



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



Report Number: 21-004093/D04.R01
Report Date: 04/26/2021
ORELAP#: OR100028
Purchase Order:
Received: 04/14/21 13:30

This is an amended version of report# 21-004093/D04.R00.
Reason: Updated LOQs.

Customer: Healthy Roots
Product identity: #141, 500 pet
Client/Metric ID: .
Laboratory ID: 21-004093-0003

Sample Date: 04/14/21

Summary

Potency:

Analyte	Result	Limits	Units	Status	
CBC	0.0508		%		CBD-Total per 28.5g 496 mg/28.5g
CBD	1.74		%		
CBDV [†]	0.00995		%		THC-Total per 28.5g 22.9 mg/28.5g
CBG [†]	0.0141		%		
CBN	0.00565		%		(Reported in milligrams per serving)
Δ9-THC	0.0804		%		
Analyte per 28.5g	Result	Limits	Units	Status	
CBC per 28.5g [†]	14.5		mg/28.5g		
CBD per 28.5g	496		mg/28.5g		
CBDV per 28.5g [†]	2.84		mg/28.5g		
CBG per 28.5g [†]	4.02		mg/28.5g		
CBN per 28.5g	1.61		mg/28.5g		
Δ9-THC per 28.5g	22.9		mg/28.5g		



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Customer: Healthy Roots

Product identity: #141, 500 pet
Client/Metric ID: .
Sample Date: 04/14/21
Laboratory ID: 21-004093-0003
Evidence of Cooling: No
Temp: 16.9 °C
Relinquished by: Client
Serving Size #1: 28.5 g

Sample Results

Potency	Method J AOAC 2015 V98-6 (mod)	Units %	Batch: 2103717	Analyze: 4/24/21 12:07:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0508		%	0.0033	
CBC-A†	< LOQ		%	0.0033	
CBC-Total†	0.0508		%	0.0061	
CBD	1.74		%	0.0327	
CBD-A	< LOQ		%	0.0033	
CBD-Total	1.74		%	0.0356	
CBDV†	0.00995		%	0.0033	
CBDV-A†	< LOQ		%	0.0033	
CBDV-Total†	0.00995		%	0.0061	
CBG†	0.0141		%	0.0033	
CBG-A†	< LOQ		%	0.0033	
CBG-Total	0.0141		%	0.0061	
CBN	0.00565		%	0.0033	
Δ8-THC†	< LOQ		%	0.0033	
Δ9-THC	0.0804		%	0.0033	
THC-A	< LOQ		%	0.0033	
THC-Total	0.0804		%	0.0061	
THCV†	< LOQ		%	0.0033	
THCV-A†	< LOQ		%	0.0033	
THCV-Total†	< LOQ		%	0.0061	

Potency per 28.5g	Method J AOAC 2015 V98-6 (mod)	Units mg/se	Batch: 2103717	Analyze: 4/24/21 12:07:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 28.5g†	14.5		mg/28.5g	0.932	
CBC-A per 28.5g†	< LOQ		mg/28.5g	0.932	
CBC-Total per 28.5g†	14.5		mg/28.5g	1.75	
CBD per 28.5g	496		mg/28.5g	9.32	
CBD-A per 28.5g	< LOQ		mg/28.5g	0.932	
CBD-Total per 28.5g	496		mg/28.5g	10.1	
CBDV per 28.5g†	2.84		mg/28.5g	0.932	
CBDV-A per 28.5g†	< LOQ		mg/28.5g	0.932	



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Potency per 28.5g Method J AOAC 2015 V98-6 (mod) Units mg/se Batch: 2103717 Analyze: 4/24/21 12:07:00 AM

Analyte	Result	Limits	Units	LOQ	Notes
CBDV-Total per 28.5g [†]	2.84		mg/28.5g	1.74	
CBG per 28.5g [†]	4.02		mg/28.5g	0.932	
CBG-A per 28.5g [†]	< LOQ		mg/28.5g	0.932	
CBG-Total per 28.5g [†]	4.02		mg/28.5g	1.74	
CBL-Total per 28.5g [†]	< LOQ		mg/28.5g	536	
CBN per 28.5g	1.61		mg/28.5g	0.932	
Δ8-THC per 28.5g [†]	< LOQ		mg/28.5g	0.932	
Δ9-THC per 28.5g	22.9		mg/28.5g	0.932	
THC-A per 28.5g	< LOQ		mg/28.5g	0.932	
THC-Total per 28.5g	22.9		mg/28.5g	1.75	
THCV per 28.5g [†]	< LOQ		mg/28.5g	0.932	
THCV-A per 28.5g [†]	< LOQ		mg/28.5g	0.932	
THCV-Total per 28.5g [†]	< LOQ		mg/28.5g	1.75	



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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/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 #: 0.00 Control : CFL-D06
Revision Date: 05/31/2019 Effective Date: 05/31/2019

Laboratory Quality Control Results

J AOAC 2015 V98-6				Batch ID: 2103717					
Laboratory Control Sample									
Analyte	Result	Spike	Units	% Rec	Limits			Evaluation	Notes
CBDV-A	0.00953	0.01	%	95.3	85.0	-	115	Acceptable	
CBDV	0.0107	0.01	%	107	85.0	-	115	Acceptable	
CBD-A	0.0100	0.01	%	100	85.0	-	115	Acceptable	
CBG-A	0.00958	0.01	%	95.8	85.0	-	115	Acceptable	
CBG	0.00993	0.01	%	99.3	85.0	-	115	Acceptable	
CBD	0.0103	0.01	%	103	85.0	-	115	Acceptable	
THCV	0.00980	0.01	%	98.0	85.0	-	115	Acceptable	
THCVA	0.00912	0.01	%	91.2	85.0	-	115	Acceptable	
CBN	0.0108	0.01	%	108	85.0	-	115	Acceptable	
THC	0.0103	0.01	%	103	85.0	-	115	Acceptable	
D8THC	0.0107	0.01	%	107	85.0	-	115	Acceptable	
CBL	0.00953	0.01	%	95.3	85.0	-	115	Acceptable	
CBC	0.00992	0.01	%	99.2	85.0	-	115	Acceptable	
THCA	0.00995	0.01	%	99.5	85.0	-	115	Acceptable	
CBCA	0.00941	0.01	%	94.1	85.0	-	115	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes	
CBDV-A	<LOQ	0.003	%	< 0.003	Acceptable		
CBDV	<LOQ	0.003	%	< 0.003	Acceptable		
CBD-A	<LOQ	0.003	%	< 0.003	Acceptable		
CBG-A	<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		
THCVA	<LOQ	0.003	%	< 0.003	Acceptable		
CBN	<LOQ	0.003	%	< 0.003	Acceptable		
THC	<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		

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

J AOAC 2015 V98-6					Batch ID: 2103717			
Sample Duplicate					Sample ID: 21-004093-0002-01			
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	0.0195	0.0197	0.003	%	0.965	< 20	Acceptable	
CBD-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0287	0.0270	0.003	%	6.39	< 20	Acceptable	
CBD	3.37	3.44	0.003	%	2.31	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	0.0103	0.0113	0.003	%	8.63	< 20	Acceptable	
THC	0.152	0.148	0.003	%	3.02	< 20	Acceptable	
D8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	0.0961	0.0954	0.003	%	0.719	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	<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.