



Report Number: 22-001478/D002.R000

02/14/2022 Report Date: ORELAP#: OR100028

Purchase Order:

Received: 02/08/22 14:55

Customer: Healthy Roots Product identity: #194, 1000 Horse

Client/Metrc ID:

Laboratory ID: 22-001478-0001

Summary

Potency:	P	ote	en	CV	:
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Analyte	Result	Limits	Units	Status	CBD-Total per 28.5g	1080 mg/28.5g
CBC	0.0801		%			
CBD	3.80		%		<u> </u>	
CBDV [†]	0.0209		%		THC-Total per 28.5g	36.5 mg/28.5g
CBG [†]	0.0237		%		Reported in milligr	ame per serving)
CBN	0.00915		%		(ixeported in minigr	airis pei serving)
CBT [†]	0.0548		%			
Δ9-THC	0.128		%			
Analyte per 28.5g	Result	Limits	Units	Status		
CBC per 28.5g [†]	22.8		mg/28.5g			
CBD per 28.5g	1080		mg/28.5g			
CBDV per 28.5g [†]	5.96		mg/28.5g			
CBG per 28.5g [†]	6.75		mg/28.5g			
CBN per 28.5g	2.61		mg/28.5g			
CBT per 28.5g [†]	15.6		mg/28.5g			
∆9-THC per 28.5g	36.5		mg/28.5g			





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Customer: Healthy Roots

Product identity: #194, 1000 Horse

Client/Metrc ID:

Sample Date:

Laboratory ID: 22-001478-0001

Evidence of Cooling: No
Temp: 22 °C
Relinquished by: Client
Serving Size #1: 28.5 g

Sample Results

Potency	Method J AOAC 2015 V98-6	(mod) Units %	Batch: 2201168	Analyze: 2/10/22 12:51:00 AM
Analyte	Result Limits	Units	LOQ	Notes
CBC	0.0801	%	0.0033	
CBC-A [†]	< LOQ	%	0.0033	
CBC-Total [†]	0.0801	%	0.0062	
CBD	3.80	%	0.0330	
CBD-A	< LOQ	%	0.0033	
CBD-Total	3.80	%	0.0359	
CBDV [†]	0.0209	%	0.0033	
CBDV-A [†]	< LOQ	%	0.0033	
CBDV-Total [†]	0.0209	%	0.0062	
CBE [†]	< LOQ	%	0.0033	
CBG [†]	0.0237	%	0.0033	
CBG-A [†]	< LOQ	%	0.0033	
CBG-Total	0.0237	%	0.0062	
CBL [†]	< LOQ	%	0.0033	
CBL-A [†]	< LOQ	%	0.0033	
CBL-Total [†]	< LOQ	%	0.0062	
CBN	0.00915	%	0.0033	
CBT [†]	0.0548	%	0.0033	
$\Delta 8$ -THCV	< LOQ	%	0.0033	
$\Delta 8\text{-THC}^{\dagger}$	< LOQ	%	0.0033	
Δ9-THC	0.128	%	0.0033	
THC-A	< LOQ	%	0.0033	
THC-Total	0.128	%	0.0062	
THCV [†]	< LOQ	%	0.0033	
THCV-A [†]	< LOQ	%	0.0033	
THCV-Total [†]	< LOQ	%	0.0062	
Total Cannabinoids [†]	4.12	%		

Potency per 28.5g	Method J AOA	AC 2015 V98-6 (m	nod) Units mg/se Ba	tch: 2201168	Analyze: 2/10/22 12:51:00 AM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g [†]	22.8		mg/28.5g	0.941	
CBC-A per 28.5g [†]	< LOQ		mg/28.5g	0.941	
CBC-Total per 28.5g [†]	22.8		mg/28.5g	1.77	

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Potency per 28.5g	Method J AO	AC 2015 V98-6 (mod) Units mg/se Bat 6	ch: 2201168	Analyze: 2/10/22 12:51:00 AM
Analyte	Result	Limits Units	LOQ	Notes
CBD per 28.5g	1080	mg/28.5g	9.41	
CBD-A per 28.5g	< LOQ	mg/28.5g	0.941	
CBD-Total per 28.5g	1080	mg/28.5g	10.2	
CBDV per 28.5g [†]	5.96	mg/28.5g	0.941	
CBDV-A per 28.5g [†]	< LOQ	mg/28.5g	0.941	
CBDV-Total per 28.5g [†]	5.96	mg/28.5g	1.76	
CBE per 28.5g [†]	< LOQ	mg/28.5g	0.941	
CBG per 28.5g [†]	6.75	mg/28.5g	0.941	
CBG-A per 28.5g [†]	< LOQ	mg/28.5g	0.941	
CBG-Total per 28.5g [†]	6.75	mg/28.5g	1.76	
CBL per 28.5g [†]	< LOQ	mg/28.5g	0.941	
CBL-A per 28.5g [†]	< LOQ	mg/28.5g	0.941	
CBL-Total per 28.5g [†]	< LOQ	mg/28.5g	1.77	
CBN per 28.5g	2.61	mg/28.5g	0.941	
CBT per 28.5g [†]	15.6	mg/28.5g	0.941	
$\Delta 8 ext{-THCV per 28.5g}^{\scriptscriptstyle \dagger}$	< LOQ	mg/28.5g	0.941	
$\Delta 8$ -THC per 28.5g †	< LOQ	mg/28.5g	0.941	
Δ 9-THC per 28.5g	36.5	mg/28.5g	0.941	
exo-THC per 28.5g [†]	< LOQ	mg/28.5g	0.941	
THC-A per 28.5g	< LOQ	mg/28.5g	0.941	
THC-Total per 28.5g	36.5	mg/28.5g	1.77	
THCV per 28.5g [†]	< LOQ	mg/28.5g	0.941	
THCV-A per 28.5g [†]	< LOQ	mg/28.5g	0.941	
THCV-Total per 28.5g [†]	< LOQ	mg/28.5g	1.77	
Total Cannabinoids per 28.5g	1170	mg/28.5g		





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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 = Gram mg/28.5g = Milligram per 28.5g% = Percentage of sample % wt = $\mu g/g$ divided by 10,000

Approved Signatory

Derrick Tanner General Manager





Report Number:

22-001478/D002.R000

Report Date:

02/14/2022

ORELAP#:

OR100028

Purchase Order:

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02/08/22 14:55



Hemp / Cannabis Usable / Extract / Finished Products **Chain of Custody Record**

Revision: 4.00 Control#: CF023 Rev 02/24/2021 Eff: 03/04/2021 ORELAP ID: OR100028

						Α	nalysi	s Req	ueste	d				p	O Number:	
CHAIN OF C Company: Healthy Root Contact: Liz Merritt Address: 14325 NE Airp Portland, OR 9 Email: Healthyrootshem Phone: 503-496-2329 License: AG-L 1052211F	s 07230 p@gmail.co	om	s – OR 59 compounds	Pesticide Multi-Residue – 379 compounds		Aesidual Solvents	& Water Activity		Micro: Yeast and Mold	Micro: E.Coli and Total Coliform	etals	SI	obic Mote phylococc	Pro Custom Report t	oject Name: Reporting: o State -	TRC or Other: Business Day Standard Turnaround Business Day Rush Turnaround* Business Day Rush Turnaround* Check for availability
Please add: Compliance Q He Lab ID Client Sample Identification	Date	Time	Pesticide	Pesticide	Potency	Residual	Moisture &	Terpenes	Micro: Ye	Micro: E.	Heavy Metals	Mycotoxins	other Sta	Type †	Weight (Units)	Comments/Metrc ID
#194,1000 Horse	28/02													T	28.5g	Report in mg/gr and % (percentage)
Relinquished By: Metton	Date 2/s/22	7ime			R	eceivec	IBy:			-	ate 8/22	_	S.5	Sample Cash	in good condition	Lab Use Only: or d Client drop Yes DNo - Temp (°C): CC Net:

† - Sample Type Codes: Vegetation (V); Isolates (S); Extract/Concentrate (C); Tincture/Topical (T); Edible (E); Beverage (B) Samples submitted to Columbia Laboratories with testing requires ents constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by "you are agreeing to these terms

12423 NE Whitaker Way Portland, OR 97230

P: (503) 254-1794 | Fax: (503) 254-1452 info@columbialaboratories.com

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02/14/2022 Report Date: ORELAP#: OR100028

Purchase Order:

Received: 02/08/22 14:55

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

Laboratory Quality Control Results

J AOAC 2015 \	J AOAC 2015 V98-6 Batch 10: 2201168							
Laboratory Co	ntrol Sample							
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDVA	0.00930	0.01	%	93.0	85.0 - 115	Acceptable		
CBDV	0.0105	0.01	%	105	85.0 - 115	Acceptable		
CBE	0.00913	0.01	%	91.3	85.0 - 115	Acceptable		
CBDA	0.0105	0.01	%	105	85.0 - 115	Acceptable		
CBGA	0.00938	0.01	%	93.8	85.0 - 115	Acceptable		
CBG	0.00970	0.01	%	97.0	85.0 - 115	Acceptable		
CBD	0.0104	0.01	%	104	85.0 - 115	Acceptable		
THCV	0.00948	0.01	%	94.8	85.0 - 115	Acceptable		
d8THCV	0.00956	0.01	%	95.6	85.0 - 115	Acceptable		
THCVA	0.00886	0.01	%	88.6	85.0 - 115	Acceptable		
CBN	0.0108	0.01	%	108	85.0 - 115	Acceptable		
exo-THC	0.00882	0.01	%	88.2	85.0 - 115	Acceptable		
d9THC	0.0102	0.01	%	102	85.0 - 115	Acceptable		
d8THC	0.00987	0.01	%	98.7	85.0 - 115	Acceptable		
CBL	0.00909	0.01	%	90.9	85.0 - 115	Acceptable		
CBC	0.00995	0.01	%	99.5	85.0 - 115	Acceptable		
THCA	0.0100	0.01	%	100	85.0 - 115	Acceptable		
CBCA	0.00981	0.01	%	98.1	85.0 - 115	Acceptable		
CBLA	0.00962	0.01	%	96.2	85.0 - 115	Acceptable		
CBT	0.0103	0.01	%	103	85.0 - 115	Acceptable		

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBDV	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBE	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBDA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBGA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBG	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBD	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
THCV	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
d8THCV	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
THCVA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBN	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
exo-THC	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
d9THC	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
d8THC	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBL	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBC	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
THCA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBCA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBLA	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></loq<>	0.003	%	< 0.003	Acceptable	
CBT	<loq< td=""><td>0.003</td><td>%</td><td>< 0.003</td><td>Acceptable</td><td></td></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





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

Laboratory Quality Control Results

J AOAC 2015 V	98-6				Bato	th ID: 2201168		
Sample Duplica	te							
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	0.0566	0.0561	0.003	%	0.730	< 20	Acceptable	
CBE	<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	
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	0.611	0.609	0.003	%	0.345	< 20	Acceptable	
CBD	<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	
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	<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	
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	0.0128	0.0125	0.003	%	1.93	< 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	<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	
CBC	0.169	0.169	0.003	%	0.156	< 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	0.00457	0.00400	0.003	%	13.3	< 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	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.