



Report Number: 21-004093/D04.R01 **Report Date:** 04/26/2021 **ORELAP#:** OR100028 **Purchase Order:** 04/14/21 13:30 **Received:**

This is an amended version of report# 21-004093/D04.R00. Reason: Updated LOQs.

Client/Metrc ID:	Customer: Product identity:	Healthy Roots #141, 500 pet		
Laboratory ID: 21.004002.0002 Comple Date: 04/14/21	•			
Laboratory ID: 21-004093-0003 Sample Date: 04/14/21	Laboratory ID:	21-004093-0003	Sample Date:	04/14/21

Summary

Analyte	Result	Limits	Units	Status	CBD-Total per 28.5g	496 mg/28.5g
CBC	0.0508		%			
CBD	1.74		%			
CBDV [†]	0.00995		%		THC-Total per 28.5g	22.9 mg/28.5g
CBG [†]	0.0141		%		(Reported in milligr	- $ -$
CBN	0.00565		%		(Reported in minigi	anis per serving)
∆9-THC	0.0804		%			
Analyte per 28.5g	Result	Limits	Units	Status		
CBC per 28.5g [†]	14.5		mg/28.5g			
CBD per 28.5g	496		mg/28.5g			
CBDV per 28.5g [†]	2.84		mg/28.5g			
CBG per 28.5g [†]	4.02		mg/28.5g			
CBN per 28.5g	1.61		mg/28.5g			
∆9-THC per 28.5g	22.9		mg/28.5g			

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Report Date:	04/26/2021
ORELAP#:	OR100028
Purchase Order:	
Received:	04/14/21 13:30

Customer:	Healthy Roots
Product identity:	#141, 500 pet
Client/Metrc ID:	
Sample Date:	04/14/21
Laboratory ID:	21-004093-0003
Evidence of Cooling:	No
Temp:	16.9 °C
Relinquished by:	Client
Serving Size #1:	28.5 g

Sample Results

Potency	Method J AOAC	2015 V98-6 (mod)	Units %	Batch: 2103717	Analyze: 4/24/21 12:07:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0508		%	0.0033	
CBC-A [†]	< LOQ		%	0.0033	
CBC-Total [†]	0.0508		%	0.0061	
CBD	1.74		%	0.0327	
CBD-A	< LOQ		%	0.0033	
CBD-Total	1.74		%	0.0356	
CBDV [†]	0.00995		%	0.0033	
CBDV-A [†]	< LOQ		%	0.0033	
CBDV-Total [†]	0.00995		%	0.0061	
CBG [†]	0.0141		%	0.0033	
CBG-A [†]	< LOQ		%	0.0033	
CBG-Total	0.0141		%	0.0061	
CBN	0.00565		%	0.0033	
$\Delta 8\text{-THC}^{\dagger}$	< LOQ		%	0.0033	
Δ9-THC	0.0804		%	0.0033	
THC-A	< LOQ		%	0.0033	
THC-Total	0.0804		%	0.0061	
THCV [†]	< LOQ		%	0.0033	
THCV-A [†]	< LOQ		%	0.0033	
THCV-Total [†]	< LOQ		%	0.0061	

Potency per 28.5g	Method J AOA	C 2015 V98-6 (m	nod) Units mg/se Ba	tch: 2103717	Analyze: 4/24/21 12:07:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g [†]	14.5		mg/28.5g	0.932	
CBC-A per 28.5g [†]	< LOQ		mg/28.5g	0.932	
CBC-Total per 28.5g [†]	14.5		mg/28.5g	1.75	
CBD per 28.5g	496		mg/28.5g	9.32	
CBD-A per 28.5g	< LOQ		mg/28.5g	0.932	
CBD-Total per 28.5g	496		mg/28.5g	10.1	
CBDV per 28.5g [†]	2.84		mg/28.5g	0.932	
CBDV-A per 28.5g ^{\dagger}	< LOQ		mg/28.5g	0.932	

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: 21-004093/D04.R01 **Report Date:** 04/26/2021 **ORELAP#:** OR100028 **Purchase Order: Received:** 04/14/21 13:30

Potency per 28.5g	Method J AOA	AC 2015 V98-6 (m	od) Units mg/se Ba	tch: 2103717	Analyze: 4/24/21 12:07:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
CBDV-Total per 28.5g [†]	2.84		mg/28.5g	1.74	
CBG per 28.5g [†]	4.02		mg/28.5g	0.932	
CBG-A per 28.5g ⁺	< LOQ		mg/28.5g	0.932	
CBG-Total per 28.5g [†]	4.02		mg/28.5g	1.74	
CBL-Total per 28.5g [†]	< LOQ		mg/28.5g	536	
CBN per 28.5g	1.61		mg/28.5g	0.932	
$\Delta 8$ -THC per 28.5g [†]	< LOQ		mg/28.5g	0.932	
∆9-THC per 28.5g	22.9		mg/28.5g	0.932	
THC-A per 28.5g	< LOQ		mg/28.5g	0.932	
THC-Total per 28.5g	22.9		mg/28.5g	1.75	
THCV per 28.5g [†]	< LOQ		mg/28.5g	0.932	
THCV-A per 28.5g [†]	< LOQ		mg/28.5g	0.932	
THCV-Total per 28.5g [↑]	< LOQ		mg/28.5g	1.75	
	< LOQ		mg/28.5g	1.75	

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 Testing in accordance with:
 OAR 333-007-0430





Report Number: 21-004093/D04.R01 Report Date: 04/26/2021 **ORELAP#:** OR100028 Purchase Order: **Received:** 04/14/21 13:30

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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	Colume A Tentamus Com	pany Dia			Can	nabi C	rtlar 503	able of (DR 4-17	972 794	30 nct / Rec 24/20 28	Fini		d Pr	Re OF Pu Re oducts		e: 04/26/2021 OR100028
	CHAIN OF Company: Healthy Roo Contact: Liz Merritt Address: 14325 NE Air Portland, OR Email: Healthyrootsher Phone: 503496-2329 License: AG-L 10522111 : (Fx Results ing (if different):	ts port Way, # 97230 np@gmail.c =P :: ()	com	- OR 59 compounds	esticide Multi-Residue – 379 compounds		olvents	hoisture & Water Activity		Aicro: Yeast and Mold	Vicro: E.Coli and Total Coliform	als			Proje Prc Custom Report t Turnarou	ct Number: iject Name: Reporting: o State - [] M und time: [] 5 [] 3 [] 2	ETRC or Other: Business Day Standard Turnaround Business Day Rush Turnaround* Business Day Rush Turnaround* Check for availability
Lab ID	Client Sample Identification	Date	Time	Pesticides -	Pesticide N	Potency	Residual Solvents	Moisture 8	Terpenes	Micro: Yea	Micro: E.C	Heavy Metals	Mycotoxins	Other:	Sampled Sample Type †	Weight (Units)	Comments/Metrc ID
1	150 LC, 123120 #140, 1000 Horse	04/14/21															thiv is for lab ID [±] 21-00017-0001
	#141, 500 Pet	04/14/21 04/14/21				V										28.5gr 28.5gr	
																	Report in mg/gr and % (percentage)
m	Relinquished By: Ervit	Date 04/14/2-	Time /	C]m	Re	ceived	Зу:			Da 14-1	ute 4-21		me 3	Sample in	n good conditio	Lab Use Only: or ☐ Client drop J ∪ 4 - Yes

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 Whitoker Way
P: (503) 254-1794 / Fax: (503) 254-1452
info@columbialaboratories.com
www.columbialaboratories.com Page _____of _____ www.columbialaboratories.com

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





Report Number:	21-004093/D04.R01
Report Date:	04/26/2021
ORELAP#:	OR100028
Purchase Order:	
Received:	04/14/21 13:30

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: 2103717											
Laboratory Control Sample											
Analyte	Result	Spike	Units	% Rec	Lim	nits	Evaluation	Notes			
CBDV-A	0.00953	0.01	%	95.3	85.0 -	115	Acceptable				
CBDV	0.0107	0.01	%	107	85.0 -	· 115	Acceptable				
CBD-A	0.0100	0.01	%	100	85.0 -	115	Acceptable				
CBG-A	0.00958	0.01	%	95.8	85.0 -	· 115	Acceptable				
CBG	0.00993	0.01	%	99.3	85.0 -	· 115	Acceptable				
CBD	0.0103	0.01	%	103	85.0 -	· 115	Acceptable				
THCV	0.00980	0.01	%	98.0	85.0 -	· 115	Acceptable				
THCVA	0.00912	0.01	%	91.2	85.0 -	· 115	Acceptable				
CBN	0.0108	0.01	%	108	85.0 -	115	Acceptable				
тнс	0.0103	0.01	%	103	85.0 -	115	Acceptable				
D8THC	0.0107	0.01	%	107	85.0 -	115	Acceptable				
CBL	0.00953	0.01	%	95.3	85.0 -	· 115	Acceptable				
CBC	0.00992	0.01	%	99.2	85.0 -	· 115	Acceptable				
THCA	0.00995	0.01	%	99.5	85.0 -	· 115	Acceptable				
CBCA	0.00941	0.01	%	94.1	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	
тнс	<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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Report Date:	04/26/2021
ORELAP#:	OR100028
Purchase Order:	
Received:	04/14/21 13:30

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

			Labor	atory	Quality Co	ntrol Results			
J AOAC 2015 V	Batch ID: 2103717								
Sample Duplicate			Sample ID: 21-004093-0002-01						
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	0.0195	0.0197	0.003	%	0.965	< 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	0.0287	0.0270	0.003	%	6.39	< 20	Acceptable		
CBD	3.37	3.44	0.003	%	2.31	< 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	0.0103	0.0113	0.003	%	8.63	< 20	Acceptable		
тнс	0.152	0.148	0.003	%	3.02	< 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	0.0961	0.0954	0.003	%	0.719	< 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

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





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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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