



Report Number:	23-008661/D003.R000
Report Date:	07/27/2023
ORELAP#:	OR100028
Purchase Order:	
Received:	07/21/23 14:14

-

Customer:	Healthy Roots
Product identity:	#288, 500 Pet
Client/Metrc ID:	
Laboratory ID:	23-008661-0002

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Summary

Analyte	Result	Limits	Units	Status	CBD-Total per Serving Size	527 mg/28.5g
CBC	0.128		%			
CBD	1.85		%			
CBDV	0.0205		%		THC-Total per Serving Size	20.0 mg/28.5g
CBG	0.0258		%		(Reported in milligrams	- $ -$
CBL	0.00343		%		(Reported in minigrams	per serving)
CBN	0.0120		%			
CBT	0.0261		%			
∆8-THC	0.0230		%			
∆9-THC	0.0700		%			
Analyte per 28.5g	Result	Limits	Units	Status		
CBC per 28.5g	36.5		mg/28.5g			
CBD per 28.5g	527		mg/28.5g			
CBDV per 28.5g	5.84		mg/28.5g			
CBG per 28.5g	7.35		mg/28.5g			
CBL per 28.5g	0.978		mg/28.5g			
CBN per 28.5g	3.42		mg/28.5g			
CBT per 28.5g	7.44		mg/28.5g			
∆8-THC per 28.5g	6.56		mg/28.5g			
∆9-THC per 28.5g	20.0		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:	07/21/23 14:14

Customer:	Healthy Roots
Product identity: Client/Metrc ID:	#288, 500 Pet
Sample Date: Laboratory ID:	23-008661-0002
Evidence of Cooling:	No
Temp:	24.6 °C
Relinquished by:	Client
Serving Size #1:	28.5 g

Sample Results

Potency	Method: J AOAC 2015 V98-	6 (mod) ^þ	Units %	Batch: 2309415	Analyze: 7/24/23 10:44:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.128		%	0.00326	
CBC-A	< LOQ		%	0.00326	
CBC-Total	0.128		%	0.00612	
CBD	1.85		%	0.0326	
CBD-A	< LOQ		%	0.00326	
CBD-Total	1.85		%	0.0354	
CBDV	0.0205		%	0.00326	
CBDV-A	< LOQ		%	0.00326	
CBDV-Total	0.0205		%	0.00608	
CBE	< LOQ		%	0.00326	
CBG	0.0258		%	0.00326	
CBG-A	< LOQ		%	0.00326	
CBG-Total	0.0258		%	0.00608	
CBL	0.00343		%	0.00326	
CBL-A	< LOQ		%	0.00326	
CBL-Total	< LOQ		%	0.00612	
CBN	0.0120		%	0.00326	
CBT	0.0261		%	0.00326	
∆8-THCV	< LOQ		%	0.00326	
$\Delta 10$ -THC-9R	< LOQ		%	0.00326	
$\Delta 10$ -THC-9S	< LOQ		%	0.00326	
$\Delta 10$ -THC-Total	< LOQ		%	0.00652	
$\Delta 8$ -THC	0.0230		%	0.00326	
Δ9-THC	0.0700		%	0.00326	
delta-9-THCP	< LOQ		%	0.00326	
exo-THC	< LOQ		%	0.00326	
THC-A	< LOQ		%	0.00326	
THC-Total	0.0700		%	0.00612	
THCV	< LOQ		%	0.00326	
THCV-A	< LOQ		%	0.00326	
THCV-Total	< LOQ		%	0.00608	
Total Cannabinoids	2.16		%		

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 AOAC 2015	√98-6 (mod)⊧	Units mg/se Bate	ch: 2309415	Analyze: 7/24/23 10:44:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g	36.5		mg/28.5g	0.929	
CBC-A per 28.5g	< LOQ		mg/28.5g	0.929	
CBC-Total per 28.5g	36.5		mg/28.5g	1.74	
CBD per 28.5g	527		mg/28.5g	9.29	
CBD-A per 28.5g	< LOQ		mg/28.5g	0.929	
CBD-Total per 28.5g	527		mg/28.5g	10.1	
CBDV per 28.5g	5.84		mg/28.5g	0.929	
CBDV-A per 28.5g	< LOQ		mg/28.5g	0.929	
CBDV-Total per 28.5g	5.84		mg/28.5g	1.73	
CBE per 28.5g	< LOQ		mg/28.5g	0.929	
CBG per 28.5g	7.35		mg/28.5g	0.929	
CBG-A per 28.5g	< LOQ		mg/28.5g	0.929	
CBG-Total per 28.5g	7.35		mg/28.5g	1.73	
CBL per 28.5g	0.978		mg/28.5g	0.929	
CBL-A per 28.5g	< LOQ		mg/28.5g	0.929	
CBL-Total per 28.5g	< LOQ		mg/28.5g	1.74	
CBN per 28.5g	3.42		mg/28.5g	0.929	
CBT per 28.5g	7.44		mg/28.5g	0.929	
∆8-THCV per 28.5g	< LOQ		mg/28.5g	0.929	
∆10-THC-9R per 28.5g	< LOQ		mg/28.5g	0.929	
∆10-THC-9S per 28.5g	< LOQ		mg/28.5g	0.929	
10-THC-Total per 28.5g	< LOQ		mg/28.5g	1.86	
∆8-THC per 28.5g	6.56		mg/28.5g	0.929	
∆9-THC per 28.5g	20.0		mg/28.5g	0.929	
delta-9-THCP per 28.5g	< LOQ		mg/28.5g	0.929	
exo-THC per 28.5g	< LOQ		mg/28.5g	0.929	
THC-A per 28.5g	< LOQ		mg/28.5g	0.929	
THC-Total per 28.5g	20.0		mg/28.5g	1.74	
THCV per 28.5g	< LOQ		mg/28.5g	0.929	
THCV-A per 28.5g	< LOQ		mg/28.5g	0.929	
THCV-Total per 28.5g	< LOQ		mg/28.5g	1.74	
Total Cannabinoids per 28.8	5g 615		mg/28.5g		

Page 3 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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Abbreviations

Limits: Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220, CCR title 16-division 42. BCC-section 5723

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.

^b = ISO/IEC 17025:2017 accredited method.

Units of Measure

g = g mg/28.5g = Milligram per 28.5g % = Percentage of sample % wt = μg/g divided by 10,000

Approved Signatory

Derrick Tanner General Manager

www.columbialaboratories.com

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Received:	07/21/23 14:14

Revision: 4 Document ID: 7148 Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results J AOAC 2015 V98-6 Batch ID: 2309415									
Laboratory Control	Sample								
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0302	0.0311	%	97.1	80.0 -	120	Acceptable	
CBDV	2	0.0297	0.0307	%	96.8	80.0 -	120	Acceptable	
BE	2	0.0337	0.0349	%	96.6	80.0 -	120	Acceptable	
CBDA	1	0.0311	0.0325	%	95.8	90.0 -	110	Acceptable	
CBGA	1	0.0310	0.0326	%	95.2	80.0 -	120	Acceptable	
CBG	1	0.0318	0.0332	%	95.8	80.0 -	120	Acceptable	
CBD	1	0.0330	0.0337	%	97.8	90.0 -	110	Acceptable	
HCV	2	0.0218	0.0222	%	98.1	80.0 -	120	Acceptable	
18THCV	2	0.0262	0.0272	%	96.4	80.0 -	120	Acceptable	
HCVA	2	0.0302	0.0310	%	97.4	80.0 -	120	Acceptable	
CBN	1	0.0325	0.0340	%	95.7	80.0 -	120	Acceptable	
xo-THC	2	0.0303	0.0311	%	97.2	80.0 -	120	Acceptable	
19THC	1	0.0322	0.0329	%	97.7	90.0 -	110	Acceptable	
I8THC	1	0.0301	0.0320	%	94.1	90.0 -	110	Acceptable	
9S-d10THC	1	0.0328	0.0343	%	95.8	80.0 -	120	Acceptable	
CBL	2	0.0301	0.0311	%	96.6	80.0 -	120	Acceptable	
R-d10THC	1	0.0297	0.0313	%	94.8	80.0 -	120	Acceptable	
CBC	2	0.0312	0.0319	%	97.9	80.0 -	120	Acceptable	
HCA	1	0.0305	0.0322	%	94.4	90.0 -	110	Acceptable	
CBCA	2	0.0314	0.0325	%	96.7	80.0 -	120	Acceptable	
BLA	2	0.0483	0.0500	%	96.5	80.0 -	120	Acceptable	
19THCP	2	0.0309	0.0323	%	95.7	80.0 -	120	Acceptable	
CBT	2	0.0304	0.0314	%	96.8	80.0 -	120	Acceptable	
Method Blank									
Analyte	R	esult	LOQ		Units	Limits		Evaluation	Notes
CBDVA	<	LOQ.	0.00317	%		< 0.003	17	Acceptable	
CBDV		LOQ.	0.00317	%		< 0.003	17	Acceptable	
CBE		LOQ	0.00317		%	< 0.00317		Acceptable	
CBDA		LOQ	0.00317		%	< 0.00317		Acceptable	
CBGA	<	LOQ	0.00317		%	< 0.00317		Acceptable	
CBG	<	LOQ.	0.00317		%	< 0.003	17	Acceptable	
CBD		LOQ.	0.00317		%	< 0.003		Acceptable	
THCV	<	LOQ.	0.00317		%	< 0.003	17	Acceptable	
18THCV	<	LOQ	0.00317		%	< 0.003	17	Acceptable	
HCVA	<	LOQ.	0.00317		%	< 0.003		Acceptable	
CBN		LOQ.	0.00317		%	< 0.003		Acceptable	
exo-THC		LOQ	0.00317		%	< 0.003		Acceptable	
19THC	<	LOQ	0.00317		%	< 0.003	17	Acceptable	
18THC		LOQ	0.00317	%		< 0.003		Acceptable	
S-d10THC		LOQ.	0.00317		%	< 0.003		Acceptable	
BL	<	LOQ.	0.00317	%		< 0.003	17	Acceptable	
R-d10THC		LOQ.	0.00317	%		< 0.003		Acceptable	
CBC		LOQ.	0.00317		%	< 0.003		Acceptable	
HCA	<	LOQ.	0.00317		%	< 0.003	17	Acceptable	
BCA	<	LOQ	0.00317	1	%	< 0.003	17	Acceptable	
BCA	1	LOQ	0.00317	1	%	< 0.003	17	Acceptable	
	<			%		< 0.00317			
CBLA I9THCP		LOQ	0.00317		%	< 0.003	17	Acceptable	

ND - None Detected at or above MRL RPD - Relative Percent Difference LOQ - Limit of Quantitation

Units of Measure: % - Percent

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Revision: 4 Document ID: 7148 Legacy ID: Worksheet Validated 04/20/2021

J AOAC 2015 V98-6	Batch ID: 2309415								
Sample Duplicate	Sample ID: 23-008639-0002								
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes	
CBDVA	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBDV	0.133	0.134	0.00327	%	0.292	< 20	Acceptable		
CBE	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBDA	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBGA	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBG	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBD	38.8	37.8	0.00327	%	2.53	< 20	Acceptable		
THCV	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
d8THCV	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
THCVA	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBN	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
exo-THC	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
d9THC	0.0113	0.0113	0.00327	%	0.227	< 20	Acceptable		
d8THC	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
9S-d10THC	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBL	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
9R-d10THC	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBC	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
THCA	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBCA	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBLA	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
d9THCP	<loq< td=""><td><loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00327</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00327	%	NA	< 20	Acceptable		
CBT	0.00781	0.00784	0.00327	%	0.355	< 20	Acceptable		

ND - None Detected at or above MRL RPD - Relative Percent Difference

LOQ - Limit of Quantitation

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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 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