



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



**Report Number:** 21-013253/D002.R001  
**Report Date:** 11/23/2021  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 11/10/21 14:36

This is an amended version of report# 21-013253/D002.R000.  
Reason: Sample re-extracted for potency.

**Customer:** Healthy Roots  
**Product identity:** #181, 800 Pet  
**Client/Metric ID:** .  
**Laboratory ID:** 21-013253-0004

### Summary

#### Potency:

Analyte	Result	Limits	Units	Status	CBD-Total per 28.5g	884 mg/28.5g
CBC	0.0828		%			
CBD	3.10		%			
CBDV <sup>†</sup>	0.0183		%		THC-Total per 28.5g	36.5 mg/28.5g
CBE <sup>†</sup>	0.0206		%			
CBG <sup>†</sup>	0.0247		%			
CBN	0.00953		%			
CBT <sup>†</sup>	0.0560		%			
Δ9-THC	0.128		%			
					(Reported in milligrams per serving)	
Analyte per 28.5g	Result	Limits	Units	Status		
CBC per 28.5g <sup>†</sup>	23.6		mg/28.5g			
CBD per 28.5g	884		mg/28.5g			
CBDV per 28.5g <sup>†</sup>	5.22		mg/28.5g			
CBE per 28.5g <sup>†</sup>	5.87		mg/28.5g			
CBG per 28.5g <sup>†</sup>	7.04		mg/28.5g			
CBN per 28.5g	2.72		mg/28.5g			
CBT per 28.5g <sup>†</sup>	16.0		mg/28.5g			
Δ9-THC per 28.5g	36.5		mg/28.5g			



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**Customer:** Healthy Roots

**Product identity:** #181, 800 Pet

**Client/Metric ID:** .

**Sample Date:**

**Laboratory ID:** 21-013253-0004

**Evidence of Cooling:** No

**Temp:** 20.7 °C

**Relinquished by:** Client

**Serving Size #1:** 28.5 g

## Sample Results

Potency	Method J AOAC 2015 V98-6 (mod)	Units %	Batch: 2110535	Analyze: 11/19/21 11:29:00 P	
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0828		%	0.0033	
CBC-A <sup>†</sup>	< LOQ		%	0.0033	
CBC-Total <sup>†</sup>	0.0828		%	0.0062	
CBD	3.10		%	0.0328	
CBD-A	< LOQ		%	0.0033	
CBD-Total	3.10		%	0.0357	
CBDV <sup>†</sup>	0.0183		%	0.0033	
CBDV-A <sup>†</sup>	< LOQ		%	0.0033	
CBDV-Total <sup>†</sup>	0.0183		%	0.0061	
CBE <sup>†</sup>	0.0206		%	0.0033	
CBG <sup>†</sup>	0.0247		%	0.0033	
CBG-A <sup>†</sup>	< LOQ		%	0.0033	
CBG-Total	0.0247		%	0.0061	
CBL <sup>†</sup>	< LOQ		%	0.0033	
CBL-A <sup>†</sup>	< LOQ		%	0.0033	
CBL-Total <sup>†</sup>	< LOQ		%	0.0062	
CBN	0.00953		%	0.0033	
CBT <sup>†</sup>	0.0560		%	0.0033	
Δ8-THCV	< LOQ		%	0.0033	
Δ8-THC <sup>†</sup>	< LOQ		%	0.0033	
Δ9-THC	0.128		%	0.0033	
THC-A	< LOQ		%	0.0033	
THC-Total	0.128		%	0.0062	
THCV <sup>†</sup>	< LOQ		%	0.0033	
THCV-A <sup>†</sup>	< LOQ		%	0.0033	
THCV-Total <sup>†</sup>	< LOQ		%	0.0061	
<b>Total Cannabinoids<sup>†</sup></b>	<b>3.44</b>		%		

Potency per 28.5g	Method J AOAC 2015 V98-6 (mod)	Units mg/se	Batch: 2110535	Analyze: 11/19/21 11:29:00 P	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g <sup>†</sup>	23.6		mg/28.5g	0.935	
CBC-A per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.935	
CBC-Total per 28.5g <sup>†</sup>	23.6		mg/28.5g	1.76	



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Potency per 28.5g					
Method J AOAC 2015 V98-6 (mod)Units mg/se Batch: 2110535 Analyze: 11/19/21 11:29:00 P					
Analyte	Result	Limits	Units	LOQ	Notes
CBD per 28.5g	884		mg/28.5g	9.35	
CBD-A per 28.5g	< LOQ		mg/28.5g	0.935	
CBD-Total per 28.5g	884		mg/28.5g	10.2	
CBDV per 28.5g <sup>†</sup>	5.22		mg/28.5g	0.935	
CBDV-A per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.935	
CBDV-Total per 28.5g <sup>†</sup>	5.22		mg/28.5g	1.75	
CBE per 28.5g <sup>†</sup>	5.87		mg/28.5g	0.935	
CBG per 28.5g <sup>†</sup>	7.04		mg/28.5g	0.935	
CBG-A per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.935	
CBG-Total per 28.5g <sup>†</sup>	7.04		mg/28.5g	1.75	
CBL per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.935	
CBL-A per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.935	
CBL-Total per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	1.76	
CBN per 28.5g	2.72		mg/28.5g	0.935	
CBT per 28.5g <sup>†</sup>	16.0		mg/28.5g	0.935	
Δ8-THCV per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.935	
Δ8-THC per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.935	
Δ9-THC per 28.5g	36.5		mg/28.5g	0.935	
exo-THC per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.935	
THC-A per 28.5g	< LOQ		mg/28.5g	0.935	
THC-Total per 28.5g	36.5		mg/28.5g	1.76	
THCV per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.935	
THCV-A per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	0.935	
THCV-Total per 28.5g <sup>†</sup>	< LOQ		mg/28.5g	1.76	
Total Cannabinoids per 28.5g	980		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 =  $\mu\text{g/g}$  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

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 checked="" type="checkbox"/> 2 Business Day Rush Turnaround*			
License: AG-L 1052211FP														*Check for availability			
Billing (if different):				Sampled by:													
Compliance@healthyrootshemp.com																	
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	Other	Sample Type †	Weight (Units)	Comments/Metric ID
#7, BB Base	11/10					✓									T	200g	please do 2 day rush turnaround on this item only!
#178, 200 Root Butter	11/10					✓									T	50g	
#179, 200 Pet	11/10					✓									T	28.5g	5 day turnaround for rest of tests!
#180, 500 Pet	11/10					✓									T	28.5g	Report in mg/gr and % (percentage)
#181, 800 Pet	11/10					✓									T	28.5g	
Relinquished By:				Date	Time	Received By:				Date	Time	Lab Use Only:					
Merritt				11/10	2:15p	DS				11/10/21	14:36	<input type="checkbox"/> Shipped Via: <input type="checkbox"/> Client drop Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No - Temp (°C): 20.7°C Sample in good condition: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Cash   <input type="checkbox"/> Check   <input type="checkbox"/> CC   <input checked="" 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  
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P: (503) 254-1794 | Fax: (503) 254-1452  
info@columbiaboratories.com  
Page of  
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Revision #: 0.00 Control : CFL-D06  
Revision Date: 05/31/2019 Effective Date: 05/31/2019

#### Laboratory Quality Control Results

JAOAC2015 V986

Batch ID: 2110535

#### Laboratory Control Sample

Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	0.0100	0.01	%	100	85.0 - 115	Acceptable	
CBDV	0.0110	0.01	%	110	85.0 - 115	Acceptable	
CBE	0.00987	0.01	%	98.7	85.0 - 115	Acceptable	
CBDA	0.0101	0.01	%	101	85.0 - 115	Acceptable	
CBGA	0.0101	0.01	%	101	85.0 - 115	Acceptable	
CBG	0.0102	0.01	%	102	85.0 - 115	Acceptable	
CBD	0.00985	0.01	%	98.5	85.0 - 115	Acceptable	
THCV	0.0101	0.01	%	101	85.0 - 115	Acceptable	
d8THCV	0.00950	0.01	%	95.0	85.0 - 115	Acceptable	
THCVA	0.00985	0.01	%	98.5	85.0 - 115	Acceptable	
CBN	0.00993	0.01	%	99.3	85.0 - 115	Acceptable	
exo-THC	0.00908	0.01	%	90.8	85.0 - 115	Acceptable	
d9THC	0.00961	0.01	%	96.1	85.0 - 115	Acceptable	
d8THC	0.0102	0.01	%	102	85.0 - 115	Acceptable	
CBL	0.00981	0.01	%	98.1	85.0 - 115	Acceptable	
CBC	0.0105	0.01	%	105	85.0 - 115	Acceptable	
THCA	0.00984	0.01	%	98.4	85.0 - 115	Acceptable	
CBCA	0.0104	0.01	%	104	85.0 - 115	Acceptable	
CBLA	0.00986	0.01	%	98.6	85.0 - 115	Acceptable	
CBT	0.0113	0.01	%	113	85.0 - 115	Acceptable	

#### Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBDV	<LOQ	0.003	%	< 0.003	Acceptable	
CBE	<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	<LOQ	0.003	%	< 0.003	Acceptable	
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	
CBT	<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 #: 0.00 Control : CFL-D06  
Revision Date: 05/31/2019 Effective Date: 05/31/2019

Laboratory Quality Control Results

JAOAC2015 V986							
Batch ID: 2110535							
Sample Duplicate							
Sample ID: 21-010754-0004							
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
CBDV	0.00675	0.00689	0.003	%	2.04	< 20	Acceptable
CBE	0.00815	0.00830	0.003	%	1.82	< 20	Acceptable
CBD A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
CBG	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
CBD	2.17	2.19	0.003	%	0.617	< 20	Acceptable
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
d8THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
CBN	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
exo-THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
d9THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
d8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
CBC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
CBCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable
CBT	<LOQ	<LOQ	0.003	%	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.