



CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

ISO.CBG.20	BATCH # CBG.ISO.20.016	NR: Not Reported NA: Not Available
CBG ISOLATE	0.16	LOQ: Limit Of Quantitation LOD: Limit Of Detection
LABORATORY: COLUMBIA LABORATORIES	OREGON ACCREDITATION: OR100028	1 g = 10⁻³ kg = 10³ mg = 10⁶ µg 1 mg/kg = 1 ppm = 1000 ppb

POTENCY	PER SERVING	PER GRAM	REGULATORY ACTION LEVEL
Cannabidiol (CBD)	0.11 mg/serving	1.10 mg/g	N/A
Total THC (d9-THC, d8-THC, THCA)	<LOQ mg/serving	<LOQ mg/g	3 mg/g
Cannabigerol (CBG)	92.7 mg/serving	927 mg/g	N/A
Cannabinol (CBN)	<LOQ mg/serving	<LOQ mg/g	N/A
Cannabichromene (CBC)	<LOQ mg/serving	<LOQ mg/g	N/A
Tetrahydrocannabinolic Acid (THCA)	<LOQ mg/serving	<LOQ mg/g	N/A
Delta-9-THC (d9-THC)	<LOQ mg/serving	<LOQ mg/g	N/A
Delta-8-THC (d8-THC)	<LOQ mg/serving	<LOQ mg/g	N/A

HEAVY METALS	PER SERVING	PER GRAM	REGULATORY ACTION LEVEL
Arsenic	<LOQ µg/serving	<LOQ µg/g	10 µg/day ^[1]
Cadmium	<LOQ µg/serving	<LOQ µg/g	4.1 µg/day ^[1]
Lead	<LOQ µg/serving	<LOQ µg/g	3.5 µg/day ^[2]
Mercury	<LOQ µg/serving	<LOQ µg/g	2 µg/day ^[1]

PESTICIDES	REGULATORY ACTION LEVEL
None of the 59 pesticides tested found above limit of quantitation in the sample.	10 ppb ^[1]

RESIDUAL SOLVENTS
None of the 36 residual solvents tested found above limit of quantitation in the sample.

MICROBIAL	PASS/FAIL
Yeast & Mold	Pass
Coliform	Pass
Water Activity	Pass

1. American Herbal Pharmacopoeia. (2014). *Cannabis Inflorescence: Standards of Identity, Analysis, and Quality Control*. Washington DC: AHP.
 2. US Food and Drug Administration. (2019). *Lead in Food, Foodwares, and Dietary Supplements*. Washington DC: FDA. US Food and Drug Administration. (2019). *Lead in Food, Foodwares, and Dietary Supplements*. Washington DC: FDA.



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



Report Number: 20-009925/D02.R03
Report Date: 10/05/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/16/20 13:12

This is an amended version of report# 20-009925/D02.R01

.Reason: Report includes high purity testing

Customer: Etz Hayim Holdings
Product identity: CBG.ISO.20.016
Client/Metric ID: ..
Laboratory ID: 20-009925-0002 **Sample Date:** 09/16/20 11:00

Summary

High Purity:

Chemical Purity: 99.1% ± 0.2%

CBG identified as primary component with purity of 99.1% based on overall cannabinoid potency testing.

Potency:

Analyte per 1g	Result	Limits	Units	Status	
CBD per 1g	1.10		mg/1g		CBD-Total per 1g <LOQ
CBG per 1g	927		mg/1g		THC-Total per 1g <LOQ
(Reported in milligrams per serving)					

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



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

Report Number: 20-009925/D02.R03
Report Date: 10/05/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/16/20 13:12



Customer: Etz Hayim Holdings
 16427 NE Airport Way
 PORTLAND 97230
 United States

Product identity: CBG.ISO.20.016
Client/Metric ID: ..
Sample Date: 09/16/20 11:00
Laboratory ID: 20-009925-0002
Relinquished by: Client *See COC*
Temp: 16.8 °C
Serving Size #1: 1 g

Sample Results

Purity								
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Chemical Purity	99.2		%		2008035	09/30/20	Purity by FID	X

CBG identified as primary component based on separate potency cannabinoid testing. Mass-balance purity assay performed by GC-FID. The reported result is accurate within an expanded uncertainty of $\pm 0.2\%$ (w/w).

Potency per 1g		Method J AOAC 2015 V98-6 (mod)			Batch: 2007876		Analyze: 9/24/20 6:12:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes			
CBC per 1g	< LOQ		mg/1g	0.883				
CBC-A per 1g	< LOQ		mg/1g	0.883				
CBC-Total per 1g	< LOQ		mg/1g	1.66				
CBD per 1g	1.10		mg/1g	0.883				
CBD-A per 1g	< LOQ		mg/1g	0.883				
CBD-Total per 1g	< LOQ		mg/1g	1.66				
CBDV per 1g	< LOQ		mg/1g	0.883				
CBDV-A per 1g	< LOQ		mg/1g	0.883				
CBDV-Total per 1g	< LOQ		mg/1g	1.65				
CBG per 1g	927		mg/1g	8.83				
CBG-A per 1g	< LOQ		mg/1g	0.883				
CBG-Total per 1g	927		mg/1g	9.59				
CBL per 1g	< LOQ		mg/1g	0.883				
CBN per 1g	< LOQ		mg/1g	0.883				
$\Delta 8$ -THC per 1g	< LOQ		mg/1g	0.883				
$\Delta 9$ -THC per 1g	< LOQ		mg/1g	0.883				
THC-A per 1g	< LOQ		mg/1g	0.883				
THC-Total per 1g	< LOQ		mg/1g	1.66				
THCV per 1g	< LOQ		mg/1g	0.883				
THCV-A per 1g	< LOQ		mg/1g	0.883				
THCV-Total per 1g	< LOQ		mg/1g	1.66				
Total Cannabinoids 1g[†]	928		mg/1g					

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



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

Report Number: 20-009925/D02.R03
Report Date: 10/05/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/16/20 13:12



Solvents						Method EPA5021A		Units µg/g		Batch 2007622		Analyze 09/17/20 11:25 AM	
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes		
1,4-Dioxane	< LOQ	380	100	pass		2-Butanol	< LOQ	5000	200	pass			
2-Ethoxyethanol	< LOQ	160	30.0	pass		2-Methylbutane	< LOQ		200				
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass			
2,2-Dimethylbutane	< LOQ		30.0			2,2-Dimethylpropane	< LOQ		200				
2,3-Dimethylbutane	< LOQ		30.0			3-Methylpentane	< LOQ		30.0				
Acetone	< LOQ	5000	200	pass		Acetonitrile	< LOQ	410	100	pass			
Benzene	< LOQ	2.00	1.00	pass		Butanes (sum)	< LOQ	5000	400	pass			
Cyclohexane	< LOQ	3880	200	pass		Ethanol ¹	< LOQ		200				
Ethyl acetate	< LOQ	5000	200	pass		Ethyl benzene	< LOQ		200				
Ethyl ether	< LOQ	5000	200	pass		Ethylene glycol	< LOQ	620	200	pass			
Ethylene oxide	< LOQ	50.0	30.0	pass		Hexanes (sum)	< LOQ	290	150	pass			
Isopropyl acetate	< LOQ	5000	200	pass		Isopropylbenzene	< LOQ	70.0	30.0	pass			
m,p-Xylene	< LOQ		200			Methanol	< LOQ	3000	200	pass			
Methylene chloride	< LOQ	600	200	pass		Methylpropane	< LOQ		200				
n-Butane	< LOQ		200			n-Heptane	< LOQ	5000	200	pass			
n-Hexane	< LOQ		30.0			n-Pentane	< LOQ		200				
o-Xylene	< LOQ		200			Pentanes (sum)	< LOQ	5000	600	pass			
Propane	< LOQ	5000	200	pass		Tetrahydrofuran	< LOQ	720	100	pass			
Toluene	< LOQ	890	100	pass		Total Xylenes	< LOQ		400				
Total Xylenes and Ethyl	< LOQ	2170	600	pass									

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



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

Report Number: 20-009925/D02.R03
Report Date: 10/05/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/16/20 13:12



Pesticides											
Method AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 2007638 Analyze 09/17/20 04:50 PM											
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.50	0.250	pass		Acephate	< LOQ	0.40	0.250	pass	
Acequinocyl	< LOQ	2.0	1.00	pass		Acetamiprid	< LOQ	0.20	0.100	pass	
Aldicarb	< LOQ	0.40	0.200	pass		Azoxystrobin	< LOQ	0.20	0.100	pass	
Bifenazate	< LOQ	0.20	0.100	pass		Bifenthrin	< LOQ	0.20	0.100	pass	
Boscalid	< LOQ	0.40	0.200	pass		Carbaryl	< LOQ	0.20	0.100	pass	
Carbofuran	< LOQ	0.20	0.100	pass		Chlorantraniliprole	< LOQ	0.20	0.100	pass	
Chlorfenapyr	< LOQ	1.0	0.500	pass		Chlorpyrifos	< LOQ	0.20	0.100	pass	
Clofentezine	< LOQ	0.20	0.100	pass		Cyfluthrin	< LOQ	1.0	0.500	pass	
Cypermethrin	< LOQ	1.0	0.500	pass		Daminozide	< LOQ	1.0	0.500	pass	
Diazinon	< LOQ	0.20	0.100	pass		Dichlorvos	< LOQ	1.0	0.500	pass	
Dimethoate	< LOQ	0.20	0.100	pass		Ethoprophos	< LOQ	0.20	0.100	pass	
Etofenprox	< LOQ	0.40	0.200	pass		Etoxazole	< LOQ	0.20	0.100	pass	
Fenoxycarb	< LOQ	0.20	0.100	pass		Fenpyroximate	< LOQ	0.40	0.200	pass	
Fipronil	< LOQ	0.40	0.200	pass		Fonicamid	< LOQ	1.0	0.400	pass	
Fludioxonil	< LOQ	0.40	0.200	pass		Hexythiazox	< LOQ	1.0	0.400	pass	
Imazalil	< LOQ	0.20	0.100	pass		Imidacloprid	< LOQ	0.40	0.200	pass	
Kresoxim-methyl	< LOQ	0.40	0.200	pass		Malathion	< LOQ	0.20	0.100	pass	
Metalaxyl	< LOQ	0.20	0.100	pass		Methiocarb	< LOQ	0.20	0.100	pass	
Methomyl	< LOQ	0.40	0.200	pass		MGK-264	< LOQ	0.20	0.100	pass	
Myclobutanil	< LOQ	0.20	0.100	pass		Naled	< LOQ	0.50	0.250	pass	
Oxamyl	< LOQ	1.0	0.500	pass		Paclobutrazole	< LOQ	0.40	0.200	pass	
Parathion-Methyl	< LOQ	0.20	0.200	pass		Permethrin	< LOQ	0.20	0.100	pass	
Phosmet	< LOQ	0.20	0.100	pass		Piperonyl butoxide	< LOQ	2.0	1.00	pass	
Prallethrin	< LOQ	0.20	0.200	pass		Propiconazole	< LOQ	0.40	0.200	pass	
Propoxur	< LOQ	0.20	0.100	pass		Pyrethrin I (total)	< LOQ	1.0	0.500	pass	
Pyridaben	< LOQ	0.20	0.100	pass		Spinosad	< LOQ	0.20	0.100	pass	
Spiromesifen	< LOQ	0.20	0.100	pass		Spirotetramat	< LOQ	0.20	0.100	pass	
Spiroxamine	< LOQ	0.40	0.200	pass		Tebuconazole	< LOQ	0.40	0.200	pass	
Thiacloprid	< LOQ	0.20	0.100	pass		Thiamethoxam	< LOQ	0.20	0.100	pass	
Trifloxystrobin	< LOQ	0.20	0.100	pass							

Metals									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes	
Arsenic	< LOQ		mg/kg	0.0402	2007692	09/18/20	AOAC 2013.06 (mod.)	X	
Cadmium	< LOQ		mg/kg	0.0402	2007692	09/18/20	AOAC 2013.06 (mod.)	X	
Lead	< LOQ		mg/kg	0.0402	2007692	09/18/20	AOAC 2013.06 (mod.)	X	
Mercury	< LOQ		mg/kg	0.0201	2007692	09/18/20	AOAC 2013.06 (mod.)	X	

Microbiology									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes	
E.coli	< LOQ		cfu/g	10	2007598	09/19/20	AOAC 991.14 (Petrifilm)	X	
Total Coliforms	< LOQ		cfu/g	10	2007598	09/19/20	AOAC 991.14 (Petrifilm)	X	
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2007600	09/19/20	AOAC 2014.05 (RAPID)	X	
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2007600	09/19/20	AOAC 2014.05 (RAPID)	X	

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.