



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



Report Number: 22-007977/D002.R000
Report Date: 07/19/2022
ORELAP#: OR100028
Purchase Order:
Received: 07/07/22 15:11

Customer: Healthy Roots
Product identity: #219, 1000 Horse
Client/Metric ID: .
Laboratory ID: 22-007977-0005

Summary

Potency:

Analyte	Result	Limits	Units	Status	
CBC	0.158		%		CBD-Total per Serving Size 1130 mg/28.5g
CBD	3.96		%		
CBD-A	0.0106		%		THC-Total per Serving Size 36.5 mg/28.5g
CBDV	0.0242		%		
CBG	0.0760		%		(Reported in milligrams per serving)
CBN	0.00428		%		
CBT	0.0573		%		
Δ 8-THC	0.0257		%		
Δ 9-THC	0.128		%		
Analyte per 28.5g	Result	Limits	Units	Status	
CBC per 28.5g	45.0		mg/28.5g		
CBD per 28.5g	1130		mg/28.5g		
CBD-A per 28.5g	3.02		mg/28.5g		
CBDV per 28.5g	6.90		mg/28.5g		
CBG per 28.5g	21.7		mg/28.5g		
CBN per 28.5g	1.22		mg/28.5g		
CBT per 28.5g	16.3		mg/28.5g		
Δ 8-THC per 28.5g	7.32		mg/28.5g		
Δ 9-THC per 28.5g	36.5		mg/28.5g		



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Customer: Healthy Roots
Product identity: #219, 1000 Horse
Client/Metric ID: .
Sample Date:
Laboratory ID: 22-007977-0005
Evidence of Cooling: No
Temp: 24.4 °C
Relinquished by: Client
Serving Size #1: 28.5 g

Sample Results

Potency	Method: J AOAC 2015 V98-6 (mod)		Units %	Batch: 2206049	Analyze: 7/18/22 1:32:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.158		%	0.00315	
CBC-A	< LOQ		%	0.00315	
CBC-Total	0.158		%	0.00591	
CBD [±]	3.96		%	0.0315	
CBD-A [±]	0.0106		%	0.00315	
CBD-Total	3.97		%	0.0342	
CBDV	0.0242		%	0.00315	
CBDV-A	< LOQ		%	0.00315	
CBDV-Total	0.0242		%	0.00588	
CBE	< LOQ		%	0.00315	
CBG	0.0760		%	0.00315	
CBG-A	< LOQ		%	0.00315	
CBG-Total	0.0760		%	0.00588	
CBL	< LOQ		%	0.00315	
CBL-A	< LOQ		%	0.00315	
CBL-Total	< LOQ		%	0.00591	
CBN	0.00428		%	0.00315	
CBT	0.0573		%	0.00315	
Δ8-THCV	< LOQ		%	0.00315	
Δ8-THC [±]	0.0257		%	0.00315	
Δ9-THC [±]	0.128		%	0.00315	
exo-THC	< LOQ		%	0.00315	
THC-A [±]	< LOQ		%	0.00315	
THC-Total	0.128		%	0.00591	
THCV	< LOQ		%	0.00315	
THCV-A	< LOQ		%	0.00315	
THCV-Total	< LOQ		%	0.00588	
Total Cannabinoids	4.44		%		

Potency per 28.5g	Method: J AOAC 2015 V98-6 (mod)		Units mg/se	Batch: 2206049	Analyze: 7/18/22 1:32:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g	45.0		mg/28.5g	0.897	



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Potency per 28.5g		Method: J AOAC 2015 V98-6 (mod)		Units mg/se	Batch: 2206049	Analyze: 7/18/22 1:32:00 PM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC-A per 28.5g	< LOQ		mg/28.5g	0.897		
CBC-Total per 28.5g	45.0		mg/28.5g	1.68		
CBD per 28.5g	1130		mg/28.5g	8.97		
CBD-A per 28.5g	3.02		mg/28.5g	0.897		
CBD-Total per 28.5g	1130		mg/28.5g	9.76		
CBDV per 28.5g	6.90		mg/28.5g	0.897		
CBDV-A per 28.5g	< LOQ		mg/28.5g	0.897		
CBDV-Total per 28.5g	6.90		mg/28.5g	1.67		
CBE per 28.5g	< LOQ		mg/28.5g	0.897		
CBG per 28.5g	21.7		mg/28.5g	0.897		
CBG-A per 28.5g	< LOQ		mg/28.5g	0.897		
CBG-Total per 28.5g	21.7		mg/28.5g	1.67		
CBL per 28.5g	< LOQ		mg/28.5g	0.897		
CBL-A per 28.5g	< LOQ		mg/28.5g	0.897		
CBL-Total per 28.5g	< LOQ		mg/28.5g	1.88		
CBN per 28.5g	1.22		mg/28.5g	0.897		
CBT per 28.5g	16.3		mg/28.5g	0.897		
Δ^8 -THCV per 28.5g	< LOQ		mg/28.5g	0.897		
Δ^8 -THC per 28.5g	7.32		mg/28.5g	0.897		
Δ^9 -THC per 28.5g	36.5		mg/28.5g	0.897		
exo-THC per 28.5g	< LOQ		mg/28.5g	0.897		
THC-A per 28.5g	< LOQ		mg/28.5g	0.897		
THC-Total per 28.5g	36.5		mg/28.5g	1.68		
THCV per 28.5g	< LOQ		mg/28.5g	0.897		
THCV-A per 28.5g	< LOQ		mg/28.5g	0.897		
THCV-Total per 28.5g	< LOQ		mg/28.5g	1.87		
Total Cannabinoids per 28.5g	1270		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.

* = TNI accredited analyte.

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	
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 39 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	Herbicide Pesticide Count, Salmonella, Staphylococcus, Pseudomonas	Sample Type	Weight (Units)	Comments/Metric ID
Lab ID	Client Sample Identification	Date	Time														
	FSO ED 070722	07/07				✓									C	1g	
	FSO CD2 070722					✓									C	1g	
	#216, D8/Arnica Lotion					✓									T	128g	
	#218, Facial Oil					✓									T	16g	
	#219, 1000 Horse					✓									T	28.5g	
Relinquished By: Melton				Date: 07/07/22	Time: 2:00p	Received By: AC				Date: 7-7	Time: 15:11	Lab Use Only:					
<input type="checkbox"/> Shipped Via: _____ or <input checked="" type="checkbox"/> Client drop																	
Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No - Temp (°C): 24.4																	
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
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Page _____ of _____
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Revision: 1 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V986									
Batch ID: 2206049									
Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDVA	1	0.0300	0.033	%	90.0	80.0 - 120	Acceptable		
CBDV	1	0.0309	0.033	%	92.7	80.0 - 120	Acceptable		
CBE	1	0.0328	0.033	%	98.6	80.0 - 120	Acceptable		
CBD	1	0.0302	0.032	%	93.1	90.0 - 110	Acceptable		
CBSA	1	0.0291	0.032	%	90.6	80.0 - 120	Acceptable		
CBS	1	0.0302	0.034	%	89.7	80.0 - 120	Acceptable		
CBD	1	0.0334	0.036	%	91.8	90.0 - 110	Acceptable		
THCV	1	0.0301	0.033	%	90.3	80.0 - 120	Acceptable		
dBTHCV	1	0.0313	0.033	%	94.1	80.0 - 120	Acceptable		
THCVA	1	0.0298	0.033	%	89.5	80.0 - 120	Acceptable		
CBN	1	0.0327	0.034	%	96.0	90.0 - 110	Acceptable		
exo-THC	1	0.0311	0.033	%	93.4	80.0 - 120	Acceptable		
dBTHC	1	0.0314	0.034	%	93.3	90.0 - 110	Acceptable		
dBTHC	1	0.0311	0.032	%	96.4	90.0 - 110	Acceptable		
CBL	1	0.0296	0.033	%	88.9	80.0 - 120	Acceptable		
CBC	1	0.0355	0.033	%	107	80.0 - 120	Acceptable		
THCA	1	0.0292	0.031	%	94.0	90.0 - 110	Acceptable		
CBCA	1	0.0326	0.033	%	98.0	80.0 - 120	Acceptable		
CBLA	1	0.0326	0.033	%	97.9	80.0 - 120	Acceptable		
CBI	1	0.0360	0.033	%	108	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	
CBSA	<LOQ	0.003	%	< 0.003	Acceptable	
CBS	<LOQ	0.003	%	< 0.003	Acceptable	
CBD	<LOQ	0.003	%	< 0.003	Acceptable	
THCV	<LOQ	0.003	%	< 0.003	Acceptable	
dBTHCV	<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	
dBTHC	<LOQ	0.003	%	< 0.003	Acceptable	
dBTHC	<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	
CBI	<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

JAOAC2015 V986 Batch ID: 2206049								
Sample Duplicate Sample ID: 22-007977/0003								
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDA	0.00574	0.00529	0.003	%	8.21	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDA	0.03119	0.00371	0.003	%	157	< 20	Outlier	
CBDA	0.724	0.633	0.003	%	13.4	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
deltaTHCV	<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	
deltaTHC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
deltaTHC	1.55	1.36	0.003	%	13.0	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0305	0.0280	0.003	%	8.61	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	

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.