



Customer: Healthy Roots
Product identity: #60 Rollerbomb
Client/Metric ID: .
Laboratory ID: 20-001378-0001

Sample Date: 02/04/20

Summary

Potency:

Analyte	Result	Limits	Units	Status	
CBC [†]	0.0498		%		CBD-Total per 10g 264 mg/10g
CBC-A [†]	0.126		%		
CBD	0.795		%		THC-Total per 10g 10.1 mg/10g
CBD-A	2.10		%		(Reported in milligrams per serving)
CBDV [†]	0.00407		%		
CBDV-A [†]	0.0119		%		
CBG [†]	0.0343		%		
CBG-A [†]	0.0858		%		
Δ9-THC	0.0634		%		
THC-A	0.0432		%		
Analyte per 10g	Result	Limits	Units	Status	
CBC per 10g [†]	4.98		mg/10g		
CBC-A per 10g [†]	12.6		mg/10g		
CBD per 10g	79.5		mg/10g		
CBD-A per 10g	210		mg/10g		
CBDV per 10g [†]	0.407		mg/10g		
CBDV-A per 10g [†]	1.19		mg/10g		
CBG per 10g [†]	3.43		mg/10g		
CBG-A per 10g [†]	8.58		mg/10g		
Δ9-THC per 10g	6.34		mg/10g		
THC-A per 10g	4.32		mg/10g		



Customer: Healthy Roots

Product identity: #60 Rollerbomb
Client/Metric ID: .
Sample Date: 02/04/20
Laboratory ID: 20-001378-0001
Relinquished by: Jason Merritt
Temp: 18.7 °C
Serving Size #1: 10 g

Sample Results

Potency		Batch: 2001170					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC†	0.0498		%	0.0032	02/05/20	J AOAC 2015 V98-6	
CBC-A†	0.126		%	0.0032	02/05/20	J AOAC 2015 V98-6	
CBC-Total†	0.160		%	0.0061	02/11/20	J AOAC 2015 V98-6	
CBD	0.795		%	0.0032	02/05/20	J AOAC 2015 V98-6	
CBD-A	2.10		%	0.0323	02/06/20	J AOAC 2015 V98-6	
CBD-Total	2.64		%	0.0316	02/11/20	J AOAC 2015 V98-6	
CBDV†	0.00407		%	0.0032	02/05/20	J AOAC 2015 V98-6	
CBDV-A†	0.0119		%	0.0032	02/05/20	J AOAC 2015 V98-6	
CBDV-Total†	0.0144		%	0.0060	02/11/20	J AOAC 2015 V98-6	
CBG†	0.0343		%	0.0032	02/05/20	J AOAC 2015 V98-6	
CBG-A†	0.0858		%	0.0032	02/05/20	J AOAC 2015 V98-6	
CBG-Total†	0.110		%	0.0060	02/11/20	J AOAC 2015 V98-6	
CBL†	< LOQ		%	0.0032	02/05/20	J AOAC 2015 V98-6	
CBN	< LOQ		%	0.0032	02/05/20	J AOAC 2015 V98-6	
Δ8-THC†	< LOQ		%	0.0032	02/05/20	J AOAC 2015 V98-6	
Δ9-THC	0.0634		%	0.0032	02/05/20	J AOAC 2015 V98-6	
THC-A	0.0432		%	0.0032	02/05/20	J AOAC 2015 V98-6	
THC-Total	0.101		%	0.0061	02/11/20	J AOAC 2015 V98-6	
THCV†	< LOQ		%	0.0032	02/05/20	J AOAC 2015 V98-6	
THCV-A†	< LOQ		%	0.0032	02/05/20	J AOAC 2015 V98-6	
THCV-Total†	< LOQ		%	0.0060	02/11/20	J AOAC 2015 V98-6	

Potency per 10g		Batch: 2001170					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC per 10g†	4.98		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
CBC-A per 10g†	12.6		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
CBC-Total per 10g†	16.0		mg/10g	0.626	02/11/20	J AOAC 2015 V98-6	
CBD per 10g	79.5		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
CBD-A per 10g	210		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
CBD-Total per 10g	264		mg/10g	0.626	02/11/20	J AOAC 2015 V98-6	
CBDV per 10g†	0.407		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	



Potency per 10g				Batch: 2001170			
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBDV-A per 10g [†]	1.19		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
CBDV-Total per 10g [†]	1.44		mg/10g	0.622	02/11/20	J AOAC 2015 V98-6	
CBG per 10g [†]	3.43		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
CBG-A per 10g [†]	8.58		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
CBG-Total per 10g [†]	11.0		mg/10g	0.626	02/11/20	J AOAC 2015 V98-6	
CBL per 10g [†]	< LOQ		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
CBN per 10g	< LOQ		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
Δ8-THC per 10g [†]	< LOQ		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
Δ9-THC per 10g	6.34		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
THC-A per 10g	4.32		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
THC-Total per 10g	10.1		mg/10g	0.626	02/11/20	J AOAC 2015 V98-6	
THCV per 10g [†]	< LOQ		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
THCV-A per 10g [†]	< LOQ		mg/10g	0.333	02/11/20	J AOAC 2015 V98-6	
THCV-Total per 10g [†]	< LOQ		mg/10g	0.622	02/11/20	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/10g = Milligram per 10g

% = Percentage of sample

% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager



12423 NE Whitaker Way p.503-254-1794 **Cannabis Chain of Custody Record** ORELAP ID: OR100028

HEALTHYROOTS 20-001378

Company: Healthy Roots
Contact: Liz Merritt
Address: 14325 NE Airport Way, #113
Portland, OR 97230
Email: Healthyrootshemp@gmail.com
Phone: 503-496-2329
License: AGL 1052211FP

CHAIN OF CUSTODY
Co
Co
Ad
Cl
Ph
BIM
Pri
Lic

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

Purchase Order Number:
Project Number:
Project Name:
☐ Report Instructions:
☐ Send to State - METRC
☐ Email Final Results:
☐ Fax Final Results
☐ Cash/Check/CC/Net 30
Other:

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	Comments/Metric ID
1 #60-Roller bomb			✓										topical	10ml		
2 #53-1000 Berry Tincture			✓										edible	28gr		

Healthy Roots
% (percentage)
Report in mg/gr and

Collected By:	Relinquished By:	Date	Time	Received by:	Date	Time	Lab Use O.
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)	Jasen Merritt	2-4-20	2:00	[Signature]	02-04-20	14:00	Client Alias: healthyroots Order Number: 20-001378 <input checked="" type="checkbox"/> Proper Container <input checked="" type="checkbox"/> Sample Condition Temperature: 187 Shipped Via: Client Evidence of cooling: [Signature]

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 Control#: CF023 www.pixislabs.com
Effective 05/22/2019 Revised 05/22/2019 www.columbiafoodlab.com


 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: 2001170**
Laboratory Control Sample

Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDV-A	0.00948	0.01	%	94.8	85.0 - 115	Acceptable	
CBDV	0.00976	0.01	%	97.6	85.0 - 115	Acceptable	
CBD-A	0.0101	0.01	%	101	85.0 - 115	Acceptable	
CBG-A	0.00990	0.01	%	99.0	85.0 - 115	Acceptable	
CBG	0.00937	0.01	%	93.7	85.0 - 115	Acceptable	
CBD	0.0100	0.01	%	100	85.0 - 115	Acceptable	
THCV	0.00936	0.01	%	93.6	85.0 - 115	Acceptable	
THCVA	0.00958	0.01	%	95.8	85.0 - 115	Acceptable	
CBN	0.00998	0.01	%	99.8	85.0 - 115	Acceptable	
THC	0.0102	0.01	%	102	85.0 - 115	Acceptable	
D8THC	0.00918	0.01	%	91.8	85.0 - 115	Acceptable	
CBL	0.00935	0.01	%	93.5	85.0 - 115	Acceptable	
CBC	0.00955	0.01	%	95.5	85.0 - 115	Acceptable	
THCA	0.0104	0.01	%	104	85.0 - 115	Acceptable	
CBCA	0.00956	0.01	%	95.6	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	<LOQ	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: 2001170				
Sample Duplicate				Sample ID: 20-001090-0001				
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	0.0159	0.0154	0.003	%	2.80	< 20	Acceptable	
CBD-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0309	0.0323	0.003	%	4.50	< 20	Acceptable	
CBD	2.22	2.25	0.003	%	1.19	< 20	Acceptable	
THCV	0.00676	0.00651	0.003	%	3.69	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THC	0.0714	0.0718	0.003	%	0.615	< 20	Acceptable	
D8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	0.00775	0.00753	0.003	%	2.79	< 20	Acceptable	
CBC	0.123	0.125	0.003	%	1.10	< 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.