



Report Number:	20-012667/D02.R00
Report Date:	11/19/2020
ORELAP#:	OR100028
Purchase Order:	
Received:	11/17/20 17:00

_ _ _ _

Customer:	Healthy Roots
Product identity:	#111 800 Pet
Client/Metrc ID:	
Laboratory ID:	20-012667-0002

Summary

Analyte	Result	Limits	Units	Status	CBD-Total per 28.5g	801 mg/28.5g	
CBC	0.0761		%				
CBD	2.81		%				
CBDV [†]	0.0153		%		THC-Total per 28.5g	35.1 mg/28.5g	
CBG [†]	0.0225		%		(Reported in milligrams per serving)		
CBN	0.00763		%				
∆9-THC	0.123		%				
Analyte per 28.5g	Result	Limits	Units	Status			
CBC per 28.5g	21.7		mg/28.5g				
CBD per 28.5g	801		mg/28.5g				
CBDV per 28.5g	4.36		mg/28.5g				
CBG per 28.5g	6.41		mg/28.5g				
CBN per 28.5g	2.17		mg/28.5g				
∆9-THC per 28.5g	35.1		mg/28.5g				

Page 1 of 8 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 Columbia Laboratories 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 retained for a maximum of 30 days from the receipt date unless prior arrangements have been made. Testing in accordance with: OAR 333-007-0430





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Received:	11/17/20 17:00

Customer:	Healthy Roots
Product identity: Client/Metrc ID: Sample Date:	#111 800 Pet
Laboratory ID: Temp:	20-012667-0002 14.8 °C
Serving Size #1:	28.5 g

Sample Results

Potency	Method J AOA	C 2015 V98-6 (mod)	Batch: 2009707		Analyze: 11/18/20 9:46:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0761		%	0.0032	
CBC-A [†]	< LOQ		%	0.0032	
CBC-Total [†]	0.0761		%	0.0061	
CBD	2.81		%	0.0325	
CBD-A	< LOQ		%	0.0032	
CBD-Total	2.81		%	0.0353	
CBDV [†]	0.0153		%	0.0032	
CBDV-A [†]	< LOQ		%	0.0032	
CBDV-Total [†]	0.0153		%	0.0061	
CBG [†]	0.0225		%	0.0032	
CBG-A [†]	< LOQ		%	0.0032	
CBG-Total	0.0225		%	0.0061	
CBL [†]	< LOQ		%	0.0032	
CBN	0.00763		%	0.0032	
$\Delta 8$ -THC [†]	< LOQ		%	0.0032	
Δ9-THC	0.123		%	0.0032	
THC-A	< LOQ		%	0.0032	
THC-Total	0.123		%	0.0061	
THCV [†]	< LOQ		%	0.0032	
THCV-A [†]	< LOQ		%	0.0032	
THCV-Total [†]	< LOQ		%	0.0061	
Total Cannabinoids [†]	3.05		%		

Potency per 28.5g	Method J AOA	AC 2015 V98-6 (mod)	Batch: 2009707		Analyze: 11/18/20 9:46:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g	21.7		mg/28.5g	0.926	
CBC-A per 28.5g	< LOQ		mg/28.5g	0.926	
CBC-Total per 28.5g	21.7		mg/28.5g	1.74	
CBD per 28.5g	801		mg/28.5g	9.26	
CBD-A per 28.5g	< LOQ		mg/28.5g	0.926	
CBD-Total per 28.5g	801		mg/28.5g	10.1	
CBDV per 28.5g	4.36		mg/28.5g	0.926	
CBDV-A per 28.5g	< LOQ		mg/28.5g	0.926	
CBDV-Total per 28.5g	4.36		mg/28.5g	1.73	

Page 2 of 8 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 Columbia Laboratories 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 retained for a maximum of 30 days from the receipt date unless prior arrangements have been made. Testing in accordance with: OAR 333-007-0430





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Potency per 28.5g	Method J AOA	AC 2015 V98-6 (mod)	Batch: 2009707		Analyze: 11/18/20 9:46:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBG per 28.5g	6.41		mg/28.5g	0.926	
CBG-A per 28.5g	< LOQ		mg/28.5g	0.926	
CBG-Total per 28.5g	6.41		mg/28.5g	1.73	
CBL per 28.5g	< LOQ		mg/28.5g	0.926	
CBN per 28.5g	2.17		mg/28.5g	0.926	
∆8-THC per 28.5g	< LOQ		mg/28.5g	0.926	
∆9-THC per 28.5g	35.1		mg/28.5g	0.926	
THC-A per 28.5g	< LOQ		mg/28.5g	0.926	
THC-Total per 28.5g	35.1		mg/28.5g	1.74	
THCV per 28.5g	< LOQ		mg/28.5g	0.926	
THCV-A per 28.5g	< LOQ		mg/28.5g	0.926	
THCV-Total per 28.5g	< LOQ		mg/28.5g	1.74	
Total Cannabinoids 28.5g ⁺	871		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 = $\mu g/g$ divided by 10,000

Approved Signatory

Derrick Tanner General Manager

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	ORIES	Э				Port 5	land 03-2	Whit , OR 254-1	8 972 1794	230	ıy			Rep ORI Pur	oort Da ELAP#	: Order:	20-012667/D02.F 11/19/2020 OR100028 11/17/20 17:00
Company: Healthy Contact: Liz Merrin Address: 14325 NI Portland Email: Healthyroo Phone: 503-496-2 License: AG-L 105: City, State, Zip: Email: Phone: Billing (if dif.)	tt E Airport Way, I, OR 97230 tshemp@gma 329	, #113 il.com	Pesticide Multi-Residue – 379 com	N 1794	Ca	-		te hain A	of Cu nalys	usto is Re		eco	HEAL	U.THYROOT.	213 s 20	5	D: OR100028 Urchase Order Number: Project Number: Project Name: Report Instructions: Send to State - METRC Email Final Results: Fax Final Results Cash/Check/CC/Net 30
Processor's License: Client Sample Identification #108 v 3 Citrus # 111 / 800 Pet	Date/Time Collected	Pesticides – OR 59 compounds	Pesticide Multi-Re	X X 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 edible	other: s c Healthy Roots D
Collected By: Turnaround time: Ask for availability	Relinquished	By:			Date M/1		Time		Rece	ived by				Date			Report in mg/gr and (percentage) bb Use Only: ient Alias: rder Number: oper Container

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

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Page 5 of 8 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 Columbia Laboratories 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 retained for a maximum of 30 days from the receipt date unless prior arrangements have been made. Testing in accordance with: OAR 333-007-0430





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ORELAP#:	OR100028
Purchase Order:	
Received:	11/17/20 17:00

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

		Lak	oratory	Quality Co	ntrol Results						
J AOAC 2015 V98-6 Batch ID: 2009707											
Laboratory Control Sample											
Analyte	Result	Spike	e Units	% Rec	Limits	Evaluation	Notes				
CBDV-A	0.01000	0.01	%	100.0	85.0 - 115	Acceptable					
CBDV	0.0104	0.01	%	104	85.0 - 115	Acceptable					
CBD-A	0.0102	0.01	%	102	85.0 - 115	Acceptable					
CBG-A	0.0101	0.01	%	101	85.0 - 115	Acceptable					
CBG	0.0102	0.01	%	102	85.0 - 115	Acceptable					
CBD	0.00988	0.01	%	98.8	85.0 - 115	Acceptable					
THCV	0.0102	0.01	%	102	85.0 - 115	Acceptable					
THCVA	0.00987	0.01	%	98.7	85.0 - 115	Acceptable					
CBN	0.0102	0.01	%	102	85.0 - 115	Acceptable					
тнс	0.0101	0.01	%	101	85.0 - 115	Acceptable					
D8THC	0.0101	0.01	%	101	85.0 - 115	Acceptable					
CBL	0.0101	0.01	%	101	85.0 - 115	Acceptable					
CBC	0.0108	0.01	%	108	85.0 - 115	Acceptable					
THCA	0.0101	0.01	%	101	85.0 - 115	Acceptable					
CBCA	0.00977	0.01	%	97.7	85.0 - 115	Acceptable					

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDV-A	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBDV	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBD-A	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBG-A	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBG	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBD	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
THCV	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
THCVA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBN	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
THC	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
D8THC	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBL	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBC	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
THCA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBCA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></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

Page 6 of 8 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 Columbia Laboratories 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 retained for a maximum of 30 days from the receipt date unless prior arrangements have been made. Testing in accordance with: OAR 333-007-0430





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Received:	11/17/20 17:00

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

			Laboi	ratory (Quality Co	ntrol Results		
I AOAC 2015 V98-6 Batch ID: 2009707								
Sample Duplicat		Sample ID: 20-012628-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	<loq< td=""><td><loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.003	%	NA	< 20	Acceptable	
CBDV	0.0147	0.0143	0.003	%	2.61	< 20	Acceptable	
CBD-A	<loq< td=""><td><loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.003	%	NA	< 20	Acceptable	
CBG-A	<loq< td=""><td><loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.003	%	NA	< 20	Acceptable	
CBG	0.0138	0.0143	0.003	%	3.56	< 20	Acceptable	
CBD	1.62	1.60	0.003	%	1.52	< 20	Acceptable	
THCV	<loq< td=""><td><loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.003	%	NA	< 20	Acceptable	
THCVA	<loq< td=""><td><loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.003	%	NA	< 20	Acceptable	
CBN	0.0497	0.0474	0.003	%	4.68	< 20	Acceptable	
тнс	<loq< td=""><td><loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.003	%	NA	< 20	Acceptable	
D8THC	0.00483	0.00467	0.003	%	3.38	< 20	Acceptable	
CBL	<loq< td=""><td><loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.003	%	NA	< 20	Acceptable	
CBC	<loq< td=""><td><loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.003	%	NA	< 20	Acceptable	
THCA	<loq< td=""><td><loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.003	%	NA	< 20	Acceptable	
CBCA	<loq< td=""><td><loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></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

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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.				
В	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.				

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