# **Certificate of Quality Assurance**

PRODUCT NAME: Orange Tincture PRODUCT STRENGTH: 1000 mg LOT NUMBER: TO1000-406 OIL BATCH NUMBER: CON019-06

**DATE OF MANUFACTURE:** 1/31/19 *Expiration date is 18 months under sealed conditions.* 

**DATE OF ANALYSIS: 1/31/19** 

**ACTIVE INGREDIENT:** Phytocannabinoid-Rich Hemp Oil

INACTIVE INGREDIENTS: Fractionated Coconut Oil (MCT), Orange Essential Oil



## Terpene Results\*

Terpene Results						
Compound	Weight %	Compound	Weight %			
β-Bisabolene	1.0-3.0	Camphene	0.1-0.2			
β-Farnesene	1.0-2.0	E-Farnesene	0.1-0.2			
Gualol	0.5-2.0	Farnesol	0.1-0.2			
β-Maaliene	0.5-2.0	α-Bisabolol	< 0.1			
Calarene	0.5-1.5	p-Cymene	< 0.1			
β-Caryophyllene	0.1-1.0	Linalool	< 0.1			
α-Humulene	0.1-1.0	Myrcene	< 0.1			
Cadinene	0.1-1.0	Phytol	< 0.1			
α-Gurjunene	0.1-0.5	Isopulegol	< 0.1			
d-Limonene	0.1-0.5	Terpinene	< 0.1			
Nerolidol	0.1-0.5	Geraniol	< 0.1			
α-Pinene	0.1-0.5	Myrcene	< 0.1			
Aristolene	0.1-0.3	γ-Terpinene	< 0.1			
Eucalyptol	0.1-0.2	δ-3-Carene	< 0.1			

# **Physical Attributes of Raw Hemp Oil**

Attribute	Acceptance Criteria	Result
Appearance Viscous Dark Amber Oil Possible Crystal Formation		Conforms
Aroma	Characteristic Hemp Aroma	Conforms
Dissolution	Dissolution Not Cloudy or Turbid, Characteristic Color	
Microbial Testing	Total Aerobic Count <2000 cfu/g Total Yeast and Mold <2000 cfu/g	Conforms

## I Potency of Raw Hemp Oil

Cannabinoid	Weight %
CBD	92.12
CBG	<0.03
CBN	<0.03
THC	ND
СВС	<0.03
THC-A	ND
CBD-A	<0.03

## Pesticides\*

Compound	Result	Compound	Result	
Acequinocil	ND	Spinosad	ND	
Pyrethrium	ND	Spirotetramat	ND	
Spiromesifin	ND	Bifenazate	ND	
Abamectin	ND	Fenoxycarb	ND	
Imidacloprid	ND	Paclobutrazol	ND	

## **Residual Solvents\***

Solvent	Weight %
Acetone	Compliant with USP<467>
Butane	Compliant with USP<467>
Ethanol	Compliant with USP<467>
Hexane	Compliant with USP<467>
Isobutane	Compliant with USP<467>
Isopropanol	Compliant with USP<467>
Pentane	Compliant with USP<467>

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Expiration date is 18 months under sealed conditions.

**DATE OF ANALYSIS: 1/31/19** 

ACTIVE INGREDIENT: Phytocannabinoid-Rich Hemp Oil

INACTIVE INGREDIENTS: Fractionated Coconut Oil (MCT), Orange Essential Oil



Heavy Metals\*

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

**Analysis Results for Finished Product** 

Attribute	Acceptance Criteria	Result
Appearance	Clear Colorless to Light Yellow Liquid	Conforms
Aroma	Characteristic Orange Aroma	Conforms
Cannabidiol Content	Label Claim ± 10%	Conforms
THC Content	None Detected	Conforms

\* Results based on testing of multiple batches of hemp oil raw material.

Certified by:

Matthew Plenert, Ph.D

Head Chemist and Quality Manager

2-5-19



# CERTIFICATE OF ANALYSIS

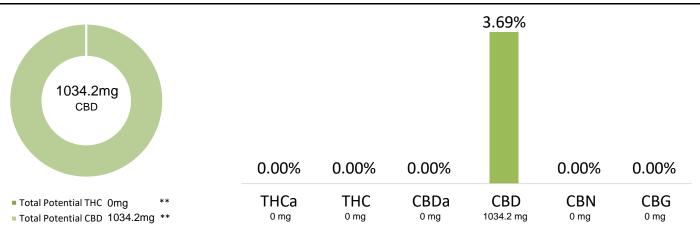
prepared for: JOY ORGANICS

1306 Blue Spruce Dr. Unit B-1 Ft. Collins, CO 80524

## Tincture 1000 Orange

Batch ID:	TO1000-406	Test ID:	2024442.006
Reported:	27-Feb-2019	Method:	TM01
Туре:	Edible		
Test:	Potency		

## **CANNABINOID PROFILE**



<sup>\*\*</sup> 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 = 28.00389g

## FINAL APPROVAL

Sam Smith 27-Feb-2019 12:41 PM

David Green 27-Feb-2019 1:45 PM

PREPARED BY / DATE

APPROVED BY / DATE

Testing results are based solely upon the sample submitted to Botanacor Services, LLC, in the condition it was received. Botanacor Services, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Services, LLC. ISO/IEC 17025:2005 Accredited A2LA Certificate Number 4329.02







879 Federal Blvd Denver, CO 80204 (303) 427-2379

License Number: 405-00008

405R-00011

# **INFUSED II LABORATORY REPORT**

Customer Name: Triple C Ranch Ltd (Result Group)

Customer License: 403H-75142
Batch Number: TO1000-406

METRC Tag: 1A4000712681366000000687

Instrument Name: HPLC 1100-2

Product Name: Tincture 1000 Orange

Product Type: Liquid Edible

Sample ID: 297489

Date Received: 02/08/2019

Test Date: 03/06/2019

Report Date: 03/06/2019

ACIDIC NEUTRAL COMPOUND mg\unit COMPOUND mg\unit		Conversion Ratio <sup>1</sup>				
CBDVA	ND*	CBDV	ND*		CBDV	NR*
THCVA	ND*	THCV	ND*		THCV	NR*
CBDA	ND*	CBD	952.9		CBD	100%
THCA	ND*	THC	ND*		THC	NR*
CBCA	ND*	CBC	ND*		СВС	NR*
CBGA	ND*	CBG	ND*		CBG	NR*
CBNA	ND*	CBN	ND*		CBN	NR*

## Notes:

<sup>&</sup>lt;sup>1</sup> Conversion ratio indicates the amount of neutral cannabinoid compared directly to its acidic counterpart. A number close to 1 means a high neutral content. A number close to 0 indicates a high acidic cannabinoid content.



<sup>\*</sup> None Reported (NR) because the compound exists at or below the limit of quantitation but above the limit of detection.

<sup>\*</sup> None Detected (ND) because the compound exists at or below the limit of detection.

<sup>\*</sup> Potency (SOP 020)

<sup>\*</sup> Sample Condition deemed acceptable upon receipt by PhytaTech. Sampling done by outside party.

<sup>\*</sup> Units of % are (mass/mass) and reflect numbers as a fraction of 100.



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# **PESTICIDES LABORATORY REPORT**

Customer Name: Triple C Ranch Ltd (Result Group)

Customer License: 403H-75142
Batch Number: TO1000-406

METRC Tag: 1A4000712681366000000687

Instrument Name: HPLC 1050

Product Name: Tincture 1000 Orange

Product Type: Liquid Edible

Sample ID: 297489

Date Received: 02/08/2019

Test Date: 02/12/2019

Report Date: 02/12/2019

PESTICIDE	ppb
Abamectin	ND*
Avermectin B1b	ND*
Azoxystrobin	ND*
Bifenazate	ND*
Etoxazole	ND*
Imazalil	ND*
Imidacloprid	ND*
Malathion A	ND*
Myclobutanil	ND*
Cis Permethrin	ND*
Trans Permethrin	ND*
Spinosyn A	ND*
Spinosyn D	ND*
Spiromesifen	ND*
Spirotetramat	ND*
Tebuconazole	ND*

## Notes:

Stephen Goldman
Laboratory Director

<sup>\*</sup> None Reported (NR) because the compound exists at or below the detection limit of the method.

<sup>\*</sup> None Detected (ND) because the compound was not detected.



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405R-00011

# **MICROBIAL LABORATORY REPORT**

Customer Name: Triple C Ranch Ltd (Result Group) Product Name: Tincture 1000 Orange

Customer License: 403H-75142 Product Type: Liquid Edible

Batch Number: TO1000-406 Sample ID: 297489

METRC Tag: 1A4000712681366000000687 Date Received: 02/08/2019

Instrument Name: Microbial Lab Test Date: 02/12/2019

Report Date: 02/12/2019

#### MICROBIAL CONTAMINATION \*

STEC ND
Salmonella ND

Total Yeast & Molds ND cfu/g

## Notes:

Stephen Goldman
Laboratory Director

<sup>\*</sup> None Detected (ND) because the compound was not detected.

<sup>\*</sup> Microbial Contamination (SOPs 029, 030, 039)

<sup>\*</sup> Sample Condition deemed acceptable upon receipt by PhytaTech. Sampling done by outside party.

<sup>\*</sup> E. coli & Salmonella measured using qPCR. Total Yeast & Mold (TYMC) is a plating technique. The regulatory limit for TYMC is 10,000 cfu/g or 10<sup>4</sup>. CFU/g = colony forming unit per gram.



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DOR#: 405R-00011 & 405-00008
info@phytatech.com

Date Received: 02.08.2019 Date Lab Test: 02.14.2019 Date Reported: 02.14.2019

Company Name: Triple C Ranch Ltd Company License: 403H-75142

Sample Type: Tinctures, Creams & Softgels

\*ND: None Detected or below reportable threshold All data in the following table is in parts per million (ppm).

Sample	Sample	METRC	Arsenic	Lead	Cadmium	Mercury
		#				
1000 Tranquil Mint	297472	0671	ND	ND	ND	ND
1000 Tranquil Mint	297473	0672	ND	ND	ND	ND
500 Tranquil Mint	297474	0673	ND	ND	ND	ND
250 Tranquil Mint	297475	0674	ND	ND	ND	ND
250 Tranquil Mint	297476	0675	ND	ND	ND	ND
Softgels 10 mg	297477	0676	ND	ND	ND	ND
Softgels 25 mg melatonin	297478	0677	ND	ND	ND	ND
Softgels 10 mg	297479	0678	ND	ND	ND	ND
Softgels 10 mg	297480	0679	ND	ND	ND	ND
Softgels 10 mg	297481	0680	ND	ND	ND	ND
Softgels 25 mg	297482	0681	ND	ND	ND	ND
Pain relieving pain cream 200 mg	297483	0658	ND	ND	ND	ND
Energy drink mix 1	297484	0682	ND	ND	ND	ND
Vape Juice Strawberry Kiwi	297485	0683	ND	ND	ND	ND
Vape Juice Chocolate Mint	297486	0684	ND	ND	ND	ND
Vape Juice Blue	297487	0685	ND	ND	ND	ND

Raspberry						
500 Lemon	297488	0686	ND	ND	ND	ND
1000 Orange	297489	0687	ND	ND	ND	ND
Vape Juice Melon Ball	297490	0688	ND	ND	ND	ND
Vape Juice Sour Apple	297491	0689	ND	ND	ND	ND
Vape Juice Natural	297492	0690	ND	ND	ND	ND
Softgels 25 mg	297493	0691	ND	ND	ND	ND
250 Natural	297494	0692	ND	ND	ND	ND
Salve 1 oz	297495	0693	ND	ND	ND	ND
500 Tranquil Mint	297496	0694	ND	ND	ND	ND
Salves 1 oz	297497	0695	ND	ND	ND	ND
500 Orange	297498	0696	ND	ND	ND	ND
Joy Skin Eye Serum	297499	0697	ND	ND	ND	ND
Joy Skin Face Serum	297500	0698	ND	ND	ND	ND
Joy Skin Night Cream	297501	0699	ND	ND	ND	ND
Joy Skin Day Cream	297502	0700	ND	ND	ND	ND
500 Natural	297503	0901	ND	ND	ND	ND

NOTES: The State of Colorado mandates the following levels for heavy metals: Lead (1 ppm), Arsenic (0.4 ppm), Cadmium (0.4 ppm), and Mercury (0.2 ppm). This testing is for R&D purposes only.