



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



Report Number: 21-004718/D02.R00
Report Date: 05/04/2021
ORELAP#: OR100028
Purchase Order:
Received: 04/28/21 14:25

Customer: Healthy Roots
Product identity: #142 Root Butter
Client/Metric ID: .
Laboratory ID: 21-004718-0001

Sample Date: 04/28/21 09:30

Summary

Potency:

Analyte	Result	Limits	Units	Status
CBD	0.0191		%	
CBC-A†	0.0330		%	
CBD	1.56		%	
CBD-A	0.565		%	
CBDV†	0.00710		%	
CBG†	0.0140		%	
CBG-A†	0.0245		%	
Δ9-THC	0.0264		%	
THC-A	0.0137		%	
Analyte per 25g	Result	Limits	Units	Status
CBC per 25g†	4.78		mg/25g	
CBC-A per 25g†	8.25		mg/25g	
CBD per 25g	390		mg/25g	
CBD-A per 25g	141		mg/25g	
CBDV per 25g†	1.78		mg/25g	
CBG per 25g†	3.50		mg/25g	
CBG-A per 25g†	6.13		mg/25g	
Δ9-THC per 25g	6.60		mg/25g	
THC-A per 25g	3.43		mg/25g	

CBD-Total per 25g	514 mg/25g
THC-Total per 25g	9.60 mg/25g
(Reported in milligrams per serving)	



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Product identity: #142 Root Butter
Client/Metric ID: .
Sample Date: 04/28/21 09:30
Laboratory ID: 21-004718-0001
Evidence of Cooling: No
Temp: 27.1 °C
Serving Size #1: 25 g

Sample Results

Potency	Method J AOAC 2015 V98-6 (mod)	Units %	Batch: 2103911	Analyze: 4/29/21 8:45:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0191		%	0.0033	
CBC-A [†]	0.0330		%	0.0033	
CBC-Total [†]	0.0480		%	0.0061	
CBD	1.56		%	0.0326	
CBD-A	0.565		%	0.0033	
CBD-Total	2.06		%	0.0355	
CBDV [†]	0.00710		%	0.0033	
CBDV-A [†]	< LOQ		%	0.0033	
CBDV-Total [†]	0.00710		%	0.0061	
CBG [†]	0.0140		%	0.0033	
CBG-A [†]	0.0245		%	0.0033	
CBG-Total	0.0355		%	0.0061	
CBL [†]	< LOQ		%	0.0033	
CBN	< LOQ		%	0.0033	
Δ8-THC [†]	< LOQ		%	0.0033	
Δ9-THC	0.0264		%	0.0033	
THC-A	0.0137		%	0.0033	
THC-Total	0.0384		%	0.0061	
THCV [†]	< LOQ		%	0.0033	
THCV-A [†]	< LOQ		%	0.0033	
THCV-Total [†]	< LOQ		%	0.0061	
Total Cannabinoids[†]	2.26		%		

Potency per 25g	Method J AOAC 2015 V98-6 (mod)	Units mg/se	Batch: 2103911	Analyze: 4/29/21 8:45:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 25g [†]	4.78		mg/25g	0.815	
CBC-A per 25g [†]	8.25		mg/25g	0.815	
CBC-Total per 25g [†]	12.0		mg/25g	1.53	
CBD per 25g	390		mg/25g	8.15	
CBD-A per 25g	141		mg/25g	0.815	
CBD-Total per 25g	514		mg/25g	8.87	
CBDV per 25g [†]	1.78		mg/25g	0.815	
CBDV-A per 25g [†]	< LOQ		mg/25g	0.815	



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Potency per 25g **Method J AOAC 2015 V98-6 (mod) Units mg/se Batch: 2103911 Analyze: 4/29/21 8:45:00 PM**

Analyte	Result	Limits	Units	LOQ	Notes
CBDV-Total per 25g [†]	1.78		mg/25g	1.52	
CBG per 25g [†]	3.50		mg/25g	0.815	
CBG-A per 25g [†]	6.13		mg/25g	0.815	
CBG-Total per 25g [†]	8.81		mg/25g	1.52	
CBL per 25g [†]	< LOQ		mg/25g	0.815	
CBN per 25g	< LOQ		mg/25g	0.815	
Δ8-THC per 25g [†]	< LOQ		mg/25g	0.815	
Δ9-THC per 25g	6.60		mg/25g	0.815	
THC-A per 25g	3.43		mg/25g	0.815	
THC-Total per 25g	9.60		mg/25g	1.53	
THCV per 25g [†]	< LOQ		mg/25g	0.815	
THCV-A per 25g [†]	< LOQ		mg/25g	0.815	
THCV-Total per 25g [†]	< LOQ		mg/25g	1.53	

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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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

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/25g = Milligram per 25g

% = 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**

21-004718

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

Company: _____ CHAIN OF CUSTODY Company: Healthy Roots Contact: Liz Merritt Address: 14325 NE Airport Way, #113 Portland, OR 97230 Email: Healthyrootshemp@gmail.com Phone: 503-496-2329 License: AG-L 1052211FP Billing (if different): _____				Analysis Requested 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: _____										PO Number: _____ Project Number: _____ Project Name: _____ Custom Reporting: _____ Report to State - <input type="checkbox"/> METRC or <input type="checkbox"/> Other: _____ Turnaround time: <input type="checkbox"/> 5 Business Day Standard Turnaround <input type="checkbox"/> 3 Business Day Rush Turnaround* <input type="checkbox"/> 2 Business Day Rush Turnaround* <i>*Check for availability</i> 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	Other	Sample Type †	Weight (Units)	Comments/Metric ID
1	#142 Root Butter	4/28				✓									T	25gk	
Report in mg/gr and % (percentage)																	
Relinquished By:			Date	Time	Received By:			Date	Time	Lab Use Only:							
Merritt			4/28	2:15	Jmw			4-28-21	14:25	<input type="checkbox"/> Shipped Via: _____ or <input type="checkbox"/> Client drop Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No - Temp (°C): <u>22.1</u> 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
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P: (503) 254-1794 | Fax: (503) 254-1452
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Page 1 of 1
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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: 2103874/2103911						
Laboratory Control Sample								
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDA	0.00967	0.01	%	96.7	85.0 - 115	Acceptable		
CBV	0.00992	0.01	%	99.2	85.0 - 115	Acceptable		
CBDA	0.00988	0.01	%	98.8	85.0 - 115	Acceptable		
CBGA	0.00973	0.01	%	97.3	85.0 - 115	Acceptable		
CBG	0.0100	0.01	%	100	85.0 - 115	Acceptable		
CB	0.0111	0.01	%	111	85.0 - 115	Acceptable		
THCV	0.01000	0.01	%	100.0	85.0 - 115	Acceptable		
THCVA	0.00925	0.01	%	92.5	85.0 - 115	Acceptable		
CBN	0.0104	0.01	%	104	85.0 - 115	Acceptable		
THC	0.0100	0.01	%	100	85.0 - 115	Acceptable		
DBTHC	0.00996	0.01	%	99.6	85.0 - 115	Acceptable		
CB	0.00921	0.01	%	92.1	85.0 - 115	Acceptable		
CB	0.0112	0.01	%	112	85.0 - 115	Acceptable		
THCA	0.00967	0.01	%	96.7	85.0 - 115	Acceptable		
CBDA	0.00964	0.01	%	96.4	85.0 - 115	Acceptable		

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDA	<LOQ	0.003	%	< 0.003	Acceptable	
CBV	<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	
CB	<LOQ	0.003	%	< 0.003	Acceptable	
THCV	<LOQ	0.003	%	< 0.003	Acceptable	
THCVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBN	<LOQ	0.003	%	< 0.003	Acceptable	
THC	<LOQ	0.003	%	< 0.003	Acceptable	
DBTHC	<LOQ	0.003	%	< 0.003	Acceptable	
CB	<LOQ	0.003	%	< 0.003	Acceptable	
CB	<LOQ	0.003	%	< 0.003	Acceptable	
THCA	<LOQ	0.003	%	< 0.003	Acceptable	
CBDA	<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: 2103874/2103911						
Sample Duplicate		Sample ID: 21-004681-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	0.00950	0.00985	0.003	%	3.59	< 20	Acceptable	
CBD-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0602	0.0609	0.003	%	1.23	< 20	Acceptable	
CBD	2.21	2.10	0.003	%	5.02	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	0.0184	0.0187	0.003	%	1.57	< 20	Acceptable	
THC	0.0689	0.0700	0.003	%	1.60	< 20	Acceptable	
D8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	0.00757	0.00672	0.003	%	11.8	< 20	Acceptable	
CBG	0.0792	0.0810	0.003	%	2.23	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<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.