



Report Number:	21-007812/D004.R000
Report Date:	07/16/2021
ORELAP#:	OR100028
Purchase Order:	
Received:	07/09/21 14:45

Customer:	Healthy Roots
Product identity:	#154, 200 Pet
Client/Metrc ID:	
Laboratory ID:	21-007812-0003

Summary

Analyte	Result	Limits	Units	Status	CBD-Total per 28.5g	193 mg/28.5g	
CBC	0.0191		%				
CBD	0.678		%				
CBDV [†]	0.00362		%		THC-Total per 28.5g	8.58 mg/28.5g	
CBE [†]	0.00466		%		(Reported in milligrams per serving)		
CBG [†]	0.00579		%				
CBT [†]	0.0151		%				
∆9-THC	0.0301		%				
Analyte per 28.5g	Result	Limits	Units	Status			
CBC per 28.5g [†]	5.44		mg/28.5g				
CBD per 28.5g	193		mg/28.5g				
CBDV per 28.5g [†]	1.03		mg/28.5g				
CBE per 28.5g [†]	1.33		mg/28.5g				
CBG per 28.5g [†]	1.65		mg/28.5g				
CBT per 28.5g [†]	4.30		mg/28.5g				
∆9-THC per 28.5g	8.58		mg/28.5g				

Page 1 of 8 www.columbialaboratories.com
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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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Report Date:	07/16/2021			
ORELAP#:	OR100028			
Purchase Order:				
Received:	07/09/21 14:45			

Customer:	Healthy Roots
Product identity: Client/Metrc ID:	#154, 200 Pet
Sample Date:	
Laboratory ID:	21-007812-0003
Evidence of Cooling:	No
Temp:	26.0 °C
Relinquished by:	Client
Serving Size #1:	28.5 g

Sample Results

Potency	Method J AOA	C 2015 V98-6 (mod)	Units %	Batch: 2106235	Analyze: 7/13/21 7:58:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0191		%	0.0033	
CBC-A [†]	< LOQ		%	0.0033	
CBC-Total [†]	0.0191		%	0.0062	
CBD	0.678		%	0.0033	
CBD-A	< LOQ		%	0.0033	
CBD-Total	0.678		%	0.0062	
CBDV [†]	0.00362		%	0.0033	
CBDV-A [†]	< LOQ		%	0.0033	
CBDV-Total [†]	< LOQ		%	0.0062	
CBE [†]	0.00466		%	0.0033	
CBG [†]	0.00579		%	0.0033	
CBG-A [†]	< LOQ		%	0.0033	
CBG-Total	< LOQ		%	0.0062	
CBL [†]	< LOQ		%	0.0033	
CBL-A [†]	< LOQ		%	0.0033	
CBL-Total [†]	< LOQ		%	0.0062	
CBN	< LOQ		%	0.0033	
CBT [†]	0.0151		%	0.0033	
$\Delta 8$ -THCV	< LOQ		%	0.0033	
$\Delta 8$ -THC [†]	< LOQ		%	0.0033	
Δ9-THC	0.0301		%	0.0033	
THC-A	< LOQ		%	0.0033	
THC-Total	0.0301		%	0.0062	
THCV [†]	< LOQ		%	0.0033	
THCV-A [†]	< LOQ		%	0.0033	
THCV-Total [†]	< LOQ		%	0.0062	
Total Cannabinoids [†]	0.756		%		

Potency per 28.5g	Method J AOA	C 2015 V98-6 (m	od) Units mg/se Ba	t ch: 2106235	Analyze: 7/13/21 7:58:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g [†]	5.44		mg/28.5g	0.942	
CBC-A per 28.5g [†]	< LOQ		mg/28.5g	0.942	
CBC-Total per 28.5g [†]	5.44		mg/28.5g	1.77	

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





Report Number: 21-007812/D004.R000 **Report Date:** 07/16/2021 **ORELAP#:** OR100028 **Purchase Order:** 07/09/21 14:45 **Received:**

Potency per 28.5g	Method J AOA	C 2015 V98-6 (mod) Units mg/s	e Batch: 2106235	Analyze: 7/13/21 7:58:00 PM
Analyte	Result	Limits Units	LOQ	Notes
CBD per 28.5g	193	mg/28.5g	0.942	
CBD-A per 28.5g	< LOQ	mg/28.5g	0.942	
CBD-Total per 28.5g	193	mg/28.5g	1.77	
CBDV per 28.5g⁺	1.03	mg/28.5g	0.942	
CBDV-A per 28.5g⁺	< LOQ	mg/28.5g	0.942	
CBDV-Total per 28.5g⁺	< LOQ	mg/28.5g	1.76	
CBE per 28.5g [†]	1.33	mg/28.5g	0.942	
CBG per 28.5g⁺	1.65	mg/28.5g	0.942	
CBG-A per 28.5g [†]	< LOQ	mg/28.5g	0.942	
CBG-Total per 28.5g [†]	< LOQ	mg/28.5g	1.76	
CBL per 28.5g [†]	< LOQ	mg/28.5g	0.942	
CBL-A per 28.5g [†]	< LOQ	mg/28.5g	0.942	
CBL-Total per 28.5g⁺	< LOQ	mg/28.5g	1.77	
CBN per 28.5g	< LOQ	mg/28.5g	0.942	
CBT per 28.5g [†]	4.30	mg/28.5g	0.942	
∆8-THCV per 28.5g⁺	< LOQ	mg/28.5g	0.942	
∆8-THC per 28.5g [†]	< LOQ	mg/28.5g	0.942	
19-THC per 28.5g	8.58	mg/28.5g	0.942	
exo-THC per 28.5g⁺	< LOQ	mg/28.5g	0.942	
THC-A per 28.5g	< LOQ	mg/28.5g	0.942	
THC-Total per 28.5g	8.58	mg/28.5g	1.77	
THCV per 28.5g [†]	< LOQ	mg/28.5g	0.942	
THCV-A per 28.5g⁺	< LOQ	mg/28.5g	0.942	
THCV-Total per 28.5g⁺	< LOQ	mg/28.5g	1.77	
Total Cannabinoids per 28.5g	216	mg/28.5g		

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 Page 3 of 8

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 OAR 333-007-0430





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 21-007812/D004.R000

 Report Date:
 07/16/2021

 ORELAP#:
 OR100028

 Purchase Order:
 07/09/21 14:45

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

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Page 4 of 8

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ORELAP#:	OR100028
Purchase Order:	
Received:	07/09/21 14:45

Hemp / Cannabis Usable / Extract / Finished Products olumbia **Chain of Custody Record** ABORATORIE Revision: 4.00 Control#: CF023 Rev 02/24/2021 Eff: 03/04/2021 A Tentamus Company ORELAP ID: OR100028 Analysis Requested PO Number: 21-007842 Project Number: CHAIN OF CUSTODY Company: Healthy Roots Project Name: ²esticide Multi-Residue – 379 compounds Contact: Liz Merritt Custom Reporting: Address: 14325 NE Airport Way, #113 Report to State - 🗌 METRC or 🗐 Other:_ Portland, OR 97230 Micro: E.Coli and Total Coliform Pesticides – OR 59 compounds Email: Healthyrootshemp@gmail.com Turnaround time: 🗹 5 Business Day Standard Turnaround Phone: 503-496-2329 oisture & Water Activity 3 Business Day Rush Turnaround* License: AG-L 1052211FP **Aicro: Yeast and Mold** □ 2 Business Day Rush Turnaround* sidual Solvents Billing (if different):_ *Check for availability Heavy Metals Sampled by: Mycotoxins rpenes Potency Weight Other: Lab Sample **Client Sample Identification** ID Date Time Type 1 (Units) Comments/Metrc ID #153, Wilipia 7/9 V 28.5 gr #143v3, Soft Grel Capsule 7/9 .5gr Reference Lab final H v 21-005235-0001 #154 200 Ret 7/9 28.54 #155, 500 Pet 7/9 28.5gt V 7 #156, 800 Pet Report in 7/9 Roots ~ 28.5 mg/gr and % (percentage) IIc Relinquished By: Date Time Received By Date Time Lab Use Only: □ Shipped Via: or Client drop Merritt 0 7/9/2 26.0 Evidence of cooling: Yes |No - Temp (°C): Sample in good condition: Yes | No □ Cash | □ Check | □ CC | □ Net: 7/9/21 14:4 Prelog storage: In + - Sample Type Codes: Vegetation (V); Isolates (S); Extract/Concentrate (C); Tincture/Topical (T); Edible (E); Beverage (B) Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms

12423 NE Whitaker Way
P: (503) 254-1792
Portland, OR 97230
Pi (503) 254-1792
Pi (503) 254-1795
Pi (503

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Report Date:	07/16/2021
ORELAP#:	OR100028
Purchase Order:	

Received:

07/09/21 14:45

Revision #: 0.00 Control : CFL-D06

Revision	Date:	05/31/2019	Effective	Date:	05/31/2019

Laboratory Quality Control Results										
	AOAC 2015 V98-6 Batch ID: 2106235									
Laboratory Cont										
Analyte	Result	Spike	Units	% Rec	L	imit:	5	Evaluation	Notes	
CBDVA	0.00977	0.01	%	97.7	85.0	-	115	Acceptable		
CBDV	0.00985	0.01	%	98.5	85.0	-	115	Acceptable		
CBE	0.00996	0.01	%	99.6	85.0	-	115	Acceptable		
CBDA	0.00975	0.01	%	97.5	85.0	-	115	Acceptable		
CBGA	0.00965	0.01	%	96.5	85.0	-	115	Acceptable		
CBG	0.00991	0.01	%	99.1	85.0	-	115	Acceptable		
CBD	0.00993	0.01	%	99.3	85.0	-	115	Acceptable		
THCV	0.00986	0.01	%	98.6	85.0	-	115	Acceptable		
d8THCV	0.00993	0.01	%	99.3	85.0	-	115	Acceptable		
THCVA	0.00938	0.01	%	93.8	85.0	-	115	Acceptable		
CBN	0.0104	0.01	%	104	85.0	-	115	Acceptable		
exo-THC	0.00954	0.01	%	95.4	85.0	-	115	Acceptable		
d9THC	0.0103	0.01	%	103	85.0	-	115	Acceptable		
d8THC	0.00973	0.01	%	97.3	85.0	-	115	Acceptable		
CBL	0.00981	0.01	%	98.1	85.0	-	115	Acceptable		
CBC	0.00983	0.01	%	98.3	85.0	-	115	Acceptable		
THCA	0.00944	0.01	%	94.4	85.0	-	115	Acceptable		
CBCA	0.00968	0.01	%	96.8	85.0	-	115	Acceptable		
CBLA	0.0104	0.01	%	104	85.0	-	115	Acceptable		
CBT	0.0109	0.01	%	109	85.0	-	115	Acceptable		

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<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	
CBE	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBDA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBGA	<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	
d8THCV	<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	
exo-THC	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
d9THC	<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	
CBLA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBT	<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

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 Page 6 of 8

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Report Date:	07/16/2021			
ORELAP#:	OR100028			
Purchase Order:				
Received:	07/09/21 14:45			

Revision #: 0.00 Control : CFL-D06

Revision Date: 05/31/2019 Effective Date: 05/31/2019

			Labo	ratory (Quality Co	ontrol Results			
J AOAC 2015	V98-6			Batch ID: 2106235					
Sample Duplicate				Sample ID: 21-005064-0004					
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes	
CBDVA	0.0131	0.0134	0.003	%	2.09	< 20	Acceptable		
CBDV	0.0420	0.0427	0.003	%	1.85	< 20	Acceptable		
CBE	0.0172	0.0190	0.003	%	9.99	< 20	Acceptable		
CBDA	0.403	0.407	0.003	%	1.11	< 20	Acceptable		
CBGA	0.00957	0.0106	0.003	%	10.3	< 20	Acceptable		
CBG	0.0201	0.0216	0.003	%	7.01	< 20	Acceptable		
CBD	2.96	2.85	0.003	%	3.99	< 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		
d8THCV	<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	<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		
exo-THC	<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		
d9THC	0.0433	0.0439	0.003	%	1.36	< 20	Acceptable		
d8THC	<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		
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	0.165	0.166	0.003	%	0.828	< 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	0.0344	0.0363	0.003	%	5.49	< 20	Acceptable		
CBLA	<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		
CBT	0.0292	0.0287	0.003	%	2.03	< 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

Page 7 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





Report Number: 21-007812/D004.R000 **Report Date:** 07/16/2021 **ORELAP#:** OR100028 **Purchase Order:** 07/09/21 14:45 **Received:**

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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 Page 8 of 8

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