



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



Report Number: 22-010306/D003.R000
Report Date: 09/02/2022
ORELAP#: OR100028
Purchase Order:
Received: 08/29/22 14:38

Customer: Healthy Roots
Product identity: #231, 800 Pet
Client/Metric ID: .
Laboratory ID: 22-010306-0001

Summary

Potency:

Analyte	Result	Limits	Units	Status	CBD-Total per Serving Size 871 mg/28.5g
CBC	0.110		%		
CBD	3.05		%		
CBD-A	0.00537		%		THC-Total per Serving Size 29.1 mg/28.5g
CBDV	0.0186		%		
CBG	0.0441		%		
CBT	0.0461		%		
Δ 8-THC	0.00661		%		
Δ 9-THC	0.102		%		(Reported in milligrams per serving)
Analyte per 28.5g	Result	Limits	Units	Status	
CBC per 28.5g	31.4		mg/28.5g		
CBD per 28.5g	869		mg/28.5g		
CBD-A per 28.5g	1.53		mg/28.5g		
CBDV per 28.5g	5.30		mg/28.5g		
CBG per 28.5g	12.6		mg/28.5g		
CBT per 28.5g	13.1		mg/28.5g		
Δ 8-THC per 28.5g	1.88		mg/28.5g		
Δ 9-THC per 28.5g	29.1		mg/28.5g		



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Customer: Healthy Roots
Product identity: #231, 800 Pet
Client/Metric ID: .
Sample Date:
Laboratory ID: 22-010306-0001
Evidence of Cooling: No
Temp: 30.1 °C
Relinquished by: Client
Serving Size #1: 28.5 g

Sample Results

Potency	Method: J AOAC 2015 V98-6 (mod) ^b			Units %	Batch: 2207381	Analyze: 8/31/22 7:13:00 AM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC	0.110		%	0.00330		
CBC-A	< LOQ		%	0.00330		
CBC-Total	0.110		%	0.00620		
CBD	3.05		%	0.0330		
CBD-A	0.00537		%	0.00330		
CBD-Total	3.05		%	0.0359		
CBDV	0.0186		%	0.00330		
CBDV-A	< LOQ		%	0.00330		
CBDV-Total	0.0186		%	0.00617		
CBE	< LOQ		%	0.00330		
CBG	0.0441		%	0.00330		
CBG-A	< LOQ		%	0.00330		
CBG-Total	0.0441		%	0.00617		
CBL	< LOQ		%	0.00330		
CBL-A	< LOQ		%	0.00330		
CBL-Total	< LOQ		%	0.00620		
CBN	< LOQ		%	0.00330		
CBT	0.0461		%	0.00330		
Δ8-THCV	< LOQ		%	0.00330		
Δ8-THC	0.00661		%	0.00330		
Δ9-THC	0.102		%	0.00330		
exo-THC	< LOQ		%	0.00330		
THC-A	< LOQ		%	0.00330		
THC-Total	0.102		%	0.00620		
THCV	< LOQ		%	0.00330		
THCV-A	< LOQ		%	0.00330		
THCV-Total	< LOQ		%	0.00617		
Total Cannabinoids	3.38		%			

Potency per 28.5g	Method: J AOAC 2015 V98-6 (mod) ^b			Units mg/se	Batch: 2207381	Analyze: 8/31/22 7:13:00 AM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC per 28.5g	31.4		mg/28.5g	0.942		



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Potency per 28.5g **Method:** J AOAC 2015 V98-6 (mod)^b **Units** mg/se **Batch:** 2207381 **Analyze:** 8/31/22 7:13:00 AM

Analyte	Result	Limits	Units	LOQ	Notes
CBC-A per 28.5g	< LOQ		mg/28.5g	0.942	
CBC-Total per 28.5g	31.4		mg/28.5g	1.77	
CBD per 28.5g	869		mg/28.5g	9.42	
CBD-A per 28.5g	1.53		mg/28.5g	0.942	
CBD-Total per 28.5g	871		mg/28.5g	10.2	
CBDV per 28.5g	5.30		mg/28.5g	0.942	
CBDV-A per 28.5g	< LOQ		mg/28.5g	0.942	
CBDV-Total per 28.5g	5.30		mg/28.5g	1.76	
CBE per 28.5g	< LOQ		mg/28.5g	0.942	
CBG per 28.5g	12.6		mg/28.5g	0.942	
CBG-A per 28.5g	< LOQ		mg/28.5g	0.942	
CBG-Total per 28.5g	12.6		mg/28.5g	1.76	
CBL per 28.5g	< LOQ		mg/28.5g	0.942	
CBL-A per 28.5g	< LOQ		mg/28.5g	0.942	
CBL-Total per 28.5g	< LOQ		mg/28.5g	1.77	
CBN per 28.5g	< LOQ		mg/28.5g	0.942	
CBT per 28.5g	13.1		mg/28.5g	0.942	
Δ8-THCV per 28.5g	< LOQ		mg/28.5g	0.942	
Δ8-THC per 28.5g	1.88		mg/28.5g	0.942	
Δ9-THC per 28.5g	29.1		mg/28.5g	0.942	
exo-THC per 28.5g	< LOQ		mg/28.5g	0.942	
THC-A per 28.5g	< LOQ		mg/28.5g	0.942	
THC-Total per 28.5g	29.1		mg/28.5g	1.77	
THCV per 28.5g	< LOQ		mg/28.5g	0.942	
THCV-A per 28.5g	< LOQ		mg/28.5g	0.942	
THCV-Total per 28.5g	< LOQ		mg/28.5g	1.77	
Total Cannabinoids per 28.5g	964		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.

^b = ISO/IEC 17025:2017 accredited method.

Units of Measure

g = g

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

CHAIN OF CUSTODY				Analysis Requested												Sampled by:		Report in mg/gr and % (percentage)	
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				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	Aerobic Plate Count, Salmonella, Shigella, Listeria, Pseudomonas	Sample Type	Weight (Units)	Comments/Metric ID		
Lab ID	Client Sample Identification	Date	Time																
	#231, 800 Pet	8/29				✓									T	28.5g			
	#230, Night Cap	8/29				✓									T	1g			
Relinquished By:				Date	Time	Received By:				Date	Time	Lab Use Only:							
Merton				8/29/22	2:00p	AC				8-29	14:38	<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): 30.1 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:							

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

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

Laboratory Quality Control Results

J AOAC 2015 V98-6									
Batch ID: 2207381									
Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDVA	1	0.0323	0.033	%	96.9	80.0 - 120	Acceptable		
CBDV	1	0.0356	0.033	%	107	80.0 - 120	Acceptable		
CBE	1	0.0317	0.033	%	95.1	80.0 - 120	Acceptable		
CBD	1	0.0316	0.033	%	94.8	90.0 - 110	Acceptable		
CBGA	1	0.0315	0.033	%	95.3	80.0 - 120	Acceptable		
CBG	1	0.0341	0.036	%	94.4	80.0 - 120	Acceptable		
CBD	1	0.0360	0.036	%	100	90.0 - 110	Acceptable		
THCV	1	0.0324	0.033	%	97.2	80.0 - 120	Acceptable		
d8THCV	1	0.0331	0.033	%	99.3	80.0 - 120	Acceptable		
THCVA	1	0.0307	0.033	%	92.2	80.0 - 120	Acceptable		
CBN	1	0.0349	0.036	%	96.5	90.0 - 110	Acceptable		
exo-THC	1	0.0313	0.033	%	93.8	80.0 - 120	Acceptable		
d9THC	1	0.0367	0.039	%	95.2	90.0 - 110	Acceptable		
d8THC	1	0.0326	0.033	%	97.8	90.0 - 110	Acceptable		
CBL	1	0.0297	0.033	%	89.2	80.0 - 120	Acceptable		
CBC	1	0.0330	0.033	%	98.9	80.0 - 120	Acceptable		
THCA	1	0.0298	0.032	%	93.5	90.0 - 110	Acceptable		
CBCA	1	0.0325	0.032	%	102	80.0 - 120	Acceptable		
CBLA	1	0.0331	0.033	%	99.4	80.0 - 120	Acceptable		
CBT	1	0.0326	0.033	%	97.9	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	
CBE	<LOQ	0.003	%	< 0.003	Acceptable	
CBD	<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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Laboratory Quality Control Results

J AOAC 2015 V98-6								
Batch ID: 2207381								
Sample Duplicate								
Sample ID: 22-009313-0001-01								
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	0.231	0.301	0.003	%	26.5	< 20	Outlier	R
CBE	1.53	2.00	0.003	%	26.7	< 20	Outlier	R
CBD	0.837	1.09	0.003	%	26.4	< 20	Outlier	R
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.616	0.819	0.003	%	28.3	< 20	Outlier	R
CBD	55.0	61.2	0.003	%	10.8	< 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	1.05	1.37	0.003	%	26.2	< 20	Outlier	R
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	1.63	2.10	0.003	%	24.9	< 20	Outlier	R
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	0.746	1.14	0.003	%	42.2	< 20	Outlier	R

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation

Units of Measure:



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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.