



Report Number:	23-013711/D002.R000
Report Date:	11/28/2023
ORELAP#:	OR100028
Purchase Order:	
Received:	11/20/23 13:32

Customer:	Healthy Roots
Product identity:	Paw Butter
Client/Metrc ID:	
Laboratory ID:	23-013711-0001

Summary

Analyte	Result	Limits	Units	Status	CBD-Total per Serving Size 1310 mg/1	 00a
CBC	0.0306		%			
CBD	1.31		%			
CBDV	0.00686		%		THC-Total per Serving Size 16.3 mg/10)0g
CBG	0.00513		%		(Reported in milligrams per serving)	
CBN	0.00345		%		(Reported in minigrams per serving)	
CBT	0.00632		%			
Δ9-THC	0.0163		%			
Analyte per 100g	Result	Limits	Units	Status		
CBC per 100g	30.6		mg/100g			
CBD per 100g	1310		mg/100g			
CBDV per 100g	6.86		mg/100g			
CBG per 100g	5.13		mg/100g			
CBN per 100g	3.45		mg/100g			
CBT per 100g	6.32		mg/100g			
∆9-THC per 100g	16.3		mg/100g			

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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ORELAP#:	OR100028
Purchase Order:	
Received:	11/20/23 13:32

Customer:	Healthy Roots
Product identity:	Paw Butter
Client/Metrc ID:	•
Sample Date:	
Laboratory ID:	23-013711-0001
Evidence of Cooling:	No
Temp:	19.1 °C
Relinquished by:	client
Serving Size #1:	100 g

Sample Results

Potency	Method: J AOAC 2015 V98	3-6 (mod)	Units %	Batch: 2313071	Analyze: 11/22/23 7:58:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0306		%	0.00330	
CBC-A	< LOQ		%	0.00330	
CBC-Total	0.0306		%	0.00619	
CBD⊥	1.31		%	0.0330	
CBD-A⊥	< LOQ		%	0.00330	
CBD-Total	1.31		%	0.0359	
CBDV	0.00686		%	0.00330	
CBDV-A	< LOQ		%	0.00330	
CBDV-Total	0.00686		%	0.00615	
CBE	< LOQ		%	0.00330	
CBG	0.00513		%	0.00330	
CBG-A	< LOQ		%	0.00330	
CBG-Total	< LOQ		%	0.00615	
CBL	< LOQ		%	0.00330	
CBL-A	< LOQ		%	0.00330	
CBL-Total	< LOQ		%	0.00619	
CBN	0.00345		%	0.00330	
CBT	0.00632		%	0.00330	
$\Delta 8$ -THCV	< LOQ		%	0.00330	
$\Delta 10$ -THC-9R	< LOQ		%	0.00330	
$\Delta 10$ -THC-9S	< LOQ		%	0.00330	
$\Delta 10$ -THC-Total	< LOQ		%	0.00659	
$\Delta 8\text{-THC}^{\perp}$	< LOQ		%	0.00330	
$\Delta 9\text{-THC}^{\perp}$	0.0163		%	0.00330	
delta-9-THCP	< LOQ		%	0.00330	
exo-THC	< LOQ		%	0.00330	
THC-A⊥	< LOQ		%	0.00330	
THC-Total	0.0163		%	0.00619	
THCV	< LOQ		%	0.00330	
THCV-A	< LOQ		%	0.00330	
THCV-Total	< LOQ		%	0.00615	
Total Cannabinoids	1.38		%		

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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Received:	11/20/23 13:32

Potency per 100g	Method: J AOAC 2015 V	/98-6 (mod)	Units mg/se Bate	ch: 2313071	Analyze: 11/22/23 7:58:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 100g	30.6		mg/100g	3.30	
CBC-A per 100g	< LOQ		mg/100g	3.30	
CBC-Total per 100g	30.6		mg/100g	6.19	
CBD per 100g	1310		mg/100g	33.0	
CBD-A per 100g⊥	< LOQ		mg/100g	3.30	
CBD-Total per 100g⊥	1310		mg/100g	35.9	
CBDV per 100g	6.86		mg/100g	3.30	
CBDV-A per 100g	< LOQ		mg/100g	3.30	
CBDV-Total per 100g	6.86		mg/100g	6.15	
CBE per 100g	< LOQ		mg/100g	3.30	
CBG per 100g	5.13		mg/100g	3.30	
CBG-A per 100g	< LOQ		mg/100g	3.30	
CBG-Total per 100g	< LOQ		mg/100g	6.15	
CBL per 100g	< LOQ		mg/100g	3.30	
CBL-A per 100g	< LOQ		mg/100g	3.30	
CBL-Total per 100g	< LOQ		mg/100g	6.19	
CBN per 100g	3.45		mg/100g	3.30	
CBT per 100g	6.32		mg/100g	3.30	
∆8-THCV per 100g	< LOQ		mg/100g	3.30	
$\Delta 10$ -THC-9R per 100g	< LOQ		mg/100g	3.30	
$\Delta 10$ -THC-9S per 100g	< LOQ		mg/100g	3.30	
$\Delta 10$ -THC-Total per 100g	< LOQ		mg/100g	6.59	
∆8-THC per 100g [⊥]	< LOQ		mg/100g	3.30	
∆9-THC per 100g⊥	16.3		mg/100g	3.30	
delta-9-THCP per 100g	< LOQ		mg/100g	3.30	
exo-THC per 100g	< LOQ		mg/100g	3.30	
THC-A per 100g⊥	< LOQ		mg/100g	3.30	
THC-Total per 100g	16.3		mg/100g	6.19	
THCV per 100g	< LOQ		mg/100g	3.30	
THCV-A per 100g	< LOQ		mg/100g	3.30	
THCV-Total per 100g	< LOQ		mg/100g	6.19	
Total Cannabinoids per 10	0g 1380		mg/100g		

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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 23-013711/D002.R000

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 11/28/2023

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 11/20/23 13:32

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 = g mg/100g = Milligram per 100g % = Percentage of sample % wt = μg/g divided by 10,000

Approved Signatory

Derrick Tanner General Manager

www.columbialaboratories.com

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Received:	11/20/23 13:32

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

			Lai	orator	y Quality Co	ntrol Res	sults			
J AOAC 2015 V98-6 Batch ID: 2313071										
Laboratory Contro	ol Sample									
Analyte	LCS	Result	Spike	Units	% Rec		Limits		Evaluation	Notes
CBDVA	2	0.0317	0.0329	%	96.5	80.0	-	120	Acceptable	
CBDV	2	0.0317	0.0324	%	97.9	80.0	-	120	Acceptable	
CBE	2	0.0335	0.0349	%	95.9	80.0	-	120	Acceptable	
CBDA	1	0.0287	0.0311	%	92.2	90.0	-	110	Acceptable	
CBGA	1	0.0300	0.0313	%	95.9	80.0	-	120	Acceptable	
CBG	1	0.0319	0.0332	%	96.3	80.0	-	120	Acceptable	
CBD	1	0.0303	0.0319	%	95.1	90.0	-	110	Acceptable	
THCV	2	0.0324	0.0337	%	95.9	80.0	-	120	Acceptable	
d8THCV	2	0.0263	0.0271	%	97.2	80.0	-	120	Acceptable	
THCVA	2	0.0307	0.0317	%	96.6	80.0	-	120	Acceptable	
CBN	1	0.0323	0.0332	%	97.2	80.0	-	120	Acceptable	
exo-THC	2	0.0295	0.0308	%	95.7	80.0	-	120	Acceptable	
d9THC	1	0.0323	0.0320	%	101	90.0	-	110	Acceptable	
d8THC	1	0.0259	0.0277	%	93.5	90.0	-	110	Acceptable	
9S-d10THC	1	0.0321	0.0328	%	97.9	80.0	-	120	Acceptable	
CBL	2	0.0330	0.0351	%	93.9	80.0	-	120	Acceptable	
9R-d10THC	1	0.0301	0.0314	%	96.0	80.0	-	120	Acceptable	
CBC	2	0.0332	0.0341	%	97.5	80.0	-	120	Acceptable	
THCA	1	0.0293	0.0303	%	96.9	90.0	-	110	Acceptable	
CBCA	2	0.0322	0.0336	%	95.8	80.0	-	120	Acceptable	
CBLA	2	0.0322	0.0336	%	95.8	80.0	-	120	Acceptable	
d9THCP	2	0.0316	0.0331	%	95.4	80.0	-	120	Acceptable	
CBT	2	0.0333	0.0337	%	98.6	80.0	-	120	Acceptable	
Method Blank										
Analyte		esult	LOQ		Units		Limits		Evaluation	Notes
CBDVA		LOQ	0.00322		%		0.0032		Acceptable	
CBDV		LOQ	0.00322		%		0.0032		Acceptable	
CBE		LOQ	0.00322		%		0.0032		Acceptable	
CBDA		LOQ	0.00322		%		0.0032		Acceptable	
CBGA		LOQ	0.00322		%		0.0032		Acceptable	
CBG		LOQ	0.00322		%		0.0032		Acceptable	
CBD		LOQ	0.00322		%		0.0032		Acceptable	
THCV		LOQ	0.00322		%		0.0032		Acceptable	
d8THCV		LOQ	0.00322	ļ	%		0.0032		Acceptable	
THCVA		LOQ	0.00322	ļ	%		0.0032		Acceptable	
CBN		LOQ	0.00322	ļ	%		0.0032		Acceptable	
exo-THC		LOQ	0.00322	ļ	%		0.0032		Acceptable	
d9THC		LOQ	0.00322	%			0.0032		Acceptable	
d8THC		LOQ	0.00322	%			0.0032		Acceptable	
9S-d10THC		LOQ	0.00322	%			0.0032		Acceptable	
CBL		LOQ	0.00322				0.0032		Acceptable	
9R-d10THC		LOQ	0.00322				0.0032		Acceptable	
CBC		LOQ	0.00322		%		0.0032		Acceptable	
THCA		LOQ	0.00322	ļ	%		0.0032		Acceptable	
CBCA		LOQ	0.00322	ļ	%		0.0032		Acceptable	
CBLA		LOQ	0.00322		%		0.0032		Acceptable	
d9THCP		LOQ	0.00322	ļ	%		0.0032		Acceptable	
CBT	<	LOQ	0.00322	1	%		< 0.00322		Acceptable	1

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

			Lai	boratory	Quality Cor	ntrol Results		
J AOAC 2015 V98-6	Batch ID: 2313071							
Sample Duplicate		Sample ID: 23-013683-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBDV	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBE	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBDA	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBGA	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBG	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBD	0.131	0.126	0.00331	%	4.26	< 20	Acceptable	
THCV	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
d8THCV	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
THCVA	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBN	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
exo-THC	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
d9THC	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
d8THC	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
9S-d10THC	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBL	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
9R-d10THC	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBC	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
THCA	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBCA	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBLA	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
d9THCP	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	
CBT	<loq< td=""><td><loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.00331</td><td>%</td><td>NA</td><td>< 20</td><td>Acceptable</td><td></td></loq<>	0.00331	%	NA	< 20	Acceptable	

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

Units of Measure:

% - Percent

Page 6 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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Page 7 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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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