



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



**Report Number:** 21-010177/D002.R000  
**Report Date:** 09/09/2021  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/01/21 14:00

**Customer:** Healthy Roots  
**Product identity:** #167 1000 Horse  
**Client/Metric ID:** .  
**Laboratory ID:** 21-010177-0004

### Summary

#### Potency:

Analyte	Result	Limits	Units	Status		
CBD	3.82		%		CBD-Total per 28.5g	1090 mg/28.5g
Δ9-THC	0.146		%			
Analyte per 28.5g	Result	Limits	Units	Status	THC-Total per 28.5g	<LOQ
CBD per 28.5g	1090		mg/28.5g		(Reported in milligrams per serving)	
Δ9-THC per 28.5g	41.6		mg/28.5g			



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**Customer:** Healthy Roots  
**Product identity:** #167 1000 Horse  
**Client/Metric ID:** .  
**Sample Date:**  
**Laboratory ID:** 21-010177-0004  
**Evidence of Cooling:** No  
**Temp:** 24.9 °C  
**Relinquished by:** L. Merrit  
**Serving Size #1:** 28.5 g

### Sample Results

Potency	Method J AOAC 2015 V98-6 (mod)	Units %	Batch: 2107929	Analyze: 9/3/21 4:56:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC	< LOQ		%	0.0870	
CBC-A <sup>†</sup>	< LOQ		%	0.0870	
CBC-Total <sup>†</sup>	< LOQ		%	0.163	
CBD	3.82		%	0.0870	
CBD-A	< LOQ		%	0.0870	
CBD-Total	3.82		%	0.163	
CBDV <sup>†</sup>	< LOQ		%	0.0870	
CBDV-A <sup>†</sup>	< LOQ		%	0.0870	
CBDV-Total <sup>†</sup>	< LOQ		%	0.162	
CBE <sup>†</sup>	< LOQ		%	0.0870	
CBG <sup>†</sup>	< LOQ		%	0.0870	
CBG-A <sup>†</sup>	< LOQ		%	0.0870	
CBG-Total	< LOQ		%	0.162	
CBL <sup>†</sup>	< LOQ		%	0.0870	
CBL-A <sup>†</sup>	< LOQ		%	0.0870	
CBL-Total <sup>†</sup>	< LOQ		%	0.163	
CBN	< LOQ		%	0.0870	
CBT <sup>†</sup>	< LOQ		%	0.0870	
Δ8-THCV	< LOQ		%	0.0870	
Δ8-THC <sup>†</sup>	< LOQ		%	0.0870	
Δ9-THC	0.146		%	0.0870	
THC-A	< LOQ		%	0.0870	
THC-Total	< LOQ		%	0.163	
THCV <sup>†</sup>	< LOQ		%	0.0870	
THCV-A <sup>†</sup>	< LOQ		%	0.0870	
THCV-Total <sup>†</sup>	< LOQ		%	0.162	
<b>Total Cannabinoids<sup>†</sup></b>	<b>3.97</b>		%		

Potency per 28.5g	Method J AOAC 2015 V98-6 (mod)	Units mg/se	Batch: 2107929	Analyze: 9/3/21 4:56:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
CBC-A per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
CBC-Total per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	1.63	



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Potency per 28.5g Method J AOAC 2015 V98-6 (mod) Units mg/se Batch: 2107929 Analyze: 9/3/21 4:56:00 AM

Analyte	Result	Limits	Units	LOQ	Notes
CBD per 28.5g	1090		mg/28.5g	24.8	
CBD-A per 28.5g	< LOQ		mg/28.5g	0.870	
CBD-Total per 28.5g	1090		mg/28.5g	46.6	
CBDV per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
CBDV-A per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
CBDV-Total per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	1.62	
CBE per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
CBG per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
CBG-A per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
CBG-Total per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	1.62	
CBL per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
CBL-A per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
CBL-Total per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	1.63	
CBN per 28.5g	< LOQ		mg/28.5g	0.870	
CBT per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
Δ8-THCV per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
Δ8-THC per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
Δ9-THC per 28.5g	41.6		mg/28.5g	24.8	
exo-THC per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
THC-A per 28.5g	< LOQ		mg/28.5g	0.870	
THC-Total per 28.5g	< LOQ		mg/28.5g	46.6	
THCV per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
THCV-A per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.870	
THCV-Total per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	1.63	
Total Cannabinoids per 28.5g	1130		mg/28.5g		



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**Abbreviations**

**Limits:** Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220

**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 = µg/g divided by 10,000

Approved Signatory

Derrick Tanner  
General Manager



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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

HEALTHYROOTS 21-010177



Healthy Roots

Company:				Analysis Requested										PO Number:					
CHAIN OF CUSTODY														Project Number:					
Company: Healthy Roots														Project Name:					
Contact: Liz Merritt														Custom Reporting:					
Address: 14325 NE Airport Way, #113														Report to State - <input type="checkbox"/> METRC or <input type="checkbox"/> Other:					
Portland, OR 97230														Turnaround time: <input checked="" type="checkbox"/> 5 Business Day Standard Turnaround					
Email: Healthyrootshemp@gmail.com														<input type="checkbox"/> 3 Business Day Rush Turnaround*					
Phone: 503-496-2329														<input type="checkbox"/> 2 Business Day Rush Turnaround*					
License: AG-L 1052211FP														*Check for availability					
Billing (if different):														Sampled by:					
Lab ID	Client Sample Identification	Date	Time	Pesticides - OR 59 compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Moisture & Water Activity	Terpenes	Micro: Yeast and Mold	Micro: E. Coli and Total Coliform	Heavy Metals	Mycotoxins	Sample Type †	Weight (Units)	Comments/Metric ID			
#163	Roller Bomb	8/31/20				X								T	8g				
#166	1000 mint	9/1				X								T	1g 28.5g				
#165	Facial Oil					X								T	16g				
#167	1000 Horse					X								T	28.5g				
Report in mg/gr and % (percentage)																			
Relinquished By:				Received By:				Date				Time				Lab Use Only:			
Merritt				BD				9/1/21				14:00				<input type="checkbox"/> Shipped Via: <input checked="" type="checkbox"/> Client drop			
																Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No - Temp (°C): 24.9			
																Sample in good condition: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
																<input type="checkbox"/> Cash <input type="checkbox"/> Check <input type="checkbox"/> CC <input type="checkbox"/> Net:			
																Prelog storage:			

† - Sample Type Codes: Vegetation (V) ; Isolates (S) ; Extract/Concentrate (C) ; Tincture/Topical (T) ; Edible (E) ; Beverage (B)

Samples submitted to Columbia Laboratories with testing requirements 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  
Page \_\_\_\_\_ of \_\_\_\_\_  
www.columbialaboratories.com



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Revision #: 0.00 Control : CFL-D06  
Revision Date: 05/31/2019 Effective Date: 05/31/2019

#### Laboratory Quality Control Results

**J AOAC 2015 V98-6**

**Batch ID: 2107929**

#### Laboratory Control Sample

Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	0.203	0.2	%	101	85.0 - 115	Acceptable	
CBDV	0.214	0.2	%	107	85.0 - 115	Acceptable	
CBE	0.205	0.2	%	103	85.0 - 115	Acceptable	
CBDA	0.196	0.2	%	98.1	85.0 - 115	Acceptable	
CBGA	0.202	0.2	%	101	85.0 - 115	Acceptable	
CBG	0.200	0.2	%	99.9	85.0 - 115	Acceptable	
CBD	0.198	0.2	%	99.0	85.0 - 115	Acceptable	
THCV	0.209	0.2	%	104	85.0 - 115	Acceptable	
d8THCV	0.189	0.2	%	94.4	85.0 - 115	Acceptable	
THCVA	0.195	0.2	%	97.3	85.0 - 115	Acceptable	
CBN	0.195	0.2	%	97.5	85.0 - 115	Acceptable	
exo-THC	0.191	0.2	%	95.5	85.0 - 115	Acceptable	
d9THC	0.205	0.2	%	102	85.0 - 115	Acceptable	
d8THC	0.185	0.2	%	92.3	85.0 - 115	Acceptable	
CBL	0.216	0.2	%	108	85.0 - 115	Acceptable	
CBC	0.193	0.2	%	96.4	85.0 - 115	Acceptable	
THCA	0.192	0.2	%	96.1	85.0 - 115	Acceptable	
CBCA	0.196	0.2	%	98.0	85.0 - 115	Acceptable	
CBLA	0.200	0.2	%	100	85.0 - 115	Acceptable	
CBT	0.206	0.2	%	103	85.0 - 115	Acceptable	

#### Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.1	%	< 0.1	Acceptable	
CBDV	<LOQ	0.1	%	< 0.1	Acceptable	
CBE	<LOQ	0.1	%	< 0.1	Acceptable	
CBDA	<LOQ	0.1	%	< 0.1	Acceptable	
CBGA	<LOQ	0.1	%	< 0.1	Acceptable	
CBG	<LOQ	0.1	%	< 0.1	Acceptable	
CBD	<LOQ	0.1	%	< 0.1	Acceptable	
THCV	<LOQ	0.1	%	< 0.1	Acceptable	
d8THCV	<LOQ	0.1	%	< 0.1	Acceptable	
THCVA	<LOQ	0.1	%	< 0.1	Acceptable	
CBN	<LOQ	0.1	%	< 0.1	Acceptable	
exo-THC	<LOQ	0.1	%	< 0.1	Acceptable	
d9THC	<LOQ	0.1	%	< 0.1	Acceptable	
d8THC	<LOQ	0.1	%	< 0.1	Acceptable	
CBL	<LOQ	0.1	%	< 0.1	Acceptable	
CBC	<LOQ	0.1	%	< 0.1	Acceptable	
THCA	<LOQ	0.1	%	< 0.1	Acceptable	
CBCA	<LOQ	0.1	%	< 0.1	Acceptable	
CBLA	<LOQ	0.1	%	< 0.1	Acceptable	
CBT	<LOQ	0.1	%	< 0.1	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 #: 0.00 Control : CFL-D06  
Revision Date: 05/31/2019 Effective Date: 05/31/2019

#### Laboratory Quality Control Results

J AOAC 2015 V98-6		Batch ID: 2107929						
Sample Duplicate		Sample ID: 21-009747-0001-01						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBDV	0.292	0.289	0.1	%	0.971	< 20	Acceptable	
CBE	0.346	0.343	0.1	%	0.794	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBD	>98.0	>98.0	0.1	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	

#### Abbreviations

ND - None Detected at or above MRL  
RPD - Relative Percent Difference  
LOQ - Limit of Quantitation  
NA - Calculation Not Applicable given non-numerical results

#### 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.