

Ξ.

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



Report Number:	22-005912/D002.R000
Report Date:	05/31/2022
ORELAP#:	OR100028
Purchase Order:	
Received:	05/20/22 14:39

Customer:	Healthy Roots						
Product identity:	#210, 1600mg Deep Relief						
Client/Metrc ID:							
Laboratory ID:	22-005912-0001						

Summary

Analyte	Result	Limits	Units	Status	CBD-Total per 128g	1890 mg/128g
CBC	0.0543		%			
CBD	1.47		%			
CBD-A	0.0118		%		THC-Total per 128g	35.2 mg/128g
CBDV [†]	0.00415		%		(Reported in millig	
CBG [†]	0.00747		%		(Reported in ming	rains per serving)
CBN	0.00509		%			
CBT [†]	0.00434		%			
∆8-THC	0.00449		%			
∆9-THC	0.0275		%			
Analyte per 128g	Result	Limits	Units	Status		
CBC per 128g [†]	69.5		mg/128g			
CBD per 128g	1880		mg/128g			
CBD-A per 128g	15.1		mg/128g			
CBDV per 128g [†]	5.31		mg/128g			
CBG per 128g [†]	9.56		mg/128g			
CBN per 128g	6.52		mg/128g			
CBT per 128g [†]	5.56		mg/128g			
∆8-THC per 128g [†]	5.75		mg/128g			
∆9-THC per 128g	35.2		mg/128g			

Page 1 of 9
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





Report Number:	22-005912/D002.R000
Report Date:	05/31/2022
ORELAP#:	OR100028
Purchase Order:	
Received:	05/20/22 14:39

Customer:	Healthy Roots
Product identity: Client/Metrc ID: Sample Date:	#210, 1600mg Deep Relief
Laboratory ID:	22-005912-0001
Evidence of Cooling:	No
Temp:	25.1 °C
Relinquished by:	Client
Serving Size #1:	128 g

Sample Results

Potency	Method J AOA	C 2015 V98-6 (mod)	Units %	Batch: 2204569	Analyze: 5/31/22 10:11:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0543		%	0.0033	
CBC-A [†]	< LOQ		%	0.0033	
CBC-Total [†]	0.0543		%	0.0061	
CBD	1.47		%	0.0326	
CBD-A	0.0118		%	0.0033	
CBD-Total	1.48		%	0.0355	
CBDV [†]	0.00415		%	0.0033	
CBDV-A [†]	< LOQ		%	0.0033	
CBDV-Total [†]	< LOQ		%	0.0061	
CBE [†]	< LOQ		%	0.0033	
CBG [†]	0.00747		%	0.0033	
CBG-A [†]	< LOQ		%	0.0033	
CBG-Total	0.00747		%	0.0061	
CBL⁺	< LOQ		%	0.0033	
CBL-A [†]	< LOQ		%	0.0033	
CBL-Total [†]	< LOQ		%	0.0061	
CBN	0.00509		%	0.0033	
CBT [†]	0.00434		%	0.0033	
$\Delta 8$ -THCV	< LOQ		%	0.0033	
$\Delta 8$ -THC	0.00449		%	0.0033	
Δ9-THC	0.0275		%	0.0033	
exo-THC	< LOQ		%	0.0033	
THC-A	< LOQ		%	0.0033	
THC-Total	0.0275		%	0.0061	
THCV⁺	< LOQ		%	0.0033	
THCV-A [†]	< LOQ		%	0.0033	
THCV-Total [†]	< LOQ		%	0.0061	
Total Cannabinoids [†]	1.59		%		
Potency per 128g	Method J AOA	C 2015 V98-6 (mod)	Units mg/se	e Batch: 2204569	Analyze: 5/31/22 10:11:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 128g [†]	69.5		mg/128g	4.17	

Page 2 of 9 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





Report Number:	22-005912/D002.R000
Report Date:	05/31/2022
ORELAP#:	OR100028
Purchase Order:	
Received:	05/20/22 14:39

Potency per 128g	Method J AOA	AC 2015 V98-6 (mod	d) Units mg/se Ba	tch: 2204569	Analyze: 5/31/22 10:11:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
CBC-A per 128g [†]	< LOQ		mg/128g	4.17	
CBC-Total per 128g [†]	69.5		mg/128g	7.83	
CBD per 128g	1880		mg/128g	41.7	
CBD-A per 128g	15.1		mg/128g	4.17	
CBD-Total per 128g	1890		mg/128g	45.4	
CBDV per 128g⁺	5.31		mg/128g	4.17	
CBDV-A per 128g [†]	< LOQ		mg/128g	4.17	
CBDV-Total per 128g [†]	< LOQ		mg/128g	7.79	
CBE per 128g [†]	< LOQ		mg/128g	4.17	
CBG per 128g [†]	9.56		mg/128g	4.17	
CBG-A per 128g⁺	< LOQ		mg/128g	4.17	
CBG-Total per 128g [†]	9.56		mg/128g	7.79	
CBL per 128g [†]	< LOQ		mg/128g	4.17	
CBL-A per 128g [†]	< LOQ		mg/128g	4.17	
CBL-Total per 128g†	< LOQ		mg/128g	7.83	
CBN per 128g	6.52		mg/128g	4.17	
CBT per 128g [†]	5.56		mg/128g	4.17	
$\Delta 8$ -THCV per 128g [†]	< LOQ		mg/128g	4.17	
∆8-THC per 128g⁺	5.75		mg/128g	4.17	
∆9-THC per 128g	35.2		mg/128g	4.17	
exo-THC per 128g⁺	< LOQ		mg/128g	4.17	
THC-A per 128g	< LOQ		mg/128g	4.17	
THC-Total per 128g	35.2		mg/128g	7.83	
THCV per 128g [†]	< LOQ		mg/128g	4.17	
THCV-A per 128g [†]	< LOQ		mg/128g	4.17	
THCV-Total per 128g [†]	< LOQ		mg/128g	7.84	
Total Cannabinoids per 128g	2030		mg/128g		

Page 3 of 9
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





Report Number: 22-005912/D002.R000 **Report Date:** 05/31/2022 **ORELAP#:** OR100028 Purchase Order: Received: 05/20/22 14:39

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, 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.

[†] = Analyte not NELAP accredited.

Units of Measure

g = gmg/128g = Milligram per 128g % = Percentage of sample % wt = $\mu g/g$ divided by 10,000

Approved Signatory

Derrick Tanner General Manager

www.columbialaboratories.com

Page 4 of 9

equirements of NELAP and the Columbia Laboratories quality assurance plan Test results relate only to the parameters tested and to the samples as received by 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





Report Number:	22-005912/D002.R000
Report Date:	05/31/2022
ORELAP#:	OR100028
Purchase Order:	

05/20/22 14:39

Received:

							A	nalys	is Req	ueste	d							
ICaldia Roots	CHAIN OF Company: Healthy Roo Contact: Liz Merritt Address: 14325 NE Airp Portland, OR Email: Healthyrootshen Phone: 503-496-2329 License: AG-L 1052211F	ts port Way, #; 97230 np@gmail.c :P	com	3 ss – OR 59 compounds	Pesticide Multi-Residue – 379 compounds		èsidual Solvents	& Water Activity		Micro: Yeast and Mold	Coli and Total Coliform	tals		eropic Plate Count, Jalmonella Laphylococcku, Pseudomocnas	Projec Pro Custom Report t	Reporting: o State - 🗌 ME und time: 🕅 S 🗌 3 🗌 2 1		Dther: y Standard Turnaround y Rush Turnaround* y Rush Turnaround* <i>railobility</i>
La IC	b	Date 5/20	Time	Pesticides	Pesticide	Potency	Residual	Moisture	Terpenes	Micro: Ye	Micro: E.(Heavy Metals	Mycotoxins	Other Sta		veight (Units)		Comments/Metrc ID
					2													-12 ²⁴
			÷													10 ¹¹	Health Roots	Report in mg/gr and
E	Relinquished By:	Date	Time	-	1	R	eceived	By:			Da	ate	Tir	ne				% (percentage)
	Melton	5/20	200 p	<i>m</i>			Ac	-			5-7		14:		Sample i Cash	n good conditio	n: Kres [Only: Client drop . Temp (°C): 25,) . No

Page 5 of 9 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





Report Number:	22-005912/D002.R000
Report Date:	05/31/2022
ORELAP#:	OR100028
Purchase Order:	
Received:	05/20/22 14:39

Revision: 1 Document ID: 7148 Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results											
JAOAC2015 V	JAOAC2015 V986 Batch ID: 2204551/2204569										
Laboratory Cont	rol Sample										
Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes			
CBDVA	1	0.0324	0.033	%	97.3	80.0 - 120	Acceptable				
CBDV	1	0.0352	0.033	%	106	80.0 - 120	Acceptable				
CÆ	1	0.0313	0.033	%	94.0	80.0 - 120	Acceptable				
CBDA	1	0.0311	0.033	%	93.3	90.0 - 110	Acceptable				
CBGA	1	0.0299	0.033	%	89.8	80.0 - 120	Acceptable				
CBG	1	0.0301	0.033	%	90.2	80.0 - 120	Acceptable				
CBD	1	0.0335	0.033	%	101	90.0 - 110	Acceptable				
THCV	1	0.0323	0.033	%	97.0	80.0 - 120	Acceptable				
d8THCV	1	0.0330	0.033	%	99.1	80.0 - 120	Acceptable				
THCVA	1	0.0310	0.033	%	93.1	80.0 - 120	Acceptable				
CBN	1	0.0329	0.033	%	98.7	90.0 - 110	Acceptable				
exo-THC	1	0.0312	0.033	%	93.7	80.0 - 120	Acceptable				
d9THC	1	0.0315	0.033	%	94.5	90.0 - 110	Acceptable				
d8THC	1	0.0307	0.033	%	92.0	80.0 - 120	Acceptable				
CBL	1	0.0303	0.033	%	90.9	80.0 - 120	Acceptable				
CBC	1	0.0341	0.033	%	102	80.0 - 120	Acceptable				
THCA	1	0.0301	0.033	%	90.2	90.0 - 110	Acceptable				
CBCA	1	0.0327	0.033	%	98.0	80.0 - 120	Acceptable				
CBLA	1	0.0316	0.033	%	94.8	80.0 - 120	Acceptable				
CBI	1	0.0323	0.033	%	96.9	80.0 - 120	Acceptable				

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBDV	⊲LOQ	0.003	%	< 0.003	Acceptable	
CEE	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBDA	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBGA	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBG	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBD	0.0036	0.003	%	< 0.003	Outlier	B1
THCV	⊲LOQ	0.003	%	< 0.003	Acceptable	
d8THCV	⊲LOQ	0.003	%	< 0.003	Acceptable	
THCVA	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBN	⊲LOQ	0.003	%	< 0.003	Acceptable	
exo-THC	⊲LOQ	0.003	%	< 0.003	Acceptable	
d9THC	⊲LOQ	0.003	%	< 0.003	Acceptable	
d8THC	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBL	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBC	⊲LOQ	0.003	%	< 0.003	Acceptable	
THCA	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBCA	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBLA	⊲LOQ	0.003	%	< 0.003	Acceptable	
CBL	⊲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

Page 6 of 9 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





Report Number:	22-005912/D002.R000
Report Date:	05/31/2022
ORELAP#:	OR100028
Purchase Order:	
Received:	05/20/22 14:39

Revision: 1 Document ID: 7148 Legacy ID: Worksheet Validated 04/20/2021

			Labor	atory C	Quality Co	ntrol Results		
JAOAC2015 V986 Batch ID: 2204551/2204569								
Sample Duplicate Sample ID: 22-006111-0001								
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<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	
CBDV	0.0131	0.0108	0.003	%	19.7	< 20	Acceptable	
CEE	0.120	0.101	0.003	%	17.7	< 20	Acceptable	
CBDA	<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	
CBGA	<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	
CBG	0.0587	0.0495	0.003	%	16.9	< 20	Acceptable	
CBD	3.42	2.88	0.003	%	17.1	< 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	
d8THCV	<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><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	
CBN	0.0448	0.0378	0.003	%	17.1	< 20	Acceptable	
exo-THC	<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	
d9THC	0.145	0.121	0.003	%	17.7	< 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	0.0066	0.0063	0.003	%	3.37	< 20	Acceptable	
CBC	0.0343	0.0285	0.003	%	18.3	< 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	
CBLA	<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	
CBT	0.151	0.127	0.003	%	17.5	< 20	Acceptable	

Abbreviations

ND - None Detected at or above MRL

RPD - Relative Percent Difference

LOQ - Limit of Quantitation

Units of Measure

Page 7 of 9 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





Report Number:	22-005912/D002.R000
Report Date:	05/31/2022
ORELAP#:	OR100028
Purchase Order:	
Received:	05/20/22 14:39



Page 8 of 9
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





22-005912/D002.R000 **Report Number: Report Date:** 05/31/2022 **ORELAP#:** OR100028 **Purchase Order:** 05/20/22 14:39 **Received:**

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.

 Www.columbialaboratories.com
 Page 9 of 9

 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