



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



Report Number: 23-008341/D003.R000
Report Date: 07/19/2023
ORELAP#: OR100028
Purchase Order:
Received: 07/14/23 14:30

Customer: Healthy Roots
Product identity: #284, 1000 Horse
Client/Metric ID: .
Laboratory ID: 23-008341-0001

Summary

Potency:

Analyte	Result	Limits	Units	Status	CBD-Total per Serving Size 966 mg/28.5g
CBC	0.247		%		
CBD	3.39		%		
CBDV	0.0387		%		THC-Total per Serving Size 37.9 mg/28.5g
CBE	0.0622		%		
CBG	0.0504		%		(Reported in milligrams per serving)
CBL	0.00522		%		
CBN	0.0248		%		
CBT	0.0505		%		
Δ8-THC	0.0394		%		
Δ9-THC	0.133		%		
Analyte per 28.5g	Result	Limits	Units	Status	
CBC per 28.5g	70.4		mg/28.5g		
CBD per 28.5g	966		mg/28.5g		
CBDV per 28.5g	11.0		mg/28.5g		
CBE per 28.5g	17.7		mg/28.5g		
CBG per 28.5g	14.4		mg/28.5g		
CBL per 28.5g	1.49		mg/28.5g		
CBN per 28.5g	7.07		mg/28.5g		
CBT per 28.5g	14.4		mg/28.5g		
Δ8-THC per 28.5g	11.2		mg/28.5g		
Δ9-THC per 28.5g	37.9		mg/28.5g		



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Customer: Healthy Roots
Product identity: #284, 1000 Horse
Client/Metric ID: .
Sample Date:
Laboratory ID: 23-008341-0001
Evidence of Cooling: No
Temp: 32.1 °C
Relinquished by: Client
Serving Size #1: 28.5 g

Sample Results

Potency	Method: J AOAC 2015 V98-6 (mod) ^b			Units %	Batch: 2309237	Analyze: 7/19/23 3:32:00 AM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC	0.247		%	0.00314		
CBC-A	< LOQ		%	0.00314		
CBC-Total	0.247		%	0.00590		
CBD	3.39		%	0.0314		
CBD-A	< LOQ		%	0.00314		
CBD-Total	3.39		%	0.0342		
CBDV	0.0387		%	0.00314		
CBDV-A	< LOQ		%	0.00314		
CBDV-Total	0.0387		%	0.00586		
CBE	0.0622		%	0.00314		
CBG	0.0504		%	0.00314		
CBG-A	< LOQ		%	0.00314		
CBG-Total	0.0504		%	0.00586		
CBL	0.00522		%	0.00314		
CBL-A	< LOQ		%	0.00314		
CBL-Total	< LOQ		%	0.00590		
CBN	0.0248		%	0.00314		
CBT	0.0505		%	0.00314		
Δ8-THCV	< LOQ		%	0.00314		
Δ10-THC-9R	< LOQ		%	0.00314		
Δ10-THC-9S	< LOQ		%	0.00314		
Δ10-THC-Total	< LOQ		%	0.00628		
Δ8-THC	0.0394		%	0.00314		
Δ9-THC	0.133		%	0.00314		
delta-9-THCP	< LOQ		%	0.00314		
exo-THC	< LOQ		%	0.00314		
THC-A	< LOQ		%	0.00314		
THC-Total	0.133		%	0.00590		
THCV	< LOQ		%	0.00314		
THCV-A	< LOQ		%	0.00314		
THCV-Total	< LOQ		%	0.00586		
Total Cannabinoids	4.04		%			



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Potency per 28.5g Method: J AOAC 2015 V98-6 (mod)^b Units mg/se Batch: 2309237 Analyze: 7/19/23 3:32:00 AM

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g	70.4		mg/28.5g	0.895	
CBC-A per 28.5g	< LOQ		mg/28.5g	0.895	
CBC-Total per 28.5g	70.4		mg/28.5g	1.68	
CBD per 28.5g	966		mg/28.5g	8.95	
CBD-A per 28.5g	< LOQ		mg/28.5g	0.895	
CBD-Total per 28.5g	966		mg/28.5g	9.74	
CBDV per 28.5g	11.0		mg/28.5g	0.895	
CBDV-A per 28.5g	< LOQ		mg/28.5g	0.895	
CBDV-Total per 28.5g	11.0		mg/28.5g	1.67	
CBE per 28.5g	17.7		mg/28.5g	0.895	
CBG per 28.5g	14.4		mg/28.5g	0.895	
CBG-A per 28.5g	< LOQ		mg/28.5g	0.895	
CBG-Total per 28.5g	14.4		mg/28.5g	1.67	
CBL per 28.5g	1.49		mg/28.5g	0.895	
CBL-A per 28.5g	< LOQ		mg/28.5g	0.895	
CBL-Total per 28.5g	< LOQ		mg/28.5g	1.68	
CBN per 28.5g	7.07		mg/28.5g	0.895	
CBT per 28.5g	14.4		mg/28.5g	0.895	
Δ8-THCV per 28.5g	< LOQ		mg/28.5g	0.895	
Δ10-THC-9R per 28.5g	< LOQ		mg/28.5g	0.895	
Δ10-THC-9S per 28.5g	< LOQ		mg/28.5g	0.895	
Δ10-THC-Total per 28.5g	< LOQ		mg/28.5g	1.79	
Δ8-THC per 28.5g	11.2		mg/28.5g	0.895	
Δ9-THC per 28.5g	37.9		mg/28.5g	0.895	
delta-9-THCP per 28.5g	< LOQ		mg/28.5g	0.895	
exo-THC per 28.5g	< LOQ		mg/28.5g	0.895	
THC-A per 28.5g	< LOQ		mg/28.5g	0.895	
THC-Total per 28.5g	37.9		mg/28.5g	1.68	
THCV per 28.5g	< LOQ		mg/28.5g	0.895	
THCV-A per 28.5g	< LOQ		mg/28.5g	0.895	
THCV-Total per 28.5g	< LOQ		mg/28.5g	1.68	
Total Cannabinoids per 28.5g	1150		mg/28.5g		



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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.

↳ = ISO/IEC 17025:2017 accredited method.

Units of Measure

g = g

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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Revision: 4 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2309237

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDVA	2	0.0298	0.0311	%	95.9	80.0 - 120	Acceptable		
CBDV	2	0.0297	0.0307	%	96.7	80.0 - 120	Acceptable		
CBE	2	0.0334	0.0349	%	95.8	80.0 - 120	Acceptable		
CBD	1	0.0312	0.0325	%	95.9	90.0 - 110	Acceptable		
CBGA	1	0.0311	0.0326	%	95.3	80.0 - 120	Acceptable		
CBG	1	0.0318	0.0332	%	95.7	80.0 - 120	Acceptable		
CBD	1	0.0326	0.0337	%	96.6	90.0 - 110	Acceptable		
THCV	2	0.0215	0.0222	%	96.8	80.0 - 120	Acceptable		
d8THCV	2	0.0259	0.0272	%	95.5	80.0 - 120	Acceptable		
THCVA	2	0.0298	0.0310	%	96.2	80.0 - 120	Acceptable		
CBN	1	0.0323	0.0340	%	95.0	80.0 - 120	Acceptable		
exo-THC	2	0.0300	0.0311	%	96.4	80.0 - 120	Acceptable		
d9THC	1	0.0317	0.0329	%	96.2	90.0 - 110	Acceptable		
d8THC	1	0.0307	0.0320	%	96.0	90.0 - 110	Acceptable		
9S-d10THC	1	0.0328	0.0343	%	95.7	80.0 - 120	Acceptable		
CBL	2	0.0305	0.0311	%	98.1	80.0 - 120	Acceptable		
9R-d10THC	1	0.0296	0.0313	%	94.8	80.0 - 120	Acceptable		
CBC	2	0.0301	0.0319	%	94.5	80.0 - 120	Acceptable		
THCA	1	0.0305	0.0322	%	94.7	90.0 - 110	Acceptable		
CBGA	2	0.0309	0.0325	%	95.1	80.0 - 120	Acceptable		
CBLA	2	0.0476	0.0500	%	95.1	80.0 - 120	Acceptable		
d9THCP	2	0.0303	0.0323	%	93.7	80.0 - 120	Acceptable		
CBT	2	0.0302	0.0314	%	96.3	80.0 - 120	Acceptable		

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBDV	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBE	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBD	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBGA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBG	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBD	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCV	<LOQ	0.00329	%	< 0.00329	Acceptable	
d8THCV	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCVA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBN	<LOQ	0.00329	%	< 0.00329	Acceptable	
exo-THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
d9THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
d8THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
9S-d10THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBL	<LOQ	0.00329	%	< 0.00329	Acceptable	
9R-d10THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBC	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBGA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBLA	<LOQ	0.00329	%	< 0.00329	Acceptable	
d9THCP	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBT	<LOQ	0.00329	%	< 0.00329	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: 2309237							
Sample Duplicate							
Sample ID: 23-008341-0001							
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation
CBDVA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
CBDV	0.0385	0.0387	0.00324	%	0.686	< 20	Acceptable
CBE	0.0621	0.0622	0.00324	%	0.148	< 20	Acceptable
CBD	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
CBGA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
CBG	0.0498	0.0504	0.00324	%	1.06	< 20	Acceptable
CBD	3.39	3.39	0.00324	%	0.0904	< 20	Acceptable
THCV	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
d8THCV	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
THCVA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
CBN	0.0246	0.0248	0.00324	%	0.621	< 20	Acceptable
exo-THC	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
d9THC	0.133	0.133	0.00324	%	0.181	< 20	Acceptable
d8THC	0.0377	0.0394	0.00324	%	4.40	< 20	Acceptable
9S-d10THC	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
CBL	0.00517	0.00522	0.00324	%	0.882	< 20	Acceptable
9R-d10THC	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
CBC	0.246	0.247	0.00324	%	0.462	< 20	Acceptable
THCA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
CBCA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
CBLA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
d9THCP	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable
CBT	0.0502	0.0505	0.00324	%	0.536	< 20	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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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.