.100	N/D	0.001	0.001	PIPERONYL	3.000	N/D	0.001	0.001
DAMINOZIDE	0.100	N/D	0.005	0.001	BUTOXIDE				
DIAZINON	0.100	N/D	0.001	0.001	PRALLETHRIN	0.100	N/D	0.005	0.005
DICHLORVOS	0.100	N/D	0.005	0.001	PROPICONAZOLE	0.100	N/D	0.010	0.005
DIMETHOATE	0.100	N/D	0.001	0.001	PROPOXUR	0.100	N/D	0.001	0.001
DIMETHOMORPH	2.000	N/D	0.005	0.001	PYRETHRINS				
ETHOPROPHOS	0.100	N/D	0.001	0.001	(PYRETHRIN I)	0.500	N/D	0.005	0.005
ETOFENPROX	0.100	N/D	0.001	0.001	PYRIDABEN	0.100	N/D	0.005	0.001
ETOXAZOLE	0.100	N/D	0.010	0.005	SPINETORAM	0.100	N/D	0.001	0.001
FENHEXAMID	0.100	N/D	0.005	0.001	SPINOSAD	0.100	N/D	0.001	0.001
FENOXYCARB	0.100	N/D	0.005	0.001	SPIROMESIFEN	0.100	N/D	0.005	0.001
FENPYROXIMATE	0.100	N/D	0.001	0.001	SPIROTETRAMAT	0.100	N/D	0.001	0.001
FIPRONIL	0.100	N/D	0.003	0.001	SPIROXAMINE	0.100	N/D	0.001	0.001
FLONICAMID	0.100	N/D	0.025	0.010	TEBUCONAZOLE	0.100	N/D	0.005	0.001
FLUDIOXONIL	0.100	N/D	0.003	0.001	THIACLOPRID	0.100	N/D	0.001	0.001
HEXYTHIAZOX	0.100	N/D	0.005	0.001	THIAMETHOXAM	5.000	N/D	0.001	0.001
IMAZALIL	0.100	N/D	0.005	0.001	TRIFLOXYSTROBIN	0.100	N/D	0.001	0.001

N/D = Not Detected, A/LOQ = Above LOQ Level, B/LOQ = Below LOQ Level, B/LOD = Below LOD Level

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Ben Witten, MS, MT., Lab Director

Green Scientific Labs  
 info@greenscientificlabs.com  
 1-833 TEST CBD



Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the original client of record.

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## ISO/IEC 17025:2017 ACCREDITATION #103104



Order #: 56748  
 Order Name: CBD + CBG  
 Tincture  
 Batch#: BP01T35  
 Received: 06/26/2020  
 Completed: 07/08/2020



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 marie@botanical-processing.com



### RESIDUAL SOLVENTS:

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405  
 Prepared: 06/26/2020 17:22:58

Residual Solvent	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
1,1-DICHLOROETHENE	8	N/D	0.63	0.63
1,2-DICHLOROETHANE	2	N/D	0.12	0.02
ACETONE	5,000	N/D	140	20
ACETONITRILE	410	N/D	25	1
BENZENE	1	N/D	1	0.5
BUTANE	5,000	N/D	50	10
CHLOROFORM	1	N/D	1	0.5
CIS 1,2-DICHLOROETHENE	5	N/D	0.73	0.18
ETHANOL	5,000	N/D	140	20
ETHYL ACETATE	5,000	N/D	140	20
ETHYL ETHER	5,000	N/D	140	20
ETHYLENE OXIDE	1	N/D	0	0
ISOPROPYL ALCOHOL	5,000	N/D	140	20
METHANOL	3,000	N/D	100	20
METHYLENE CHLORIDE	125	N/D	0.15	0.15
N-HEPTANE	5,000	N/D	140	20
N-HEXANE	290	N/D	18	10
PENTANE	5,000	N/D	140	20
PROPANE	5,000	N/D	20	1
TOLUENE	890	N/D	53	1
TRANS 1,2-DICHLOROETHENE	5	N/D	0.73	0.18
TRICHLOROETHENE	1	N/D	1	0.5
XYLENES	150	N/D	130	20

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### Microbial Analysis:

Microbial Analysis GSL SOP 406

Uploaded: 07/07/2020 17:47:05

PCR - Agilent AriaMX  
 Test

Test	Test Method Used	Device Used	LOD	Allowable Criteria	Actual Result	Pass/Fail
STEC E.COLI*	USP 61/62†	ARIAMX PCR	2 COPIES OF DNA	PRESENCE / ABSENT	BELOW LOD	PASS
SALMONELLA*	USP 61/62†	ARIAMX PCR	5 COPIES OF DNA	PRESENCE / ABSENT	BELOW LOD	PASS
ASPERGILLUS	USP 61/62†	ARIAMX PCR	ASP_LOD***	PRESENCE / ABSENT	BELOW LOD	PASS
YEAST AND MOLD	USP 61/62†	ARIAMX PCR	363.05518 CFU/G**	1,000	BELOW THRESHOLD	PASS
TOTAL AEROBIC BACTERIA	USP 61/62†	ARIAMX PCR	0.25316 CFU/G**	10,000	BELOW THRESHOLD	PASS
COLIFORM	USP 61/62†	ARIAMX PCR	3.41539 CFU/G**	100	BELOW THRESHOLD	PASS
ENTEROBACTERIACEAE	USP 61/62†	ARIAMX PCR	0.32951 CFU/G**	100	BELOW THRESHOLD	PASS

† USP 61 (enumeration of bacteria TAC, TYM, and ENT/Coliform), USP 62 (identifying specific species E.coli Aspergillus etc)

\* STEC and Salmonella run as Multiplex

\*\* CFU/g Calculation based on Select Category Type Gummy MIP/Extract Flower matrix

\*\*\* Flavus = 2 Copies of DNA / Fumigatis = 2 Copies of DNA Niger = 20 Copies of DNA / Terrus = 10 copies of DNA

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### Mycotoxin Analysis:

LC-MS - Shimadzu LCMS-8060  
GSL SOP 401

Uploaded: 06/30/2020 12:08:58

Analyte	Action Lvl (ppb)	Results (ppb)
AFLATOXIN B1	20	N/D
AFLATOXIN B2	20	N/D
AFLATOXIN G1	20	N/D
AFLATOXIN G2	20	N/D
OCHRATOXIN A	20	N/D

LOQ is 4ppb, LOD is 1ppb

### Heavy Metals Analysis:

ICP-MS - Shimadzu ICPMS-2030  
GSL SOP 403

Uploaded: 07/02/2020 16:24:37

Metal	Action Level (ppb)	Result (ppb)
ARSENIC (AS)	200	B/LOQ
CADMIUM (CD)	200	B/LOQ
MERCURY (HG)	100	B/LOQ
LEAD (PB)	500	B/LOQ

Lower Limit of Quantitation (LOQ) is 75 ppb

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