



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



**Report Number:** 22-008874/D002.R001  
**Report Date:** 08/05/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 07/27/22 13:42

This is an amended version of report# 22-008874/D002.R000.  
Reason: Sample re-extracted for potency.

**Customer:** Healthy Roots  
**Product identity:** #223 500mg Pet  
**Client/Metric ID:** .  
**Laboratory ID:** 22-008874-0001

### Summary

#### Potency:

Analyte	Result	Limits	Units	Status	
CBC	0.0708		%		CBD-Total per Serving Size 528 mg/28.5g
CBD	1.85		%		
CBD-A	0.00383		%		THC-Total per Serving Size 16.8 mg/28.5g
CBDV	0.0107		%		
CBG	0.0284		%		(Reported in milligrams per serving)
CBT	0.0146		%		
Δ8-THC	0.0207		%		
Δ9-THC	0.0590		%		
Analyte per 28.5g	Result	Limits	Units	Status	
CBC per 28.5g	20.2		mg/28.5g		
CBD per 28.5g	527		mg/28.5g		
CBD-A per 28.5g	1.09		mg/28.5g		
CBDV per 28.5g	3.05		mg/28.5g		
CBG per 28.5g	8.09		mg/28.5g		
CBT per 28.5g	4.16		mg/28.5g		
Δ8-THC per 28.5g	5.90		mg/28.5g		
Δ9-THC per 28.5g	16.8		mg/28.5g		



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**Customer:** Healthy Roots  
**Product identity:** #223 500mg Pet  
**Client/Metric ID:** .  
**Sample Date:**  
**Laboratory ID:** 22-008874-0001  
**Evidence of Cooling:** No  
**Temp:** 29 °C  
**Relinquished by:** Client  
**Serving Size #1:** 28.5 g

### Sample Results

Potency	Method: J AOAC 2015 V98-6 (mod) <sup>b</sup>			Units %	Batch: 2206565	Analyze: 8/3/22 10:11:00 PM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC	0.0708		%	0.00331		
CBC-A	< LOQ		%	0.00331		
CBC-Total	0.0708		%	0.00621		
CBD	1.85		%	0.0331		
CBD-A	0.00383		%	0.00331		
CBD-Total	1.85		%	0.0360		
CBDV	0.0107		%	0.00331		
CBDV-A	< LOQ		%	0.00331		
CBDV-Total	0.0107		%	0.00617		
CBE	< LOQ		%	0.00331		
CBG	0.0284		%	0.00331		
CBG-A	< LOQ		%	0.00331		
CBG-Total	0.0284		%	0.00617		
CBL	< LOQ		%	0.00331		
CBL-A	< LOQ		%	0.00331		
CBL-Total	< LOQ		%	0.00621		
CBN	< LOQ		%	0.00331		
CBT	0.0146		%	0.00331		
Δ8-THCV	< LOQ		%	0.00331		
Δ8-THC	0.0207		%	0.00331		
Δ9-THC	0.0590		%	0.00331		
exo-THC	< LOQ		%	0.00331		
THC-A	< LOQ		%	0.00331		
THC-Total	0.0590		%	0.00621		
THCV	< LOQ		%	0.00331		
THCV-A	< LOQ		%	0.00331		
THCV-Total	< LOQ		%	0.00617		
<b>Total Cannabinoids</b>	<b>2.06</b>		%			

Potency per 28.5g	Method: J AOAC 2015 V98-6 (mod) <sup>b</sup>			Units mg/se	Batch: 2206565	Analyze: 8/3/22 10:11:00 PM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC per 28.5g	20.2		mg/28.5g	0.942		



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Potency per 28.5g      Method: J AOAC 2015 V98-6 (mod) <sup>b</sup> Units mg/se      Batch: 2206565      Analyze: 8/3/22 10:11:00 PM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC-A per 28.5g	< LOQ		mg/28.5g	0.942	
CBC-Total per 28.5g	20.2		mg/28.5g	1.77	
CBD per 28.5g	527		mg/28.5g	9.42	
CBD-A per 28.5g	1.09		mg/28.5g	0.942	
CBD-Total per 28.5g	528		mg/28.5g	10.2	
CBDV per 28.5g	3.05		mg/28.5g	0.942	
CBDV-A per 28.5g	< LOQ		mg/28.5g	0.942	
CBDV-Total per 28.5g	3.05		mg/28.5g	1.76	
CBE per 28.5g	< LOQ		mg/28.5g	0.942	
CBG per 28.5g	8.09		mg/28.5g	0.942	
CBG-A per 28.5g	< LOQ		mg/28.5g	0.942	
CBG-Total per 28.5g	8.09		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	4.16		mg/28.5g	0.942	
Δ8-THCV per 28.5g	< LOQ		mg/28.5g	0.942	
Δ8-THC per 28.5g	5.90		mg/28.5g	0.942	
Δ9-THC per 28.5g	16.8		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	16.8		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	587		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.

<sup>b</sup> = 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

Revision: 4.00-Kontrol: CF023 Rev 02/24/2021 Eff: 03/04/2021

ORELAP ID: OR1000028

CHAIN OF CUSTODY				Analysis Requested			
Company: Healthy Roots Contact: Liz Merritt Address: 14325 NE Airport Way, #113 Portland, OR 97230 Email: HealthyRootsHemp.com Phone: 503-496-2329 License: AG L 1052211FP				Pesticides - OR 59 compounds Pesticide Multi-Residue - 379 compounds <input checked="" type="checkbox"/> Potency Residual Solvents Moisture & Water Activity Terpenes Micro: Yeast and Mold Micro: E Coli and Total Coliform Heavy Metals Mycotoxins Other: Aerobic Plate Count, Salmonella, Staphylococcus, Pseudomonas			
Billing (if different): Please Add: Compliance @ HealthyRootsHemp.com				PO Number: Project Number: Project Name: Custom Reporting: Report to State: <input type="checkbox"/> METRC or <input type="checkbox"/> Other: Turnaround time: <input checked="" type="checkbox"/> 5 Business Day Standard Turnaround <input type="checkbox"/> 3 Business Day Rush Turnaround* <input type="checkbox"/> 2 Business Day Rush Turnaround* *Check for availability			
Lab ID	Client Sample Identification	Date	Time	Sample Type	Weight (Units)	Comments/Metric ID	
223	500 mg Pet				0.85g		
Relinquished By: Merritt				Received By: AC			
Date				Date			
Time				Time			
7-27-22 1:00				7-27 13:42			
Lab Use Only: Shipped Via: <input type="checkbox"/> or <input checked="" type="checkbox"/> Client drop Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Temp (°C): 24.0 Sample in good condition: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cash <input type="checkbox"/> Check <input type="checkbox"/> CC <input type="checkbox"/> Net: Prelog storage:				Report in mg/gr and % (percentage)			

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Sample submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of service associated with the CCLB. By signing, Relinquished By, you are agreeing to these terms.

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

Laboratory Quality Control Results

JAOAC2015 V986									
Batch ID: 2206565									
Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDA	1	0.0335	0.033	%	100	80.0 - 120	Acceptable		
CBDV	1	0.0368	0.033	%	110	80.0 - 120	Acceptable		
CBE	1	0.0331	0.033	%	99.3	80.0 - 120	Acceptable		
CBDA	1	0.0325	0.032	%	101	90.0 - 110	Acceptable		
CBGA	1	0.0325	0.032	%	101	80.0 - 120	Acceptable		
CBG	1	0.0345	0.034	%	102	80.0 - 120	Acceptable		
CB	1	0.0343	0.033	%	102	90.0 - 110	Acceptable		
THCV	1	0.0337	0.033	%	101	80.0 - 120	Acceptable		
deltaTHCV	1	0.0341	0.033	%	102	80.0 - 120	Acceptable		
THCVA	1	0.0315	0.033	%	94.5	80.0 - 120	Acceptable		
CBN	1	0.0352	0.034	%	103	90.0 - 110	Acceptable		
exo-THC	1	0.0334	0.033	%	100	80.0 - 120	Acceptable		
deltaTHC	1	0.0367	0.037	%	99.4	90.0 - 110	Acceptable		
deltaTHC	1	0.0333	0.033	%	99.8	90.0 - 110	Acceptable		
CB	1	0.0307	0.033	%	92.0	80.0 - 120	Acceptable		
CB	1	0.0343	0.033	%	103	80.0 - 120	Acceptable		
THCA	1	0.0314	0.032	%	99.3	90.0 - 110	Acceptable		
CBGA	1	0.0337	0.033	%	101	80.0 - 120	Acceptable		
CBGA	1	0.0344	0.033	%	103	80.0 - 120	Acceptable		
CB	1	0.0348	0.033	%	104	80.0 - 120	Acceptable		

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDA	<LOQ	0.003	%	< 0.003	Acceptable	
CBDV	<LOQ	0.003	%	< 0.003	Acceptable	
CBE	<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	
deltaTHCV	<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	
deltaTHC	<LOQ	0.003	%	< 0.003	Acceptable	
deltaTHC	<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	
CBGA	<LOQ	0.003	%	< 0.003	Acceptable	
CBGA	<LOQ	0.003	%	< 0.003	Acceptable	
CB	<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: 2206565								
Sample Duplicate								
Sample ID: 21-0128530004								
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBV	0.0335	0.0335	0.003	%	0.170	< 20	Acceptable	
CB	0.139	0.142	0.003	%	2.60	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.167	0.167	0.003	%	0.197	< 20	Acceptable	
CB	5.74	5.71	0.003	%	0.570	< 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	0.0286	0.0287	0.003	%	0.164	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
deltaTHC	0.158	0.158	0.003	%	0.0713	< 20	Acceptable	
deltaTHC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CB	0.236	0.236	0.003	%	0.116	< 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	
CB	0.104	0.105	0.003	%	1.17	< 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.