



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

**Customer:** Sovereign Medicinals Inc  
4207 SE Woodstock Blvd #507  
Portland, Oregon 97206  
United States

**Product identity:** Vital Leaf CBD Mini Quinoa Chocolate Bar - UPC 703624910013 - Batch 18262  
**Client/Metric ID:** .  
**Sample Date:** 09/25/18  
**Laboratory ID:** 18-008377-0002  
**Relinquished by:** Danae Redhawk  
**Temp:** 21.8 °C  
**Weight Received:** 46.89 g  
**Serving Size #1:** 15.63 g

### Sample Results

Potency per 15.63g		Batch: 1805747					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
CBC-A per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
CBC-Total per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	1.47	09/27/18	J AOAC 2015 V98-6	
CBD per 15.63g	30.6		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
CBD-A per 15.63g	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
CBD-Total per 15.63g	30.6		mg/15.63g	1.47	09/27/18	J AOAC 2015 V98-6	
CBDV per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
CBDV-A per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
CBDV-Total per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	1.46	09/27/18	J AOAC 2015 V98-6	
CBG per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
CBG-A per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
CBG-Total per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	1.47	09/27/18	J AOAC 2015 V98-6	
CBL per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
CBN per 15.63g	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
D8THC per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
THC per 15.63g	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
THC-A per 15.63g	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
THC-Total per 15.63g	< LOQ	5.00	mg/15.63g	1.47	09/27/18	J AOAC 2015 V98-6	
THCV per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
THCV-A per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	0.781	09/27/18	J AOAC 2015 V98-6	
THCV-Total per 15.63g <sup>†</sup>	< LOQ		mg/15.63g	1.46	09/27/18	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**

- g = Gram
- mg/15.63g = Milligram per 15.63g
- % = Percentage of sample
- % wt =  $\mu\text{g/g}$  divided by 10,000

**Glossary of Qualifiers**

† = Analyte not NELAP accredited.

Approved Signatory

Derrick Tanner  
General Manager



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**Laboratory Quality Control Results**

J AOAC 2015 V98-6		Batch ID: 1805747							
Laboratory Control Sample									
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes		
CBDV-A	0.00958	0.01	%	95.8	85 - 115	Acceptable			
CBDV	0.0105	0.01	%	105	85 - 115	Acceptable			
CBD-A	0.00956	0.01	%	95.6	85 - 115	Acceptable			
CBG-A	0.00947	0.01	%	94.7	85 - 115	Acceptable			
CBG	0.00979	0.01	%	97.9	85 - 115	Acceptable			
CBD	0.00952	0.01	%	95.2	85 - 115	Acceptable			
THCV	0.00957	0.01	%	95.7	85 - 115	Acceptable			
THCVA	0.00974	0.01	%	97.4	85 - 115	Acceptable			
CBN	0.00977	0.01	%	97.7	85 - 115	Acceptable			
THC	0.0100	0.01	%	100	85 - 115	Acceptable			
D8THC	0.00983	0.01	%	98.3	85 - 115	Acceptable			
CBL	0.00977	0.01	%	97.7	85 - 115	Acceptable			
CBC	0.00953	0.01	%	95.3	85 - 115	Acceptable			
THCA	0.00927	0.01	%	92.7	85 - 115	Acceptable			
CBCA	0.00957	0.01	%	95.7	85 - 115	Acceptable			

**Method Blank**

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes			
CBDV-A	ND	0.001	%	< 0.001	Acceptable				
CBDV	ND	0.001	%	< 0.001	Acceptable				
CBD-A	ND	0.001	%	< 0.001	Acceptable				
CBG-A	ND	0.001	%	< 0.001	Acceptable				
CBG	ND	0.001	%	< 0.001	Acceptable				
CBD	ND	0.001	%	< 0.001	Acceptable				
THCV	ND	0.001	%	< 0.001	Acceptable				
THCVA	ND	0.001	%	< 0.001	Acceptable				
CBN	ND	0.001	%	< 0.001	Acceptable				
THC	ND	0.001	%	< 0.001	Acceptable				
D8THC	ND	0.001	%	< 0.001	Acceptable				
CBL	ND	0.001	%	< 0.001	Acceptable				
CBC	ND	0.001	%	< 0.001	Acceptable				
THCA	ND	0.001	%	< 0.001	Acceptable				
CBCA	ND	0.001	%	< 0.001	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: 1805747			
Sample Duplicate					Sample ID: 18-008170-0001			
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	ND	ND	0.005	%	0	< 20	Acceptable	
CBD	0.0937	0.0941	0.005	%	0.426	< 20	Acceptable	
THCV	ND	ND	0.005	%	0	< 20	Acceptable	
THCVA	ND	ND	0.005	%	0	< 20	Acceptable	
CBN	ND	ND	0.005	%	0	< 20	Acceptable	
THC	0.0812	0.0814	0.005	%	0.246	< 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:**

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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	Quantitation 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.