



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



Report Number: 23-009563/D002.R000
Report Date: 08/17/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/11/23 14:20

Customer: Healthy Roots
Product identity: #14 PM Gummy
Client/Metric ID: .
Laboratory ID: 23-009563-0001

Summary

Potency:					
Analyte	Result	Limits	Units	Status	
CBD	0.779		%		CBD-Total per Serving Size 31.2 mg/4g
Analyte per 4g	Result	Limits	Units	Status	
CBD per 4g	31.2		mg/4g		THC-Total per Serving Size <LOQ
					(Reported in milligrams per serving)



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Customer: Healthy Roots
Product identity: #14 PM Gummy
Client/Metric ID: .
Sample Date:
Laboratory ID: 23-009563-0001
Evidence of Cooling: No
Temp: 23.6 °C
Relinquished by: client
Serving Size #1: 4 g

Sample Results

Potency	Method: J AOAC 2015 V98-6 (mod) ^b			Units %	Batch: 2310009	Analyze: 8/14/23 7:03:00 PM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC	< LOQ		%	0.00325		
CBC-A	< LOQ		%	0.00325		
CBC-Total	< LOQ		%	0.00610		
CBD	0.779		%	0.00325		
CBD-A	< LOQ		%	0.00325		
CBD-Total	0.779		%	0.00610		
CBDV	< LOQ		%	0.00325		
CBDV-A	< LOQ		%	0.00325		
CBDV-Total	< LOQ		%	0.00606		
CBE	< LOQ		%	0.00325		
CBG	< LOQ		%	0.00325		
CBG-A	< LOQ		%	0.00325		
CBG-Total	< LOQ		%	0.00606		
CBL	< LOQ		%	0.00325		
CBL-A	< LOQ		%	0.00325		
CBL-Total	< LOQ		%	0.00610		
CBN	< LOQ		%	0.00325		
CBT	< LOQ		%	0.00325		
Δ8-THCV	< LOQ		%	0.00325		
Δ10-THC-9R	< LOQ		%	0.00325		
Δ10-THC-9S	< LOQ		%	0.00325		
Δ10-THC-Total	< LOQ		%	0.00650		
Δ8-THC	< LOQ		%	0.00325		
Δ9-THC	< LOQ		%	0.00325		
delta-9-THCP	< LOQ		%	0.00325		
exo-THC	< LOQ		%	0.00325		
THC-A	< LOQ		%	0.00325		
THC-Total	< LOQ		%	0.00610		
THCV	< LOQ		%	0.00325		
THCV-A	< LOQ		%	0.00325		
THCV-Total	< LOQ		%	0.00606		
Total Cannabinoids	0.779		%			



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Potency per 4g **Method:** J AOAC 2015 V98-6 (mod)^b **Units** mg/se **Batch:** 2310009 **Analyze:** 8/14/23 7:03:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	< LOQ		mg/4g	0.130	
CBC-A per 4g	< LOQ		mg/4g	0.130	
CBC-Total per 4g	< LOQ		mg/4g	0.244	
CBD per 4g	31.2		mg/4g	0.130	
CBD-A per 4g	< LOQ		mg/4g	0.130	
CBD-Total per 4g	31.2		mg/4g	0.244	
CBDV per 4g	< LOQ		mg/4g	0.130	
CBDV-A per 4g	< LOQ		mg/4g	0.130	
CBDV-Total per 4g	< LOQ		mg/4g	0.243	
CBE per 4g	< LOQ		mg/4g	0.130	
CBG per 4g	< LOQ		mg/4g	0.130	
CBG-A per 4g	< LOQ		mg/4g	0.130	
CBG-Total per 4g	< LOQ		mg/4g	0.243	
CBL per 4g	< LOQ		mg/4g	0.130	
CBL-A per 4g	< LOQ		mg/4g	0.130	
CBL-Total per 4g	< LOQ		mg/4g	0.244	
CBN per 4g	< LOQ		mg/4g	0.130	
CBT per 4g	< LOQ		mg/4g	0.130	
Δ8-THCV per 4g	< LOQ		mg/4g	0.130	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.130	
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.130	
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.260	
Δ8-THC per 4g	< LOQ		mg/4g	0.130	
Δ9-THC per 4g	< LOQ		mg/4g	0.130	
delta-9-THCP per 4g	< LOQ		mg/4g	0.130	
exo-THC per 4g	< LOQ		mg/4g	0.130	
THC-A per 4g	< LOQ		mg/4g	0.130	
THC-Total per 4g	< LOQ		mg/4g	0.244	
THCV per 4g	< LOQ		mg/4g	0.130	
THCV-A per 4g	< LOQ		mg/4g	0.130	
THCV-Total per 4g	< LOQ		mg/4g	0.244	
Total Cannabinoids per 4g	31.2		mg/4g		



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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.

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

Units of Measure

g = g

mg/4g = Milligram per 4g

% = 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

JAOAC2015 V986 Batch ID: 2310009

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDA	2	0.0328	0.0311	%	106	80.0 - 120	Acceptable		
CBDV	2	0.0324	0.0307	%	105	80.0 - 120	Acceptable		
CBE	2	0.0366	0.0349	%	105	80.0 - 120	Acceptable		
CBDA	1	0.0340	0.0336	%	101	90.0 - 110	Acceptable		
CBGA	1	0.0339	0.0336	%	101	80.0 - 120	Acceptable		
CBG	1	0.0350	0.0344	%	102	80.0 - 120	Acceptable		
CB	1	0.0355	0.0352	%	101	90.0 - 110	Acceptable		
THCV	2	0.0236	0.0222	%	106	80.0 - 120	Acceptable		
deltaTHCV	2	0.0284	0.0272	%	104	80.0 - 120	Acceptable		
THCVA	2	0.0328	0.0310	%	106	80.0 - 120	Acceptable		
CBN	1	0.0360	0.0351	%	103	80.0 - 120	Acceptable		
exo-THC	2	0.0327	0.0311	%	105	80.0 - 120	Acceptable		
deltaTHC	1	0.0356	0.0345	%	103	90.0 - 110	Acceptable		
deltaTHC	1	0.0332	0.0325	%	102	90.0 - 110	Acceptable		
9SdeltaTHC	1	0.0362	0.0354	%	102	80.0 - 120	Acceptable		
CB	2	0.0330	0.0311	%	106	80.0 - 120	Acceptable		
9RdeltaTHC	1	0.0328	0.0323	%	102	80.0 - 120	Acceptable		
CB	2	0.0332	0.0319	%	104	80.0 - 120	Acceptable		
THCA	1	0.0335	0.0331	%	101	90.0 - 110	Acceptable		
CBGA	2	0.0336	0.0325	%	103	80.0 - 120	Acceptable		
CBLA	2	0.0526	0.0500	%	105	80.0 - 120	Acceptable		
deltaTHCP	2	0.0342	0.0323	%	106	80.0 - 120	Acceptable		
CB	2	0.0328	0.0314	%	104	80.0 - 120	Acceptable		

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDA	<LOQ	0.00308	%	< 0.00308	Acceptable	
CBDV	<LOQ	0.00308	%	< 0.00308	Acceptable	
CBE	<LOQ	0.00308	%	< 0.00308	Acceptable	
CBDA	<LOQ	0.00308	%	< 0.00308	Acceptable	
CBGA	<LOQ	0.00308	%	< 0.00308	Acceptable	
CBG	<LOQ	0.00308	%	< 0.00308	Acceptable	
CB	<LOQ	0.00308	%	< 0.00308	Acceptable	
THCV	<LOQ	0.00308	%	< 0.00308	Acceptable	
deltaTHCV	<LOQ	0.00308	%	< 0.00308	Acceptable	
THCVA	<LOQ	0.00308	%	< 0.00308	Acceptable	
CBN	<LOQ	0.00308	%	< 0.00308	Acceptable	
exo-THC	<LOQ	0.00308	%	< 0.00308	Acceptable	
deltaTHC	<LOQ	0.00308	%	< 0.00308	Acceptable	
deltaTHC	<LOQ	0.00308	%	< 0.00308	Acceptable	
9SdeltaTHC	<LOQ	0.00308	%	< 0.00308	Acceptable	
CB	<LOQ	0.00308	%	< 0.00308	Acceptable	
9RdeltaTHC	<LOQ	0.00308	%	< 0.00308	Acceptable	
CB	<LOQ	0.00308	%	< 0.00308	Acceptable	
THCA	<LOQ	0.00308	%	< 0.00308	Acceptable	
CBGA	<LOQ	0.00308	%	< 0.00308	Acceptable	
CBLA	<LOQ	0.00308	%	< 0.00308	Acceptable	
deltaTHCP	<LOQ	0.00308	%	< 0.00308	Acceptable	
CB	<LOQ	0.00308	%	< 0.00308	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

JAOAC2015 V986 Batch ID: 2310009								
Sample Duplicate Sample ID: 23-0093500001-01								
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBDVA	0.00991	0.00992	0.00317	%	0.143	< 20	Acceptable	
CBSA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBS	0.00947	0.00960	0.00317	%	1.28	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
deltaTHCV	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBN	0.00528	0.00531	0.00317	%	0.626	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
deltaTHC	0.313	0.315	0.00317	%	0.866	< 20	Acceptable	
deltaTHC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
9Sdelta10THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
9Rdelta10THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBC	0.00374	0.00378	0.00317	%	1.05	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
deltaTHCP	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	

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ND - None Detected at or above MRL
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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.