



This report cannot be used for OHA or OLCC compliance requirements.

This is an amended version of the report# 055530-00.  
Reason: Results reported in milligrams per 2oz.

**Customer:** Columbia Bitters Company  
**Product identity:** Hibiscus Mint CBD Bitters  
**Client/Metric ID:** .  
**Sample Date:** 11/27/18 15:30  
**Laboratory ID:** 18-010823-0001  
**Relinquished by:** Gabriel Villarreal  
**Temp:** 20.6 °C  
**Serving Size:** 56.7g (2oz)

**Sample Results**

Potency	Method J AOAC 2015 V98-6	Units mg/serving	Batch 1807545	Analyze 11/28/18 10:27 AM			
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
CBC-A per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
CBC-Total per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	5.32	11/28/18	J AOAC 2015 V98-6	
CBD per 56.7g	341		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
CBD-A per 56.7g	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
CBD-Total per 56.7g	341		mg/5.5g	5.32	11/28/18	J AOAC 2015 V98-6	
CBDV per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
CBDV-A per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
CBDV-Total per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	5.29	11/28/18	J AOAC 2015 V98-6	
CBG per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
CBG-A per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
CBG-Total per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	5.32	11/28/18	J AOAC 2015 V98-6	
CBL per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
CBN per 56.7g	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
Δ8-THC per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
Δ9-THC per 56.7g	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
THC-A per 56.7g	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
THC-Total per 56.7g	< LOQ		mg/5.5g	5.32	11/28/18	J AOAC 2015 V98-6	
THCV per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
THCV-A per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	2.84	11/28/18	J AOAC 2015 V98-6	
THCV-Total per 56.7g <sup>†</sup>	< LOQ		mg/5.5g	5.29	11/28/18	J AOAC 2015 V98-6	

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Pixis quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be kept a maximum of 15 days from the report date unless prior arrangements have been made.



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**Abbreviations**

**Limits:** Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220

**Limit(s) of Quantitation (LOQ):** The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

**Units of Measure**

% = Percentage of sample

% wt =  $\mu\text{g/g}$  divided by 10,000

Approved Signatory

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Derrick Tanner  
General Manager



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## Cannabis Chain of Custody Record

### PRICES AND CHARGING

Prices to be charged for work performed for CUSTOMER are those currently published in the Columbia Food Laboratories, Inc. DBA Pixis Labs (herein referred to as "the LAB", where Columbia Food Laboratories, Inc. & Pixis Labs can be used interchangeably) standard price book unless otherwise agreed in writing by the CUSTOMER and the LAB. CUSTOMER must notify the LAB of price quotation at the time of the transfer of sample(s) to the LAB. Any cancellation of testing requirements will result in charges being assessed on all testing completed prior to the notice of cancellation. Unless otherwise agreed upon, samples containing hazardous materials will be shipped back to client at their expense, or disposed of at a certain fee, waste category dependent. Price quotes are valid for one year after initial quote date.

### DELIVERY AND LIABILITY LIMITATIONS

The specific format of the goods will be defined by the CUSTOMER to the LAB upon delivery of the sample(s) to the LAB. The LAB will analyze samples provided by CUSTOMER as requested by CUSTOMER in accordance with the procedures documented in the Quality Assurance Plan (QAP). Samples are retained for 15 days. If additional time is desired, then a written request is required, and an additional monthly fee will apply.

### CONFIDENTIALITY

The LAB will treat all information regarding work performed for CUSTOMER as proprietary and confidential. No CUSTOMER information will be released to third party persons without the written request of the CUSTOMER.

### LIMITATION OF LIABILITY AND WARRANTY

The LAB gives no warranty, express or implied, or of fitness for a particular purpose, in connection with its analytical testing or reporting. Any liability of the LAB to CUSTOMER or any third party shall be limited to the cost of analysis charged to the CUSTOMER.

### PAST DUE ACCOUNTS

Credit line account are payable within 30 days. Accounts that are 60 days past due will incur 1.5% per month on all past due sums until paid in full. Customer agrees to pay the interest as a service charge and all the LAB's collection costs, including reasonable attorney fees.

### EXPERT TESTIMONY AND COURT APPEARANCES

In the event CUSTOMER requires further written opinion or testimony of any employee of the LAB, including response to a subpoena issued by CUSTOMER or any third person, the CUSTOMER agrees to pay additional fees and expenses as may be reasonably assessed by the LAB.

### ALTERNATIVE DISPUTE RESOLUTION (ADR)

Any disputes arising out of this Agreement or the analytical testing or reporting by the LAB shall be settled through mediation and/or arbitration rather than litigation, and the cost of the ADR shall be borne equally by both parties.

### APPLICABLE LAW

Legal matters arising from work performed by the LAB for CUSTOMER will be construed and interpreted in accordance with the laws for the state of OREGON. Samples are being received with the full understanding that they are in compliance with state and federal law.



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**Laboratory Quality Control Results**

J AOAC 2015 V98-6		Batch ID: 1807545								
Laboratory Control Sample										
Analyte	Result	Spike	Units	% Rec	Limits			Evaluation	Notes	
CBDV-A	0.00932		0.01	%	93.2	85	-	115	Acceptable	
CBDV	0.0100		0.01	%	100	85	-	115	Acceptable	
CBD-A	0.00962		0.01	%	96.2	85	-	115	Acceptable	
CBG-A	0.00929		0.01	%	92.9	85	-	115	Acceptable	
CBG	0.0101		0.01	%	101	85	-	115	Acceptable	
CBD	0.00941		0.01	%	94.1	85	-	115	Acceptable	
THCV	0.00961		0.01	%	96.1	85	-	115	Acceptable	
THCVA	0.00948		0.01	%	94.8	85	-	115	Acceptable	
CBN	0.0102		0.01	%	102	85	-	115	Acceptable	
THC	0.00969		0.01	%	96.9	85	-	115	Acceptable	
D8THC	0.00955		0.01	%	95.5	85	-	115	Acceptable	
CBL	0.00917		0.01	%	91.7	85	-	115	Acceptable	
CBC	0.0103		0.01	%	103	85	-	115	Acceptable	
THCA	0.00961		0.01	%	96.1	85	-	115	Acceptable	
CBCA	0.00938		0.01	%	93.8	85	-	115	Acceptable	

**Method Blank**

Analyte	Result	LOQ	Units	Limits			Evaluation	Notes	
CBDV-A	ND	0.005	%	< 0.005			Acceptable		
CBDV	ND	0.005	%	< 0.005			Acceptable		
CBD-A	ND	0.005	%	< 0.005			Acceptable		
CBG-A	ND	0.005	%	< 0.005			Acceptable		
CBG	ND	0.005	%	< 0.005			Acceptable		
CBD	ND	0.005	%	< 0.005			Acceptable		
THCV	ND	0.005	%	< 0.005			Acceptable		
THCVA	ND	0.005	%	< 0.005			Acceptable		
CBN	ND	0.005	%	< 0.005			Acceptable		
THC	ND	0.005	%	< 0.005			Acceptable		
D8THC	ND	0.005	%	< 0.005			Acceptable		
CBL	ND	0.005	%	< 0.005			Acceptable		
CBC	ND	0.005	%	< 0.005			Acceptable		
THCA	ND	0.005	%	< 0.005			Acceptable		
CBCA	ND	0.005	%	< 0.005			Acceptable		

**Abbreviations**

ND - None Detected at or above MRL  
RPD - Relative Percent Difference  
LOQ - Limit of Quantitation

**Units of Measure:**

% - Percent



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J AOAC 2015 V98-6		Batch ID: 1807545						
Sample Duplicate		Sample ID: 18-010702-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	ND	ND	0.005	%	0	< 20	Acceptable	
CBDV	ND	ND	0.005	%	0	< 20	Acceptable	
CBD-A	ND	ND	0.005	%	0	< 20	Acceptable	
CBG-A	ND	ND	0.005	%	0	< 20	Acceptable	
CBG	0.00561	0.00564	0.005	%	0.533	< 20	Acceptable	
CBD	0.143	0.143	0.005	%	0	< 20	Acceptable	
THCV	ND	ND	0.005	%	0	< 20	Acceptable	
THCVA	ND	ND	0.005	%	0	< 20	Acceptable	
CBN	0.00347	0.00346	0.005	%	0.289	< 20	Acceptable	
THC	0.158	0.158	0.005	%	0	< 20	Acceptable	
D8THC	ND	ND	0.005	%	0	< 20	Acceptable	
CBL	ND	ND	0.005	%	0	< 20	Acceptable	
CBC	ND	ND	0.005	%	0	< 20	Acceptable	
THCA	ND	ND	0.005	%	0	< 20	Acceptable	
CBCA	ND	ND	0.005	%	0	< 20	Acceptable	

**Abbreviations**

ND - None Detected at or above MRL  
RPD - Relative Percent Difference  
LOQ - Limit of Quantitation

**Units of Measure:**

% - Percent



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Explanation of QC Flag Comments:

Code	Explanation
Q	Matrix interferences affecting spike or surrogate recoveries.
Q1	Quality control result biased high. Only non-detect samples reported.
Q2	Quality control outside QC limits. Data considered estimate.
Q3	Sample concentration greater than four times the amount spiked.
Q4	Non-homogenous sample matrix, affecting RPD result and/or % recoveries.
Q5	Spike results above calibration curve.
Q6	Quality control outside QC limits. Data acceptable based on remaining QC.
R	Relative percent difference (RPD) outside control limit.
R1	RPD non-calculable, as sample or duplicate results are less than five times the LOQ.
R2	Sample replicates RPD non-calculable, as only one replicate is within the analytical range.
LOQ1	Quantitation level raised due to low sample volume and/or dilution.
LOQ2	Quantitaion level raised due to matrix interference.
B	Analyte detected in method blank, but not in associated samples.
B1	The sample concentration is greater than 5 times the blank concentration.
B2	The sample concentration is less than 5 times the blank concentration.