



Customer: Healthy Roots
Product identity: #53 1,000 Berry
Client/Metric ID: .
Laboratory ID: 20-000746-0001

Summary

Potency:

Analyte	Result	Limits	Units	Status	
CBC [†]	0.0947		%		CBD-Total per 28.5g 1050 mg/28.5g
CBD	3.68		%		
CBD-A	0.0202		%		THC-Total per 28.5g 19.6 mg/28.5g
CBDV [†]	0.0189		%		(Reported in milligrams per serving)
CBG [†]	0.0694		%		
Δ9-THC	0.0688		%		
Analyte per 28.5g	Result	Limits	Units	Status	
CBC per 28.5g [†]	27.0		mg/28.5g		
CBD per 28.5g	1050		mg/28.5g		
CBD-A per 28.5g	5.76		mg/28.5g		
CBDV per 28.5g [†]	5.39		mg/28.5g		
CBG per 28.5g [†]	19.8		mg/28.5g		
Δ9-THC per 28.5g	19.6		mg/28.5g		



Customer: Healthy Roots

Product identity: #53 1,000 Berry
Client/Metric ID: .
Sample Date:
Laboratory ID: 20-000746-0001
Relinquished by: Liz Merritt
Temp: 21.4 °C
Serving Size #1: 28.5 g

Sample Results

Potency		Batch: 2000786					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC [†]	0.0947		%	0.0033	01/27/20	J AOAC 2015 V98-6	
CBC-A [†]	< LOQ		%	0.0033	01/27/20	J AOAC 2015 V98-6	
CBC-Total [†]	0.0947		%	0.0062	01/27/20	J AOAC 2015 V98-6	
CBD	3.68		%	0.0329	01/27/20	J AOAC 2015 V98-6	
CBD-A	0.0202		%	0.0033	01/27/20	J AOAC 2015 V98-6	
CBD-Total	3.70		%	0.0358	01/27/20	J AOAC 2015 V98-6	
CBDV [†]	0.0189		%	0.0033	01/27/20	J AOAC 2015 V98-6	
CBDV-A [†]	< LOQ		%	0.0033	01/27/20	J AOAC 2015 V98-6	
CBDV-Total [†]	0.0189		%	0.0061	01/27/20	J AOAC 2015 V98-6	
CBG [†]	0.0694		%	0.0033	01/27/20	J AOAC 2015 V98-6	
CBG-A [†]	< LOQ		%	0.0033	01/27/20	J AOAC 2015 V98-6	
CBG-Total [†]	0.0694		%	0.0061	01/27/20	J AOAC 2015 V98-6	
CBL [†]	< LOQ		%	0.0033	01/27/20	J AOAC 2015 V98-6	
CBN	< LOQ		%	0.0033	01/27/20	J AOAC 2015 V98-6	
Δ8-THC [†]	< LOQ		%	0.0033	01/27/20	J AOAC 2015 V98-6	
Δ9-THC	0.0688		%	0.0033	01/27/20	J AOAC 2015 V98-6	
THC-A	< LOQ		%	0.0033	01/27/20	J AOAC 2015 V98-6	
THC-Total	0.0688		%	0.0062	01/27/20	J AOAC 2015 V98-6	
THCV [†]	< LOQ		%	0.0033	01/27/20	J AOAC 2015 V98-6	
THCV-A [†]	< LOQ		%	0.0033	01/27/20	J AOAC 2015 V98-6	
THCV-Total [†]	< LOQ		%	0.0061	01/27/20	J AOAC 2015 V98-6	

Potency per 28.5g		Batch: 2000786					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC per 28.5g [†]	27.0		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
CBC-A per 28.5g [†]	< LOQ		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
CBC-Total per 28.5g [†]	27.0		mg/28.5g	1.78	01/27/20	J AOAC 2015 V98-6	
CBD per 28.5g	1050		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
CBD-A per 28.5g	5.76		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
CBD-Total per 28.5g	1050		mg/28.5g	1.78	01/27/20	J AOAC 2015 V98-6	
CBDV per 28.5g [†]	5.39		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	



Potency per 28.5g		Batch: 2000786					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBDV-A per 28.5g [†]	< LOQ		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
CBDV-Total per 28.5g [†]	5.39		mg/28.5g	1.77	01/27/20	J AOAC 2015 V98-6	
CBG per 28.5g [†]	19.8		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
CBG-A per 28.5g [†]	< LOQ		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
CBG-Total per 28.5g [†]	19.8		mg/28.5g	1.78	01/27/20	J AOAC 2015 V98-6	
CBL per 28.5g [†]	< LOQ		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
CBN per 28.5g	< LOQ		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
Δ8-THC per 28.5g [†]	< LOQ		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
Δ9-THC per 28.5g	19.6		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
THC-A per 28.5g	< LOQ		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
THC-Total per 28.5g	19.6		mg/28.5g	1.78	01/27/20	J AOAC 2015 V98-6	
THCV per 28.5g [†]	< LOQ		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
THCV-A per 28.5g [†]	< LOQ		mg/28.5g	0.950	01/27/20	J AOAC 2015 V98-6	
THCV-Total per 28.5g [†]	< LOQ		mg/28.5g	1.77	01/27/20	J AOAC 2015 V98-6	



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 = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager



Way Portland OR 97230 p.503-254-1794

Cannabis Chain of Custody Record 20-000746

ORELAP ID: OR100028

Healthy Roots
OUR ROOTS RUN DEEP
CHAIN OF CUSTODY
Company: Healthy Roots
Contact: Liz Merritt
Address: 14325 NE Airport Way, #113
Portland, OR 97230
Email: Healthyrootscomp@gmail.com
Phone: 503-496-2329
License: AG-L-1052211FP

Client Sample Identification		Analysis Requested											Purchase Order Number:			Project Number:		Project Name:	
Date/Time Collected		Pesticides - OR 59 compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Water Activity	Moisture	Terpenes	Micro: Yeast and Mold	Micro: E. Coli and Total Coliform	Heavy Metals	Mycotoxins	Other	Sample Type	Weight	Serving size for edibles	Report in mg/gr and % (percentage)		
1/20/20	#53 1,000 Berry			X											28.5				

Collected By:	Relinquished By:	Date	Time	Received by:	Date	Time	Lab Use Only:
Turnaround time: Ask for availability <input type="checkbox"/> Standard (5 day) <input type="checkbox"/> Rush (3-4 day) (1.5x Standard) <input type="checkbox"/> Priority Rush (2 day) (2x Standard)	L. Merritt	1/20/20		J. nu	1-20-20	15:30	Client Alias: Order Number: Proper Container Sample Condition Temperature: 21.4 Shipped Via: client Evidence of cooling: FNO

SUBMISSION OF SAMPLES WITH TESTING REQUIREMENTS TO PIXIS WILL BE UNDERSTOOD TO BE AN AGREEMENT FOR SERVICES IN ACCORDANCE WITH THE CONDITIONS LISTED ON THE BACK OF THIS FORM

Revision: 3.00 Controll#: CF023
Effective 05/22/2019 Revised 05/22/2019
www.pixislabs.com
www.columbiafoodlab.com

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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: 2000729**
Laboratory Control Sample

Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDV-A	0.0101	0.01	%	101	85.0 - 115	Acceptable	
CBDV	0.0101	0.01	%	101	85.0 - 115	Acceptable	
CBD-A	0.00998	0.01	%	99.8	85.0 - 115	Acceptable	
CBG-A	0.0104	0.01	%	104	85.0 - 115	Acceptable	
CBG	0.0101	0.01	%	101	85.0 - 115	Acceptable	
CBD	0.0100	0.01	%	100	85.0 - 115	Acceptable	
THCV	0.00998	0.01	%	99.8	85.0 - 115	Acceptable	
THCVA	0.0101	0.01	%	101	85.0 - 115	Acceptable	
CBN	0.00983	0.01	%	98.3	85.0 - 115	Acceptable	
THC	0.00985	0.01	%	98.5	85.0 - 115	Acceptable	
D8THC	0.0102	0.01	%	102	85.0 - 115	Acceptable	
CBL	0.0101	0.01	%	101	85.0 - 115	Acceptable	
CBC	0.0104	0.01	%	104	85.0 - 115	Acceptable	
THCA	0.00964	0.01	%	96.4	85.0 - 115	Acceptable	
CBCA	0.00988	0.01	%	98.8	85.0 - 115	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDV-A	<LOQ	0.003	%	< 0.003	Acceptable	
CBDV	<LOQ	0.003	%	< 0.003	Acceptable	
CBD-A	<LOQ	0.003	%	< 0.003	Acceptable	
CBG-A	<LOQ	0.003	%	< 0.003	Acceptable	
CBG	<LOQ	0.003	%	< 0.003	Acceptable	
CBD	0.00268	0.003	%	< 0.003	Acceptable	
THCV	<LOQ	0.003	%	< 0.003	Acceptable	
THCVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBN	<LOQ	0.003	%	< 0.003	Acceptable	
THC	<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	
CBCA	<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



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: 2000729				
Sample Duplicate				Sample ID: 20-000702-0001				
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0837	0.0831	0.003	%	0.748	< 20	Acceptable	
CBD	0.00806	0.00786	0.003	%	2.41	< 20	Acceptable	
THCV	0.0198	0.0196	0.003	%	0.962	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	0.0412	0.0405	0.003	%	1.66	< 20	Acceptable	
THC	3.23	3.21	0.003	%	0.597	< 20	Acceptable	
D8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	0.0455	0.0449	0.003	%	1.40	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.003	%	NA	< 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



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.