JOY ORGANICS

CERTIFICATE OF ANALYSIS

PRODUCT NAME:	Joy Organics Dog Chews
PRODUCT STRENGTH:	2 mg / chew
FILL LOT NUMBER:	2021801
DOG TREAT LOT NUMBER*:	CODSC19-15
BEST BY DATE	03/04/2021

Click on the links to view third-party reports

Physical Atttributes

Test	Method	Specification	Results
Color	SOP-100	Brown	PASS
Odor	SOP-100	Beef, grains, somewhat yeasty	PASS
Appearance	SOP-100	Squat cylindrical dog treats a plastic amber container	PASS
Primary Package Eval.	SOP-132	Container clean and free of filth. Container caps tight and shrin bands intact	PASS
Secondary Package Eval.	SOP-132	Labeling Compliance Checked, Cartons sturdy and clean. Suffici cushion material exists. Box taped and secure.	PASS

Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
Potency - Total CBD	SOP-111	1.9-2.5 mg CBD / ea. LOQ**: 10 PPM† (0.001%)	2.2mg/chew	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	ND	PASS
Compliant Pesticide Panel	SOP-111	WIP-100008 : Product specification for Bu Dog Treats, Oregon Action limits apply	ND	PASS
Microbial - Full Panel	SOP-111	Complies with USP 61/62	ND	PASS
CA Compliant Heavy Metal Panel	SOP-111	Arsenic (As): ≤1.5 PPM Cadmium (Cd): ≤0.5 PPM Mercury (Hg): ≤1.0 PPM Lead (Pb): ≤0.5 PPM	ND	PASS

* *Level of Quantitation, † Parts Per Million

Quality Certified by: *Kei Horikawa*   08.17.2020

Kei Horikawa   Date
Quality Control Manager

119 W. Oak St. Fort Collins, CO 80524
Tel: (833) 569-7223 www.joyorganics.com

FO-106 Certificate of Analysi
Rev. 1.1 - Effective Date: 2/20/20

CONFIDENTIAL EXTRACTOR

CERTIFICATE OF INTERNAL ANALYSIS

TYPE: Full Spectrum K9 Soft Chew
BATCH No: CODSC19-15   **Lot No:** 2546889
Date of Analysis: 04Mar2019
Total Active Phytocannabinoid-Rich Hemp Oil per Soft Chew: 2.2mg

POTENCY RESULTS:

Cannabinoid	Wt. (%)	(mg/g)
CBD	0.05	0.50
CBG	< 0.03	< 0.30
CBN	< 0.03	< 0.30
THC	ND**	ND**
CBC	< 0.03	< 0.30
THC-A	ND**	ND**
CBD-A	< 0.03	< 0.30
MAX THC	ND**	ND**
MAX CBD	0.05	0.50
TOTAL ACTIVE	0.05	0.50

Residual Solvents*:

Propane	Compliant with USP<467>	Pentane	Compliant with USP<467>
Isobutane	Compliant with USP<467>	Isopropanol	Compliant with USP<467>
Butane	Compliant with USP<467>	Hexane	Compliant with USP<467>
Ethanol	Compliant with USP<467>	Acetone	Compliant with USP<467>

Heavy Metals*:

Cadmium	Compliant with USP<233>
Lead	Compliant with USP<233>
Arsenic	Compliant with USP<233>
Mercury	Compliant with USP<233>

TERPENE RESULTS*:

	Wt. (%)		Wt. (%)
β-Bisabolene	< 0.1	Camphene	< 0.1
β-Farnesene	< 0.1	E-Farnesene	< 0.1
Guaiol	< 0.1	Farnesol	< 0.1
β-Maaliene	< 0.1	α-Bisabolol	< 0.1
Calarene	< 0.1	P-Cymene	< 0.1
β-Caryophyllene	< 0.1	Linalool	< 0.1
α-Humulene	< 0.1	Myrcene	< 0.1
Cadinene	< 0.1	Phytol	< 0.1
α-Gurjunene	< 0.1	Isopulegol	< 0.1
d-Limonene	< 0.1	Terpinene	< 0.1
Nerolidol	< 0.1	Geraniol	< 0.1
α-Pinene	< 0.1	Myrcene	< 0.1
Aristolene	< 0.1	γ-Terpinene	< 0.1
Eucalyptol	< 0.1	δ-3-Carene	< 0.1

Pesticides*:

Acequinocyl	ND***	Spinosad	ND***
Pyrethrium	ND***	Spirotetramat	ND***
Spiromesifen	ND***	Bifenazate	ND***
Abamectin	ND***	Fenoxycarb	ND***
Imidacloprid	ND***	Paclobutrazol	ND***

Test ID: 4151945.006 tested by Botanacor

*Batches are sent out regularly for testing, not all batches tested

** ND = Not Detected using a validated high-performance liquid chromatography test method, LOD = 0.03%

***Pesticides are tested by a third party lab, ND = Not Detected at the Reporting Limit (RL)

Batch Release:

Chemist: Ashley Orosco

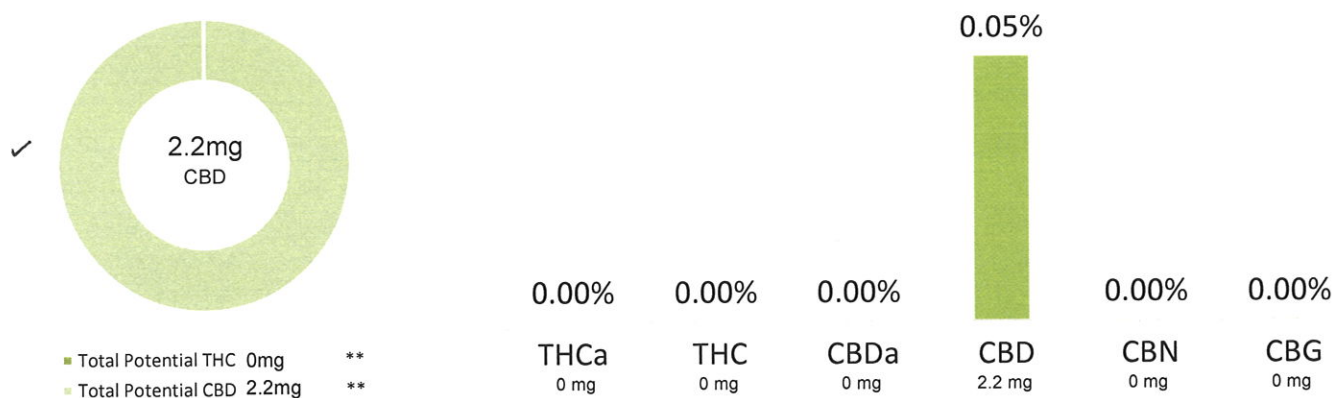*Ashley Orosco (signature)* 04Mar2019

Manager: Kathryn Sears

Kathryn Sears (signature) 04Mar2019

botanacor

CERTIFICATE OF ANALYSIS

2546889

Batch ID:	N/A	**Test ID:**	4151945.006
Reported:	4-Mar-2019	**Method:**	TM01
Type:	Edible		
Test:	Potency		

CANNABINOID PROFILE

2.2mg
CBD

0.05%

- ■ Total Potential THC 0mg   **
- ■ Total Potential CBD 2.2mg   **

THCa	THC	CBDa	CBD	CBN	CBG
0.00%	0.00%	0.00%		0.00%	0.00%
0 mg	0 mg	0 mg	2.2 mg	0 mg	0 mg

** Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.
   Total THC = THC + (THCa *(0.877)) and Total CBD = CBD + (CBDa *(0.877))
% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

NOTES:
Free from visual mold, mildew, and foreign matter.
# of Servings = 1, Sample/Fill Weight = 4.29656666666667g

FINAL APPROVAL

Sam Smith
4-Mar-2019
3:12 PM

PREPARED BY / DATE

David Green
4-Mar-2019
3:22 PM

APPROVED BY / DATE

ilac-MRA

A2LA ACCREDITED

Certificate #4329.02

reviewed
apo 04mar2019

ACCU Bio-Chem LABORATORIES

1755 Victory Blvd. Glendale, CA 91201
Tel: 818.547.3221   Email: acculab@accubclabs.com
www.accubclabs.com

To:

COA No.:	**M-JO080720-01**
COA Date:	**08/12/20**
Sample Rec'd Date:	**08/07/20**
ISO/IEC 17025:2017 Standard	**Page 1 of 1**

MICROBIOLOGICAL CERTIFICATE OF ANALYSIS

Sample Description: *DOG TREATS*
Sample Batch/Lot No.:   *2021801*
ACCU Laboratory Ref.:   *0787013*
Purchase Order No.:   *N/A*
Test Method: *USP*
Notes: *N/A*

Analysis:	Results:
Total Plate Count:	**2350 CFU / g**
Yeast & Mold Count:	**<10 CFU / g**
Bile-Tolerant g- Bacteria (coliforms):	**Negative**
Escherichia coli:	**Negative**
Salmonella:	**Negative**

Approved By: _____

Vano Baghdasarian, Laboratory Director