



Report Number:	23-012793/D002.R000
Report Date:	11/02/2023
ORELAP#:	OR100028
Purchase Order:	
Received:	10/27/23 15:59

Customer:	Healthy Roots
Product identity:	#295 200 MG Pet Tincture
Client/Metrc ID:	
Laboratory ID:	23-012793-0001

Summary

Analyte	Result	Limits	Units	Status	CBD-Total per Serving Size	209 mg/28.5g		
CBC	0.0471		%					
CBD	0.734		%		+			
CBDV	0.00824		%		THC-Total per Serving Size	6.98 mg/28.5g		
CBE	0.0119		%		(Reported in milligrams per serving)			
CBG	0.00829		%		(Reported in minigrams per serving)			
CBN	0.00484		%					
CBT	0.00950		%					
∆8-THC	0.00749		%					
∆9-THC	0.0245		%					
Analyte per 28.5g	Result	Limits	Units	Status				
CBC per 28.5g	13.4		mg/28.5g					
CBD per 28.5g	209		mg/28.5g					
CBDV per 28.5g	2.35		mg/28.5g					
CBE per 28.5g	3.39		mg/28.5g					
CBG per 28.5g	2.36		mg/28.5g					
CBN per 28.5g	1.38		mg/28.5g					
CBT per 28.5g	2.71		mg/28.5g					
∆8-THC per 28.5g	2.13		mg/28.5g					
∆9-THC per 28.5g	6.98		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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Customer:	Healthy Roots
Dreduct identitur	
Product identity:	#295 200 MG Pet Tincture
Client/Metrc ID:	
Sample Date:	
Laboratory ID:	23-012793-0001
Evidence of Cooling:	No
Temp:	25.3 °C
Relinquished by:	Client
Serving Size #1:	28.5 g

Sample Results

Potency	Method: J AOAC 2015 VS	98-6 (mod) ^þ	Units %	Batch: 2312369	Analyze: 10/31/23 2:14:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0471		%	0.00316	
CBC-A	< LOQ		%	0.00316	
CBC-Total	0.0471		%	0.00594	
CBD	0.734		%	0.00316	
CBD-A	< LOQ		%	0.00316	
CBD-Total	0.734		%	0.00594	
CBDV	0.00824		%	0.00316	
CBDV-A	< LOQ		%	0.00316	
CBDV-Total	0.00824		%	0.00591	
CBE	0.0119		%	0.00316	
CBG	0.00829		%	0.00316	
CBG-A	< LOQ		%	0.00316	
CBG-Total	0.00829		%	0.00591	
CBL	< LOQ		%	0.00316	
CBL-A	< LOQ		%	0.00316	
CBL-Total	< LOQ		%	0.00594	
CBN	0.00484		%	0.00316	
CBT	0.00950		%	0.00316	
∆8-THCV	< LOQ		%	0.00316	
$\Delta 10$ -THC-9R	< LOQ		%	0.00316	
$\Delta 10$ -THC-9S	< LOQ		%	0.00316	
$\Delta 10$ -THC-Total	< LOQ		%	0.00633	
$\Delta 8$ -THC	0.00749		%	0.00316	
∆9-THC	0.0245		%	0.00316	
delta-9-THCP	< LOQ		%	0.00316	
exo-THC	< LOQ		%	0.00316	
THC-A	< LOQ		%	0.00316	
THC-Total	0.0245		%	0.00594	
THCV	< LOQ		%	0.00316	
THCV-A	< LOQ		%	0.00316	
THCV-Total	< LOQ		%	0.00591	
Total Cannabinoids	0.856		%		

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 \	Units mg/se Bate	ch: 2312369	Analyze: 10/31/23 2:14:00 AN	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g	13.4		mg/28.5g	0.902	
CBC-A per 28.5g	< LOQ		mg/28.5g	0.902	
CBC-Total per 28.5g	13.4		mg/28.5g	1.69	
CBD per 28.5g	209		mg/28.5g	0.902	
CBD-A per 28.5g	< LOQ		mg/28.5g	0.902	
CBD-Total per 28.5g	209		mg/28.5g	1.69	
CBDV per 28.5g	2.35		mg/28.5g	0.902	
CBDV-A per 28.5g	< LOQ		mg/28.5g	0.902	
CBDV-Total per 28.5g	2.35		mg/28.5g	1.68	
CBE per 28.5g	3.39		mg/28.5g	0.902	
CBG per 28.5g	2.36		mg/28.5g	0.902	
CBG-A per 28.5g	< LOQ		mg/28.5g	0.902	
CBG-Total per 28.5g	2.36		mg/28.5g	1.68	
CBL per 28.5g	< LOQ		mg/28.5g	0.902	
CBL-A per 28.5g	< LOQ		mg/28.5g	0.902	
CBL-Total per 28.5g	< LOQ		mg/28.5g	1.69	
CBN per 28.5g	1.38		mg/28.5g	0.902	
CBT per 28.5g	2.71		mg/28.5g	0.902	
∆8-THCV per 28.5g	< LOQ		mg/28.5g	0.902	
10-THC-9R per 28.5g	< LOQ		mg/28.5g	0.902	
10-THC-9S per 28.5g	< LOQ		mg/28.5g	0.902	
10-THC-Total per 28.5g	< LOQ		mg/28.5g	1.80	
∆8-THC per 28.5g	2.13		mg/28.5g	0.902	
19-THC per 28.5g	6.98		mg/28.5g	0.902	
delta-9-THCP per 28.5g	< LOQ		mg/28.5g	0.902	
exo-THC per 28.5g	< LOQ		mg/28.5g	0.902	
THC-A per 28.5g	< LOQ		mg/28.5g	0.902	
THC-Total per 28.5g	6.98		mg/28.5g	1.69	
THCV per 28.5g	< LOQ		mg/28.5g	0.902	
THCV-A per 28.5g	< LOQ		mg/28.5g	0.902	
THCV-Total per 28.5g	< LOQ		mg/28.5g	1.69	
Total Cannabinoids per 28.8	5g 244		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

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Page 4 of 8

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

JAOAC 2015 V98-6	5			or all or .	y Quanty CO B	atch ID: 2			
Laboratory Control						atorrib.	2012000		
Analyte	LCS	Result	Spike	Units	% Rec		Limits	Evaluation	Notes
CBDVA	2	0.0309	0.0323	%	95.5	80.0	- 120	Acceptable	
CBDV	2	0.0335	0.0337	%	99.5	80.0	- 120	Acceptable	
CBE	2	0.0339	0.0358	%	94.7	80.0	- 120	Acceptable	
OBDA	1	0.0308	0.0322	%	95.6	90.0	- 110	Acceptable	
OBGA	1	0.0312	0.0329	%	94.7	80.0	- 120	Acceptable	
CBG	1	0.0355	0.0368	%	96.5	80.0	- 120	Acceptable	
CBD	1	0.0322	0.0313	%	103	90.0	- 110	Acceptable	
THCV	2	0.0323	0.0345	%	93.7	80.0	- 120	Acceptable	
d8THCV	2	0.0286	0.0283	%	101	80.0	- 120	Acceptable	
THCVA	2	0.0299	0.0312	%	96.1	80.0	- 120	Acceptable	
CBN	1	0.0313	0.0329	%	95.3	80.0	- 120	Acceptable	
exo-THC	2	0.0309	0.0315	%	98.2	80.0	- 120	Acceptable	
d9THC	1	0.0346	0.0365	%	94.8	90.0	- 110	Acceptable	
d8THC	1	0.0332	0.0340	%	97.6	90.0	- 110	Acceptable	
9Sd10THC	1	0.0321	0.0337	%	95.1	80.0	- 120	Acceptable	
CBL.	2	0.0327	0.0332	%	98.7	80.0	- 120	Acceptable	
9R-d10THC	1	0.0321	0.0336	%	95.5	80.0	- 120	Acceptable	
CBC	2	0.0328	0.0342	%	96.0	80.0	- 120	Acceptable	
THCA	1	0.0317	0.0337	%	94.1	90.0	- 110	Acceptable	
CBCA	2	0.0314	0.0338	%	93.1	80.0	- 120	Acceptable	
OBLA	2	0.0339	0.0342	%	99.0	80.0	- 120	Acceptable	
d9THOP	2	0.0310	0.0334	%	93.0	80.0	- 120	Acceptable	
CBT	2	0.0367	0.0343	%	107	80.0	- 120	Acceptable	
Method Blank									
Analyte		esult	LOQ		Units		Limits	Evaluation	Notes
CBDVA		LOQ	0.00322		%		0.00322	Acceptable	
OBDV		LOQ	0.00322		%		0.00322	Acceptable	
CBE		LOQ	0.00322		%		0.00322	Acceptable	
CBDA		LOQ	0.00322		%		0.00322	Acceptable	
OBGA		LOQ	0.00322		%		0.00322	Acceptable	
CBG		LOQ	0.00322		%		0.00322	Acceptable	
CBD		LOQ	0.00322		%		0.00322	Acceptable	
THCV			0.00322		%		0.00322	Acceptable	
d8THCV		LOQ	0.00322		%		0.00322	Acceptable	
THCVA			0.00322		%		0.00322	Acceptable	
CBN		LOQ	0.00322	ļ	%		0.00322	Acceptable	
exo-THC			0.00322		%		0.00322	Acceptable	
d9THC			0.00322	ļ	%		0.00322	Acceptable	
d8THC 9Sid10THC		LOQ LOQ	0.00322		%		0.00322	Acceptable	
95-d101 HC CBL			0.00322	<u> </u>	%		0.00322	Acceptable	
UBL 9R-d10THC			0.00322	<u> </u>	%		0.00322	Acceptable	
OBC				<u> </u>	%			Acceptable	
THCA			0.00322	<u> </u>	%		0.00322	Acceptable	
OBCA			0.00322	<u> </u>	%		0.00322	Acceptable Acceptable	
OBLA			0.00322	<u> </u>	%		0.00322	Acceptable	
d9THCP			0.00322	<u> </u>	%		0.00322	Acceptable	
OBT			0.00322	<u> </u>	%		0.00322	Acceptable	
	<		0.00322		7c	< 1	0.00322	Amehranie	

Laboratory Quality Control Results

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

JAOAC 2015 V98-6										
Sample Duplicate			0004							
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes		
CBDVA	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
CBDV	0.194	0.194	0.00330	%	0.149	< 20	Acceptable			
CBE	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
OBDA	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
CBGA	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
CBG	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
CBD	31.6	31.1	0.00330	%	1.74	< 20	Acceptable			
THCV	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
d8THCV	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
THCVA	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
CBN	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
exo-THC	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
d9THC	0.00946	0.00946	0.00330	%	0.0718	< 20	Acceptable			
d8THC	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
9Sd10THC	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
CBL	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
9R-d10THC	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
CBC	0.0116	0.0116	0.00330	%	0.110	< 20	Acceptable			
THCA	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
OBCA	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
OBLA	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
d9THCP	<loq< td=""><td><loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00330</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00330	%	NA	< 20	Acceptable			
CBT	0.00429	0.00423	0.00330	%	1.35	< 20	Acceptable			

ND - None Detected at or above MRL RFD - 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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 Page 8 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