



Report Number:	23-014773/D002.R000
Report Date:	12/21/2023
ORELAP#:	OR100028
Purchase Order:	
Received:	12/18/23 12:26

Customer:	Healthy Roots
Product identity:	1000 MG Mint Tincture
Client/Metrc ID:	
Laboratory ID:	23-014773-0001

Summary

Analyte	Result	Limits	Units	Status	CBD-Total per Serving Size	1090 mg/28.5g
CBC	0.0739		%			·
CBD	3.75		%			·
CBD-A	0.0654		%		THC-Total per Serving Size	31.9 mg/28.5g
CBDV	0.0218		%		(Reported in milligrams	
CBE	0.0152		%		(Reported in minigrams	per serving)
CBG	0.0505		%			
СВТ	0.0157		%			
∆9-THC	0.112		%			
Analyte per 28.5g	Result	Limits	Units	Status		
CBC per 28.5g	21.1		mg/28.5g			
CBD per 28.5g	1070		mg/28.5g			
CBD-A per 28.5g	18.6		mg/28.5g			
CBDV per 28.5g	6.21		mg/28.5g			
CBE per 28.5g	4.33		mg/28.5g			
CBG per 28.5g	14.4		mg/28.5g			
CBT per 28.5g	4.47		mg/28.5g			
∆9-THC per 28.5g	31.9		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



12423 NE Whitaker Way Portland, OR 97230 503-254-1794



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Report Date:	12/21/2023
ORELAP#:	OR100028
Purchase Order:	
Received:	12/18/23 12:26

Customer:	Healthy Roots
Product identity:	1000 MG Mint Tincture
Client/Metrc ID:	
Sample Date:	
Laboratory ID:	23-014773-0001
Evidence of Cooling:	No
Temp:	18.7
Relinquished by:	client
Serving Size #1:	28.5 g

Sample Results

Potency	Method: J AOAC 2015 V98-6 (mod) ^b Units %	Batch: 2313758	Analyze: 12/20/23 12:33:00 A
Analyte	Result L	imits Units	LOQ	Notes
CBC	0.0739	%	0.00313	
CBC-A	< LOQ	%	0.00313	
CBC-Total	0.0739	%	0.00588	
CBD	3.75	%	0.0313	
CBD-A	0.0654	%	0.00313	
CBD-Total	3.81	%	0.0341	
CBDV	0.0218	%	0.00313	
CBDV-A	< LOQ	%	0.00313	
CBDV-Total	0.0218	%	0.00585	
CBE	0.0152	%	0.00313	
CBG	0.0505	%	0.00313	
CBG-A	< LOQ	%	0.00313	
CBG-Total	0.0505	%	0.00585	
CBL	< LOQ	%	0.00313	
CBL-A	< LOQ	%	0.00313	
CBL-Total	< LOQ	%	0.00588	
CBN	< LOQ	%	0.00313	
CBT	0.0157	%	0.00313	
∆8-THCV	< LOQ	%	0.00313	
$\Delta 10$ -THC-9R	< LOQ	%	0.00313	
$\Delta 10$ -THC-9S	< LOQ	%	0.00313	
$\Delta 10$ -THC-Total	< LOQ	%	0.00627	
∆8-THC	< LOQ	%	0.00313	
∆9-THC	0.112	%	0.00313	
delta-9-THCP	< LOQ	%	0.00313	
THC-A	< LOQ	%	0.00313	
THC-Total	0.112	%	0.00588	
THCV	< LOQ	%	0.00313	
THCV-A	< LOQ	%	0.00313	
THCV-Total	< LOQ	%	0.00585	
Total Cannabinoids	4.10	%		

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	V98-6 (mod) ^þ	Units mg/se Bate	ch: 2313758	Analyze: 12/20/23 12:33:00 A
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g	21.1		mg/28.5g	0.893	
CBC-A per 28.5g	< LOQ		mg/28.5g	0.893	
CBC-Total per 28.5g	21.1		mg/28.5g	1.68	
CBD per 28.5g	1070		mg/28.5g	8.93	
CBD-A per 28.5g	18.6		mg/28.5g	0.893	
CBD-Total per 28.5g	1090		mg/28.5g	9.72	
CBDV per 28.5g	6.21		mg/28.5g	0.893	
CBDV-A per 28.5g	< LOQ		mg/28.5g	0.893	
CBDV-Total per 28.5g	6.21		mg/28.5g	1.67	
CBE per 28.5g	4.33		mg/28.5g	0.893	
CBG per 28.5g	14.4		mg/28.5g	0.893	
CBG-A per 28.5g	< LOQ		mg/28.5g	0.893	
CBG-Total per 28.5g	14.4		mg/28.5g	1.67	
CBL per 28.5g	< LOQ		mg/28.5g	0.893	
CBL-A per 28.5g	< LOQ		mg/28.5g	0.893	
CBL-Total per 28.5g	< LOQ		mg/28.5g	1.68	
CBN per 28.5g	< LOQ		mg/28.5g	0.893	
CBT per 28.5g	4.47		mg/28.5g	0.893	
∆8-THCV per 28.5g	< LOQ		mg/28.5g	0.893	
∆10-THC-9R per 28.5g	< LOQ		mg/28.5g	0.893	
∆10-THC-9S per 28.5g	< LOQ		mg/28.5g	0.893	
$\Delta 10$ -THC-Total per 28.5g	< LOQ		mg/28.5g	1.79	
∆8-THC per 28.5g	< LOQ		mg/28.5g	0.893	
∆9-THC per 28.5g	31.9		mg/28.5g	0.893	
delta-9-THCP per 28.5g	< LOQ		mg/28.5g	0.893	
THC-A per 28.5g	< LOQ		mg/28.5g	0.893	
THC-Total per 28.5g	31.9		mg/28.5g	1.68	
THCV per 28.5g	< LOQ		mg/28.5g	0.893	
THCV-A per 28.5g	< LOQ		mg/28.5g	0.893	
THCV-Total per 28.5g	< LOQ		mg/28.5g	1.68	
Total Cannabinoids per 28.	5g 1170		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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 23-014773/D002.R000

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 12/21/2023

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 22/18/23 12:26

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

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Received:	12/18/23 12:26

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

			la	horator	Quality Co	ntrol Re	sults		
J AOAC 2015 V98-6 Batch ID: 2313758									
Laboratory Contro	Sample								
Analyte	LCS	Result	Spike	Units	% Rec		Limits	Evaluation	Notes
CBDVA	2	0.0307	0.0322	%	95.2	80.0	- 120	Acceptable	
CBDV	2	0.0339	0.0349	%	97.0	80.0	- 120	Acceptable	
CBE	2	0.0340	0.0356	%	95.7	80.0	- 120	Acceptable	
CBDA	1	0.0328	0.0317	%	103	90.0	- 110	Acceptable	
CBGA	1	0.0323	0.0315	%	102	80.0	- 120	Acceptable	
CBG	1	0.0290	0.0309	%	94.0	80.0	- 120	Acceptable	
CBD	1	0.0328	0.0330	%	99.2	90.0	- 110	Acceptable	
THCV	2	0.0332	0.0342	%	97.1	80.0	- 120	Acceptable	
d8THCV	2	0.0276	0.0280	%	98.8	80.0	- 120	Acceptable	
THCVA	2	0.0309	0.0323	%	95.5	80.0	- 120	Acceptable	
CBN	1	0.0337	0.0330	%	102	80.0	- 120	Acceptable	
exo-THC	2	0.0306	0.0315	%	97.2	80.0	- 120	Acceptable	
d9THC	1	0.0338	0.0337	%	100	90.0	- 110	Acceptable	
d8THC	1	0.0332	0.0336	%	98.7	90.0	- 110	Acceptable	
9S-d10THC	1	0.0320	0.0326	%	98.2	80.0	- 120	Acceptable	
CBL	2	0.0310	0.0325	%	95.4	80.0	- 120	Acceptable	
9R-d10THC	1	0.0322	0.0318	%	101	80.0	- 120	Acceptable	
CBC	2	0.0336	0.0354	%	94.9	80.0	- 120	Acceptable	
THCA	1	0.0312	0.0322	%	97.0	90.0	- 110	Acceptable	
CBCA	2	0.0309	0.0344	%	90.1	80.0	- 120	Acceptable	
CBLA	2	0.0317	0.0341	%	92.8	80.0	- 120	Acceptable	
d9THCP	2	0.0368	0.0332	%	111	80.0	- 120	Acceptable	
CBT	2	0.0334	0.0350	%	95.6	80.0	- 120	Acceptable	
Method Blank	-	-	-					•	-
Analyte		esult	LOQ		Units		Limits	Evaluation	Notes
CBDVA		LOQ	0.00332		%		0.00332	Acceptable	
CBDV		LOQ	0.00332		%		0.00332	Acceptable	
CBE		LOQ	0.00332		%		0.00332	Acceptable	
CBDA		LOQ	0.00332		%		0.00332	Acceptable	
CBGA		LOQ	0.00332		%		0.00332	Acceptable	
CBG		LOQ	0.00332		%		0.00332	Acceptable	
CBD		LOQ	0.00332		%		0.00332	Acceptable	
THCV d8THCV		LOQ	0.00332		%		0.00332	Acceptable Acceptable	
THCVA		LOQ LOQ	0.00332		%		0.00332	Acceptable	
CBN		100	0.00332		%		0.00332	Acceptable	
exo-THC		LOQ LOQ	0.00332		%		0.00332	Acceptable	
d9THC		LOQ LOQ	0.00332		%		0.00332	Acceptable	
d8THC		LOQ LOQ	0.00332	+	%		0.00332	Acceptable	
9S-d10THC		100	0.00332	+	%		0.00332	Acceptable	
CBL			0.00332		%		0.00332	Acceptable	
9R-d10THC		100	0.00332	<u> </u>	%		0.00332	Acceptable	
CBC			0.00332		%		0.00332	Acceptable	
THCA			0.00332		%		0.00332	Acceptable	
CBCA			0.00332		%		0.00332	Acceptable	
CBLA			0.00332		%		0.00332	Acceptable	1
d9THCP		LOQ	0.00332	+	%		0.00332	Acceptable	
CBT			0.00332	+	%		0.00332	Acceptable	
	-		5.00002	1	, •	1 2		. icceptable	

Abbreviations

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

LOQ - Limit of Quantitation

Units of Measure: % - Percent

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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Received:	12/18/23 12:26

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

			Lai	oratory	Quality Con	trol Results			
J AOAC 2015 V98-6					Ba	tch ID: 2313758			
Sample Duplicate	Sample ID: 23-014688-0001								
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	<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		
CBE	0.383	0.391	0.00327	%	1.99	< 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	<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		
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	0.180	0.182	0.00327	%	1.24	< 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	<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		
d8THC	25.8	26.4	0.00327	%	2.34	< 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	0.0622	0.0650	0.00327	%	4.40	< 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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