



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794



Report Number: 21-011658/D002.R001
Report Date: 10/08/2021
ORELAP#: OR100028
Purchase Order:
Received: 10/01/21 14:42

This is an amended version of report# 21-011658/D002.R000.

Reason: Updated reporting units.

Customer: Healthy Roots
Product identity: #171, 1000 Natural
Client/Metric ID: .
Laboratory ID: 21-011658-0001

Summary

Potency:

Analyte	Result	Limits	Units	Status	CBD-Total per 28.5g	990 mg/28.5g
CBC	0.0671		%			
CBD	3.47		%			
CBD-A	0.00481		%		THC-Total per 28.5g	15.0 mg/28.5g
CBDV [†]	0.0139		%		(Reported in milligrams per serving)	
CBE [†]	0.0170		%			
CBG [†]	0.0262		%			
CBT [†]	0.0220		%			
Δ9-THC	0.0528		%			
Analyte per 28.5g	Result	Limits	Units	Status		
CBC per 28.5g [†]	19.1		mg/28.5g			
CBD per 28.5g	989		mg/28.5g			
CBD-A per 28.5g	1.37		mg/28.5g			
CBDV per 28.5g [†]	3.96		mg/28.5g			
CBE per 28.5g [†]	4.85		mg/28.5g			
CBG per 28.5g [†]	7.47		mg/28.5g			
CBT per 28.5g [†]	6.27		mg/28.5g			
Δ9-THC per 28.5g	15.0		mg/28.5g			



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Customer: Healthy Roots
Product identity: #171, 1000 Natural
Client/Metric ID: .
Sample Date:
Laboratory ID: 21-011658-0001
Evidence of Cooling: No
Temp: 21.2 °C
Relinquished by: Client
Serving Size #1: 28.5 g

Sample Results

Potency	Method J AOAC 2015 V98-6 (mod)	Units %	Batch: 2109015	Analyze: 10/6/21 3:19:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0671		%	0.0033	
CBC-A†	< LOQ		%	0.0033	
CBC-Total†	0.0671		%	0.0061	
CBD	3.47		%	0.0325	
CBD-A	0.00481		%	0.0033	
CBD-Total	3.47		%	0.0354	
CBDV†	0.0139		%	0.0033	
CBDV-A†	< LOQ		%	0.0033	
CBDV-Total†	0.0139		%	0.0061	
CBE†	0.0170		%	0.0033	
CBG†	0.0262		%	0.0033	
CBG-A†	< LOQ		%	0.0033	
CBG-Total	0.0262		%	0.0061	
CBL†	< LOQ		%	0.0033	
CBL-A†	< LOQ		%	0.0033	
CBL-Total†	< LOQ		%	0.0061	
CBN	< LOQ		%	0.0033	
CBT†	0.0220		%	0.0033	
Δ8-THCV	< LOQ		%	0.0033	
Δ8-THC†	< LOQ		%	0.0033	
Δ9-THC	0.0528		%	0.0033	
THC-A	< LOQ		%	0.0033	
THC-Total	0.0528		%	0.0061	
THCV†	< LOQ		%	0.0033	
THCV-A†	< LOQ		%	0.0033	
THCV-Total†	< LOQ		%	0.0061	
Total Cannabinoids†	3.67		%		

Potency per 28.5g	Method J AOAC 2015 V98-6 (mod)		Units mg/se	Batch: 2109015	Analyze: 10/6/21 3:19:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g†	19.1		mg/28.5g	0.927	
CBC-A per 28.5g†	< LOQ		mg/28.5g	0.0325	
CBC-Total per 28.5g†	19.1		mg/28.5g	1.74	



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Potency per 28.5g Method J AOAC 2015 V98-6 (mod) Units mg/se Batch: 2109015 Analyze: 10/6/21 3:19:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBD per 28.5g	989		mg/28.5g	9.27	
CBD-A per 28.5g	1.37		mg/28.5g	0.927	
CBD-Total per 28.5g	990		mg/28.5g	10.1	
CBDV per 28.5g [†]	3.96		mg/28.5g	0.927	
CBDV-A per 28.5g [†]	< LOQ		mg/28.5g	0.0325	
CBDV-Total per 28.5g [†]	3.96		mg/28.5g	1.73	
CBE per 28.5g [†]	4.85		mg/28.5g	0.927	
CBG per 28.5g [†]	7.47		mg/28.5g	0.927	
CBG-A per 28.5g [†]	< LOQ		mg/28.5g	0.0325	
CBG-Total per 28.5g [†]	7.47		mg/28.5g	1.73	
CBL per 28.5g [†]	< LOQ		mg/28.5g	0.0325	
CBL-A per 28.5g [†]	< LOQ		mg/28.5g	0.0325	
CBL-Total per 28.5g [†]	< LOQ		mg/28.5g	0.0611	
CBN per 28.5g	< LOQ		mg/28.5g	0.0325	
CBT per 28.5g [†]	6.27		mg/28.5g	0.927	
Δ8-THCV per 28.5g [†]	< LOQ		mg/28.5g	0.0325	
Δ8-THC per 28.5g [†]	< LOQ		mg/28.5g	0.0325	
Δ9-THC per 28.5g	15.0		mg/28.5g	0.927	
exo-THC per 28.5g [†]	< LOQ		mg/28.5g	0.0325	
THC-A per 28.5g	< LOQ		mg/28.5g	0.0325	
THC-Total per 28.5g	15.0		mg/28.5g	1.74	
THCV per 28.5g [†]	< LOQ		mg/28.5g	0.0325	
THCV-A per 28.5g [†]	< LOQ		mg/28.5g	0.0325	
THCV-Total per 28.5g [†]	< LOQ		mg/28.5g	0.0611	
Total Cannabinoids per 28.5g	1050		mg/28.5g		



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These test results are representative of the individual sample selected and submitted by the client.

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.

† = Analyte not NELAP accredited.

Units of Measure

g = Gram

mg/28.5g = Milligram per 28.5g

% = Percentage of sample

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

Approved Signatory

Derrick Tanner
General Manager



Hemp / Cannabis Usable / Extract / Finished Products Chain of Custody Record

Revision: 4.00 Control#: CF023 Rev 02/24/2021 Eff: 03/04/2021
ORELAP ID: OR100028

[illegible]

† - Sample Type Codes: Vegetation (V) : Isolates (S) : Extract/Concentrate (C) : Tincture/Topical (T) : Edible (E) : Beverage (B)

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Report Date: 10/08/2021
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Received: 10/01/21 14:42

Revision #: 0.00 Control : CFL-D06
Revision Date: 05/31/2019 Effective Date: 05/31/2019

Laboratory Quality Control Results

J AOAC 2015 V98-6

Batch ID: 2109015

Laboratory Control Sample

Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	0.00948	0.01	%	94.8	85.0 - 115	Acceptable	
CBDV	0.0100	0.01	%	100	85.0 - 115	Acceptable	
CBE	0.00987	0.01	%	98.7	85.0 - 115	Acceptable	
CBDA	0.0102	0.01	%	102	85.0 - 115	Acceptable	
CBGA	0.00940	0.01	%	94.0	85.0 - 115	Acceptable	
CBG	0.0100	0.01	%	100	85.0 - 115	Acceptable	
CBD	0.0105	0.01	%	105	85.0 - 115	Acceptable	
THCV	0.00970	0.01	%	97.0	85.0 - 115	Acceptable	
d8THCV	0.00986	0.01	%	98.6	85.0 - 115	Acceptable	
THCA	0.00922	0.01	%	92.2	85.0 - 115	Acceptable	
CBN	0.0103	0.01	%	103	85.0 - 115	Acceptable	
exo-THC	0.00962	0.01	%	96.2	85.0 - 115	Acceptable	
d9THC	0.0101	0.01	%	101	85.0 - 115	Acceptable	
d8THC	0.00969	0.01	%	96.9	85.0 - 115	Acceptable	
CBL	0.00909	0.01	%	90.9	85.0 - 115	Acceptable	
CBC	0.00983	0.01	%	98.3	85.0 - 115	Acceptable	
THCA	0.00977	0.01	%	97.7	85.0 - 115	Acceptable	
CBGA	0.00976	0.01	%	97.6	85.0 - 115	Acceptable	
CBLA	0.0103	0.01	%	103	85.0 - 115	Acceptable	
CBT	0.0108	0.01	%	108	85.0 - 115	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBDV	<LOQ	0.003	%	< 0.003	Acceptable	
CBE	<LOQ	0.003	%	< 0.003	Acceptable	
CBDA	<LOQ	0.003	%	< 0.003	Acceptable	
CBGA	<LOQ	0.003	%	< 0.003	Acceptable	
CBG	<LOQ	0.003	%	< 0.003	Acceptable	
CBD	<LOQ	0.003	%	< 0.003	Acceptable	
THCV	<LOQ	0.003	%	< 0.003	Acceptable	
d8THCV	<LOQ	0.003	%	< 0.003	Acceptable	
THCA	<LOQ	0.003	%	< 0.003	Acceptable	
CBN	<LOQ	0.003	%	< 0.003	Acceptable	
exo-THC	<LOQ	0.003	%	< 0.003	Acceptable	
d9THC	<LOQ	0.003	%	< 0.003	Acceptable	
d8THC	<LOQ	0.003	%	< 0.003	Acceptable	
CBL	<LOQ	0.003	%	< 0.003	Acceptable	
CBC	<LOQ	0.003	%	< 0.003	Acceptable	
THCA	<LOQ	0.003	%	< 0.003	Acceptable	
CBGA	<LOQ	0.003	%	< 0.003	Acceptable	
CBLA	<LOQ	0.003	%	< 0.003	Acceptable	
CBT	<LOQ	0.003	%	< 0.003	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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Revision #: 0.00 Control : CFL-D06
Revision Date: 05/31/2019 Effective Date: 05/31/2019

Laboratory Quality Control Results

J AOAC 2015 V98-6		Batch ID: 2109015						
Sample Duplicate		Sample ID: 21-011654-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	0.0638	0.0634	0.003	%	0.600	< 20	Acceptable	
CBE	0.0926	0.0906	0.003	%	2.15	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.402	0.400	0.003	%	0.566	< 20	Acceptable	
CBD	18.1	18.2	0.003	%	0.540	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	0.0298	0.0298	0.003	%	0.230	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d9THC	0.00732	0.00758	0.003	%	3.50	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	0.154	0.152	0.003	%	0.855	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBT	0.0436	0.0435	0.003	%	0.103	< 20	Acceptable	

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation
NA - Calculation Not Applicable given non-numerical results

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	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.