



Report Number: 20-009479/D04.R00

09/10/2020 Report Date: ORELAP#: OR100028

Purchase Order:

Received: 09/04/20 16:15

Customer: Healthy Roots Product identity: #98 1000 Natural

Client/Metrc ID:

Laboratory ID: 20-009479-0001

Summary

Analyte	Result	Limits	Units	Status	CBD-Total per 28.5g	1030 mg/28.5g
CBC	0.133		%			
CBC-A [†]	0.0804		%		<u> </u>	
CBD	2.99		%		THC-Total per 28.5g	11.4 mg/28.5g
CBD-A	0.726		%		(Reported in milligr	ame per cerving)
CBDV [†]	0.0262		%		(Reported in milligi	ans per serving)
CBDV-A [†]	0.0232		%			
CBG [†]	0.0149		%			
CBG-A [†]	0.0128		%			
Δ9-THC	0.0370		%			
THC-A	0.00350		%			
Analyte per 28.5g	Result	Limits	Units	Status		
CBC per 28.5g	37.9		mg/28.5g			
CBC-A per 28.5g	22.9		mg/28.5g			
CBD per 28.5g	852		mg/28.5g			
CBD-A per 28.5g	207		mg/28.5g			
CBDV per 28.5g	7.47		mg/28.5g			
CBDV-A per 28.5g	6.61		mg/28.5g			
CBG per 28.5g	4.25		mg/28.5g			
CBG-A per 28.5g	3.65		mg/28.5g			
∆9-THC per 28.5g	10.5		mg/28.5g			
THC-A per 28.5g	0.998		mg/28.5g			





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Product identity: #98 1000 Natural

Client/Metrc ID:

Sample Date:

Laboratory ID: 20-009479-0001

Relinquished by: Client 26.3 °C Temp: Serving Size #1: 28.5 g

Sample Results

Potency	Method J AOAC 2	015 V98-6 (mod)	Batch: 2007421		Analyze: 9/9/20 2:33:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.133		%	0.0033	
CBC-A [†]	0.0804		%	0.0033	
CBC-Total [†]	0.204		%	0.0062	
CBD	2.99		%	0.0330	
CBD-A	0.726		%	0.0033	
CBD-Total	3.63		%	0.0359	
CBDV [†]	0.0262		%	0.0033	
CBDV-A [†]	0.0232		%	0.0033	
CBDV-Total [†]	0.0463		%	0.0062	
CBG [†]	0.0149		%	0.0033	
CBG-A [†]	0.0128		%	0.0033	
CBG-Total	0.0261		%	0.0062	
CBL [†]	< LOQ		%	0.0033	
CBN	< LOQ		%	0.0033	
$\Delta 8\text{-THC}^{\dagger}$	< LOQ		%	0.0033	
Δ9-THC	0.0370		%	0.0033	
THC-A	0.00350		%	0.0033	
THC-Total	0.0401		%	0.0062	
THCV [†]	< LOQ		%	0.0033	
THCV-A [†]	< LOQ		%	0.0033	
THCV-Total [†]	< LOQ		%	0.0062	
Total Cannabinoids [↑]	4.05		%		

Potency per 28.5g	Method J AOA	AC 2015 V98-6 (mod)	Batch: 200742	21	Analyze: 9/9/20 2:33:00 AM		
Analyte	Result	Limits	Units	LOQ	Notes		
CBC per 28.5g	37.9		mg/28.5g	0.940			
CBC-A per 28.5g	22.9		mg/28.5g	0.940			
CBC-Total per 28.5g	58.0		mg/28.5g	1.76			
CBD per 28.5g	852		mg/28.5g	9.40			
CBD-A per 28.5g	207		mg/28.5g	0.940			
CBD-Total per 28.5g	1030		mg/28.5g	10.2			
CBDV per 28.5g	7.47		mg/28.5g	0.940			
CBDV-A per 28.5g	6.61		mg/28.5g	0.940			
		www.columbialabo	rotorios com		Page 2 of 8		

www.columbialaboratories.com

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.





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Potency per 28.5g	Method J AOA	AC 2015 V98-6 (mod)	Batch: 2007421		Analyze: 9/9/20 2:33:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
CBDV-Total per 28.5g	13.2		mg/28.5g	1.75	
CBG per 28.5g	4.25		mg/28.5g	0.940	
CBG-A per 28.5g	3.65		mg/28.5g	0.940	
CBG-Total per 28.5g	7.41		mg/28.5g	1.75	
CBL per 28.5g	< LOQ		mg/28.5g	0.940	
CBN per 28.5g	< LOQ		mg/28.5g	0.940	
$\Delta 8$ -THC per 28.5g	< LOQ		mg/28.5g	0.940	
Δ9-THC per 28.5g	10.5		mg/28.5g	0.940	
THC-A per 28.5g	0.998		mg/28.5g	0.940	
THC-Total per 28.5g	11.4		mg/28.5g	1.76	
THCV per 28.5g	< LOQ		mg/28.5g	0.940	
THCV-A per 28.5g	< LOQ		mg/28.5g	0.940	
THCV-Total per 28.5g	< LOQ		mg/28.5g	1.77	
Total Cannabinoids 28.5g [†]	1150		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 = Grammg/28.5g = Milligram per 28.5g % = Percentage of sample % wt = μ g/g divided by 10,000

Approved Signatory

Derrick Tanner General Manager





20-009479/D04.R00 **Report Number:**

Report Date: 09/10/2020

ORELAP#:

OR100028

Purchase Order:

09/04/20 16:15 Received:

	Con Oui Roots Run Deep						1			A	nalys	is Re	quest	ed	*				Purchase Order Number:
	Company: Contact: L Address: 1 Address: 1 Email: He: Phone: 50 License: A				379 compounds							-							Project Number: Project Name:
	CHAIN OF CUSTODY Company: Healthy Roots Contact: Liz Merritt Address: 14325 NE Airport Way, #113 Portland, OR 97230 Email: Healthyrootshenp@gmail.com Phone: 503-496-2329 License: AG-L 1052211FP	Fax:		s – OR 59 compounds	Pesticide Multi-Residue – 379 c		olvents	tivity			Micro: Yeast and Mold	Micro: E.Coli and Total Coliform	etals	ns					☐ Report Instructions: ☐ Send to State - METRC ☐ Email Final Results: ☐ Fax Final Results ☐ Cash/Check/CC/Net 30 Other:
	.co #113	Date/ Colle	Time cted	Pesticides	Pesticide	Potency	Residual Solvents	Water Activity	Moisture	Terpenes	Micro: Yea	Micro: E.	Heavy Metals	Mycotoxins	Other	Sample Type	Weight	Serving size for edibles	Co Healthy Roots
	#98.1000 natural			•		~											28.55	~	ALMETO DECIS
	Breaking wave bar					V											127.5g	<u>r</u>	Rep m ₁ a % (per
1	Petdine #101	, M	151	+		✓											1 gr		Report in mg/gr and (percentage
-	Collected By:	Relingu	ished B	by:			Date		Time		Rece	ived by				Date	Tin		O Use Only:
	Turnaround time: Ask for availability Standard (5 day)	UT.	me	RRI	tt		913	7010	3,4	5pn	Ha	90	B	la	^	091	63 16	15 Ore	ent Alias: der Number: oper Container
	□Rush (3-4 day) (1.5x Standard) □Priority Rush (2 day) (2x Standard)																HA	Ter Shi	mple Condition mperature: 262 pped Via: dence of cooling: □No





Report Number: 20-009479/D04.R00

Report Date: 09/10/2020 ORELAP#: OR100028

Purchase Order:

Received: 09/04/20 16:15

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		•	Bat	ch ID: 2007421		
Laboratory C	ontrol Sample						
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDV-A	0.00977	0.01	%	97.7	85.0 - 115	Acceptable	
CBDV	0.0102	0.01	%	102	85.0 - 115	Acceptable	
CBD-A	0.00997	0.01	%	99.7	85.0 - 115	Acceptable	
CBG-A	0.00932	0.01	%	93.2	85.0 - 115	Acceptable	
CBG	0.0100	0.01	%	100	85.0 - 115	Acceptable	
CBD	0.0109	0.01	%	109	85.0 - 115	Acceptable	
THCV	0.00977	0.01	%	97.7	85.0 - 115	Acceptable	
THCVA	0.00922	0.01	%	92.2	85.0 - 115	Acceptable	
CBN	0.0103	0.01	%	103	85.0 - 115	Acceptable	
THC	0.00951	0.01	%	95.1	85.0 - 115	Acceptable	
D8THC	0.00988	0.01	%	98.8	85.0 - 115	Acceptable	
CBL	0.00891	0.01	%	89.1	85.0 - 115	Acceptable	
CBC	0.0100	0.01	%	100	85.0 - 115	Acceptable	
THCA	0.00925	0.01	%	92.5	85.0 - 115	Acceptable	
CBCA	0.0112	0.01	%	112	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





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Received: 09/04/20 16:15

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				Bato	ch ID: 2007421					
Sample Dupli	cate			Sample ID: 20-009247-0001-01							
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes			
CBDV-A	<loq< td=""><td><l0q< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></l0q<></td></loq<>	<l0q< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></l0q<>	0.003	%	NA	< 20	Acceptable				
CBDV	0.0561	0.0563	0.003	%	0.234	< 20	Acceptable				
CBD-A	<loq< td=""><td><l0q< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></l0q<></td></loq<>	<l0q< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></l0q<>	0.003	%	NA	< 20	Acceptable				
CBG-A	<loq< td=""><td><l0q< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></l0q<></td></loq<>	<l0q< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></l0q<>	0.003	%	NA	< 20	Acceptable				
CBG	0.0439	0.0461	0.003	%	4.81	< 20	Acceptable				
CBD	11.8	11.9	0.003	%	1.18	< 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><l0q< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></l0q<></td></loq<>	<l0q< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></l0q<>	0.003	%	NA	< 20	Acceptable				
CBN	<loq< td=""><td><l0q< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></l0q<></td></loq<>	<l0q< td=""><td>0.003</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></l0q<>	0.003	%	NA	< 20	Acceptable				
THC	0.164	0.163	0.003	%	0.889	< 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	0.0168	0.0164	0.003	%	2.90	< 20	Acceptable				
CBC	0.00548	0.00538	0.003	%	1.94	< 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





20-009479/D04.R00 **Report Number:**

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Purchase Order:

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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.