



Customer: Healthy Roots
Product identity: 3,000 MG Tincture
Client/Metric ID: .
Laboratory ID: 24-007702-0001

Summary

Potency:

Analyte	Result	Limits	Units	Status	
CBD	10.4		%		CBD-Total per Serving Size 2960 mg/28.5g
CBDV	0.0318		%		
Δ8-THC	0.0162		%		Delta-9-THC-Total per <LOQ
Analyte per 28.5g	Result	Limits	Units	Status	(Reported in milligrams per serving)
CBD per 28.5g	2960		mg/28.5g		
CBDV per 28.5g	9.06		mg/28.5g		
Δ8-THC per 28.5g	4.62		mg/28.5g		



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



Report Number: 24-007702/D001.R000
Report Date: 07/23/2024
ORELAP#: OR100028
Purchase Order:
Received: 07/16/24 10:30

Customer: Healthy Roots
14325 NE Airport Way
Portland Oregon 97230
United States of America (USA)

Product identity: 3,000 MG Tincture

Client/Metric ID: .

Sample Date:

Laboratory ID: 24-007702-0001

Evidence of Cooling: No

Temp: 21.5 °C

Relinquished by: client

Serving Size #1: 28.5 g

Sample Results

Potency	Method: J AOAC 2015 V98-6 (mod) ^b	Units %	Batch: 2405490	Analyze: 7/22/24 9:37:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC	< LOQ		%	0.00329	
CBC-A	< LOQ		%	0.00329	
CBC-Total	< LOQ		%	0.00618	
CBD [⊥]	10.4		%	0.329	
CBD-A [⊥]	< LOQ		%	0.00329	
CBD-Total [⊥]	10.4		%	0.332	
CBDV	0.0318		%	0.00329	
CBDV-A	< LOQ		%	0.00329	
CBDV-Total	0.0318		%	0.00614	
CBE	< LOQ		%	0.00329	
CBG	< LOQ		%	0.00329	
CBG-A	< LOQ		%	0.00329	
CBG-Total	< LOQ		%	0.00614	
CBL	< LOQ		%	0.00329	
CBL-A	< LOQ		%	0.00329	
CBL-Total	< LOQ		%	0.00618	
CBN	< LOQ		%	0.00329	
CBT	< LOQ		%	0.00329	
Δ10-THC-9R	< LOQ		%	0.00329	
Δ10-THC-9S	< LOQ		%	0.00329	
Δ10-THC-Total	< LOQ		%	0.00658	
Δ8-THC [⊥]	0.0162		%	0.00329	
Δ8-THCV	< LOQ		%	0.00329	
Δ9-THC [⊥]	< LOQ		%	0.00329	
Δ9-THC-A [⊥]	< LOQ		%	0.00329	
Δ9-THC-Total [⊥]	< LOQ		%	0.00618	
Δ9-THCP	< LOQ		%	0.00329	
Δ9-THCV	< LOQ		%	0.00329	
Δ9-THCV-A	< LOQ		%	0.00329	
Δ9-THCV-Total	< LOQ		%	0.00614	



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Potency	Method: J AOAC 2015 V98-6 (mod) ^b		Units %	Batch: 2405490	Analyze: 7/22/24 9:37:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
exo-THC	< LOQ		%	0.00329	
Total Cannabinoids	10.4		%		

Potency per 28.5g	Method: J AOAC 2015 V98-6 (mod) ^b	Units mg/se	Batch: 2405490	Analyze: 7/22/24 9:37:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g	< LOQ		mg/28.5g	0.938	
CBC-A per 28.5g	< LOQ		mg/28.5g	0.938	
CBC-Total per 28.5g	< LOQ		mg/28.5g	1.76	
CBD per 28.5g	2960		mg/28.5g	93.8	
CBD-A per 28.5g [⊥]	< LOQ		mg/28.5g	0.938	
CBD-Total per 28.5g [⊥]	2960		mg/28.5g	94.6	
CBDV per 28.5g	9.06		mg/28.5g	0.938	
CBDV-A per 28.5g	< LOQ		mg/28.5g	0.938	
CBDV-Total per 28.5g	9.06		mg/28.5g	1.75	
CBE per 28.5g	< LOQ		mg/28.5g	0.938	
CBG per 28.5g	< LOQ		mg/28.5g	0.938	
CBG-A per 28.5g	< LOQ		mg/28.5g	0.938	
CBG-Total per 28.5g	< LOQ		mg/28.5g	1.75	
CBL per 28.5g	< LOQ		mg/28.5g	0.938	
CBL-A per 28.5g	< LOQ		mg/28.5g	0.938	
CBL-Total per 28.5g	< LOQ		mg/28.5g	1.76	
CBN per 28.5g	< LOQ		mg/28.5g	0.938	
CBT per 28.5g	< LOQ		mg/28.5g	0.938	
Δ10-THC-9R per 28.5g	< LOQ		mg/28.5g	0.938	
Δ10-THC-9S per 28.5g	< LOQ		mg/28.5g	0.938	
Δ10-THC-Total per 28.5g	< LOQ		mg/28.5g	1.88	
Δ8-THC per 28.5g [⊥]	4.62		mg/28.5g	0.938	
Δ8-THCV per 28.5g	< LOQ		mg/28.5g	0.938	
Δ9-THC per 28.5g [⊥]	< LOQ		mg/28.5g	0.938	
Δ9-THC-Total per 28.5g	< LOQ		mg/28.5g	1.76	
Δ9-THCP per 28.5g	< LOQ		mg/28.5g	0.938	
Δ9-THCV per 28.5g	< LOQ		mg/28.5g	0.938	
Δ9-THCV-A per 28.5g	< LOQ		mg/28.5g	0.938	
Δ9-THCV-Total per 28.5g	< LOQ		mg/28.5g	1.76	
exo-THC per 28.5g	< LOQ		mg/28.5g	0.938	
THC-A per 28.5g [⊥]	< LOQ		mg/28.5g	0.938	
Total Cannabinoids per 28.5g	2980		mg/28.5g		



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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.

Ⓓ = ISO/IEC 17025:2017 accredited method.

Ⓙ = TNI accredited analyte.

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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Hemp & Cannabis
Chain of Custody

Healthy-Roots-Hemp-
Products-172148546

<div>Company Details Company: <u>Healthy Roots Hemp Products</u> Contact: <u>Liz Cardoza</u> Street Address: <u>21563 SCrestview Drive</u> City, State, Zip: <u>Oregon City, OR 97045</u> Email: <u>Liz@healthyrootshemp.com</u> Email, CC: <u>Alaincardoza3@gmail.com</u> Contact Phone: <u>503-496-2329</u> Company Phone: <u>503-496-2329</u> Billing Information Billing Phone: <u>503-496-2329</u> Billing Email: <u>Liz@healthyrootshemp.com</u></div>			<div>Project Details Turnaround Time: <u>5 Business Days Reg. For Micro Testing Standard</u> Relinquishment Sampling, Courier & Shipping Options: <u>Drop Off at Laboratory</u> Compliance: <u>Compliance</u> Receipt Information Prelog Storage: <u>Canna Shelves</u> Sample Condition: <u>Satisfactory</u></div>			Testing
						H-0010 - Potency Cannabis (Basic+Expanded)
#	Sample Name	Material	Amount Provided	Reporting Unit	Additional Test Requests and Sample Comments	
1	3,000 MG Tincture	Cannabinoid Tincture	1g	mg/g	Report in MG and Percentage	

Relinquished By	Date	Time	Received By	Date	Time	Received Temp., °C	Evidence of Cooling?
<i>Liz Cardoza</i>	<i>07/16/2024</i>	<i>09:49</i>	<i>ont</i>	<i>07/16/2024</i>	<i>10:30</i>	<i>21.50</i>	<i>No</i>

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the [current terms of services](#) associated with this COC. By signing "Relinquished by" you are agreeing to these terms.

Columbia Laboratories
12423 NE Whitaker Way
Portland, OR 97230

P: (503) 254-1794
info@columbialaboratories.com

Page 1 of 1
www.columbialaboratories.com


Laboratory Quality Control Results
J AOAC 2015 V98-6 **Batch ID: 2405490**
Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	2	0.0284	0.0299	%	95	80.0 - 120	Acceptable	
CBDV	2	0.0309	0.0320	%	97	80.0 - 120	Acceptable	
CBE	2	0.0304	0.0319	%	95	80.0 - 120	Acceptable	
CBDA	1	0.0269	0.0287	%	93.8	90.0 - 110	Acceptable	
CBGA	1	0.0273	0.0292	%	93.6	80.0 - 120	Acceptable	
CBG	1	0.0322	0.0345	%	93.2	80.0 - 120	Acceptable	
CBD	1	0.0311	0.0334	%	93.3	90.0 - 110	Acceptable	
THCV	2	0.0262	0.0273	%	96	80.0 - 120	Acceptable	
d8THCV	2	0.0284	0.0298	%	95	80.0 - 120	Acceptable	
THCVA	2	0.0285	0.0298	%	96	80.0 - 120	Acceptable	
CBN	1	0.0300	0.0317	%	94.7	80.0 - 120	Acceptable	
exo-THC	2	0.0284	0.0297	%	96	80.0 - 120	Acceptable	
d9THC	1	0.0313	0.0324	%	96.4	90.0 - 110	Acceptable	
d8THC	1	0.0268	0.0289	%	92.8	90.0 - 110	Acceptable	
9S-d10THC	1	0.0286	0.0303	%	94.2	80.0 - 120	Acceptable	
CBL	2	0.0301	0.0308	%	98	80.0 - 120	Acceptable	
9R-d10THC	1	0.0277	0.0297	%	93.0	80.0 - 120	Acceptable	
CBC	2	0.0305	0.0322	%	95	80.0 - 120	Acceptable	
THCA	1	0.0273	0.0293	%	93.1	90.0 - 110	Acceptable	
CBCA	2	0.0293	0.0309	%	95	80.0 - 120	Acceptable	
CBLA	2	0.0300	0.0315	%	95	80.0 - 120	Acceptable	
d9THCP	2	0.0297	0.0309	%	96	80.0 - 120	Acceptable	
CBT	2	0.0303	0.0317	%	96	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBDV	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBE	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBDA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBGA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBG	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBD	<LOQ	0.00320	%	< 0.00320	Acceptable	
THCV	<LOQ	0.00320	%	< 0.00320	Acceptable	
d8THCV	<LOQ	0.00320	%	< 0.00320	Acceptable	
THCVA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBN	<LOQ	0.00320	%	< 0.00320	Acceptable	
exo-THC	<LOQ	0.00320	%	< 0.00320	Acceptable	
d9THC	<LOQ	0.00320	%	< 0.00320	Acceptable	
d8THC	<LOQ	0.00320	%	< 0.00320	Acceptable	
9S-d10THC	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBL	<LOQ	0.00320	%	< 0.00320	Acceptable	
9R-d10THC	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBC	<LOQ	0.00320	%	< 0.00320	Acceptable	
THCA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBCA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBLA	<LOQ	0.00320	%	< 0.00320	Acceptable	
d9THCP	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBT	<LOQ	0.00320	%	< 0.00320	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent


Laboratory Quality Control Results

J AOAC 2015 V98-6			Batch ID: 2405490					
Sample Duplicate			Sample ID: 24-007701-0001					
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBDV	0.0187	0.0183	0.00323	%	2.55	< 20	Acceptable	
CBE	0.00779	0.00753	0.00323	%	3.35	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBG	0.0163	0.0157	0.00323	%	3.78	< 20	Acceptable	
CBD	1.65	1.63	0.00323	%	0.973	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBN	0.00910	0.00943	0.00323	%	3.64	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
d9THC	0.0389	0.0385	0.00323	%	0.922	< 20	Acceptable	
d8THC	0.00778	0.00785	0.00323	%	0.834	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBC	0.0730	0.0735	0.00323	%	0.752	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBT	0.0238	0.0238	0.00323	%	0.0801	< 20	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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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	Quantitation level raised due to matrix interference.
B	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.