



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



**Report Number:** 20-007909/D16.R00  
**Report Date:** 08/05/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 07/29/20 12:25

**Customer:** Trace Minerals Research  
**Product identity:** CBD 600mg - Lot# 130271  
**Client/Metric ID:** Lot# 0071A  
**Laboratory ID:** 20-007909-0001

**Sample Date:** 05/26/20

### Summary

#### Potency:

Analyte	Result	Limits	Units	Status	
CBC	0.108		%		CBD-Total (%) 2.68%
CBD	2.68		%		
CBDV <sup>†</sup>	0.0130		%		CBD-Total per 1g 26.8 mg/1g
CBG <sup>†</sup>	0.0307		%		
Δ9-THC	0.0778		%		CBD-Total per 30g 804 mg/30g
Analyte per 1g	Result	Limits	Units	Status	
CBC per 1g	1.08		mg/1g		THC-Total (%) 0.0778%
CBD per 1g	26.8		mg/1g		(Reported in milligrams per serving)
CBDV per 1g	0.130		mg/1g		
CBG per 1g	0.307		mg/1g		
Δ9-THC per 1g	0.778		mg/1g		
Analyte per 30g	Result	Limits	Units	Status	
CBC per 30g	32.4		mg/30g		
CBD per 30g	804		mg/30g		
CBDV per 30g	3.90		mg/30g		
CBG per 30g	9.21		mg/30g		
Δ9-THC per 30g	23.3		mg/30g		

#### Residual Solvents:

Analyte	Result (µg/g)	Limits (µg/g)	Status
Ethyl acetate	228	5000	pass

#### Pesticides:

All analytes passing and less than LOQ.

#### Terpenes:

Less than LOQ for all analytes.

#### Metals:

Less than LOQ for all analytes.

#### Microbiology:

Less than LOQ for all analytes.

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**Product identity:** CBD 600mg - Lot# 130271  
**Client/Metric ID:** Lot# 0071A  
**Sample Date:** 05/26/20  
**Laboratory ID:** 20-007909-0001  
**Relinquished by:** FEDEX  
**Temp:** 26 °C  
**Serving Size #1:** 1 g  
**Serving Size #2:** 30 g

### Sample Results

Potency	Method J AOAC 2015 V98-6 (mod)	Batch: 2006335	Analyze: 7/31/20 7:56:00 PM		
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.108		%	0.0032	
CBC-A†	< LOQ		%	0.0032	
CBC-Total†	0.108		%	0.0061	
CBD	2.68		%	0.0324	
CBD-A	< LOQ		%	0.0032	
CBD-Total	2.68		%	0.0352	
CBDV†	0.0130		%	0.0032	
CBDV-A†	< LOQ		%	0.0032	
CBDV-Total†	0.0130		%	0.0060	
CBG†	0.0307		%	0.0032	
CBG-A†	< LOQ		%	0.0032	
CBG-Total	0.0307		%	0.0060	
CBL†	< LOQ		%	0.0032	
CBN	< LOQ		%	0.0032	
Δ8-THC†	< LOQ		%	0.0032	
Δ9-THC	0.0778		%	0.0032	
THC-A	< LOQ		%	0.0032	
THC-Total	0.0778		%	0.0061	
THCV†	< LOQ		%	0.0032	
THCV-A†	< LOQ		%	0.0032	
THCV-Total†	< LOQ		%	0.0060	
<b>Total Cannabinoids†</b>	<b>2.91</b>		<b>%</b>		

Potency per 1g	Method J AOAC 2015 V98-6 (mod)	Batch: 2006335	Analyze: 7/31/20 7:56:00 PM		
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	1.08		mg/1g	0.0324	
CBC-A per 1g	< LOQ		mg/1g	0.0324	
CBC-Total per 1g	1.08		mg/1g	0.0608	
CBD per 1g	26.8		mg/1g	0.324	
CBD-A per 1g	< LOQ		mg/1g	0.0324	
CBD-Total per 1g	26.8		mg/1g	0.352	
CBDV per 1g	0.130		mg/1g	0.0324	

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Potency per 1g Method J AOAC 2015 V98-6 (mod) Batch: 2006335 Analyze: 7/31/20 7:56:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBDV-A per 1g	< LOQ		mg/1g	0.0324	
CBDV-Total per 1g	0.130		mg/1g	0.0604	
CBG per 1g	0.307		mg/1g	0.0324	
CBG-A per 1g	< LOQ		mg/1g	0.0324	
CBG-Total per 1g	0.307		mg/1g	0.0604	
CBL per 1g	< LOQ		mg/1g	0.0324	
CBN per 1g	< LOQ		mg/1g	0.0324	
Δ8-THC per 1g	< LOQ		mg/1g	0.0324	
Δ9-THC per 1g	0.778		mg/1g	0.0324	
THC-A per 1g	< LOQ		mg/1g	0.0324	
THC-Total per 1g	0.778		mg/1g	0.0608	
THCV per 1g	< LOQ		mg/1g	0.0324	
THCV-A per 1g	< LOQ		mg/1g	0.0324	
THCV-Total per 1g	< LOQ		mg/1g	0.0608	
<b>Total Cannabinoids 1g<sup>†</sup></b>	<b>29.1</b>		<b>mg/1g</b>		

Potency per 30g Method J AOAC 2015 V98-6 (mod) Batch: 2006335 Analyze: 7/31/20 7:56:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 30g	32.4		mg/30g	0.971	
CBC-A per 30g	< LOQ		mg/30g	0.971	
CBC-Total per 30g	32.4		mg/30g	1.82	
CBD per 30g	804		mg/30g	9.71	
CBD-A per 30g	< LOQ		mg/30g	0.971	
CBD-Total per 30g	804		mg/30g	10.6	
CBDV per 30g	3.90		mg/30g	0.971	
CBDV-A per 30g	< LOQ		mg/30g	0.971	
CBDV-Total per 30g	3.90		mg/30g	1.81	
CBG per 30g	9.21		mg/30g	0.971	
CBG-A per 30g	< LOQ		mg/30g	0.971	
CBG-Total per 30g	9.21		mg/30g	1.81	
CBL per 30g	< LOQ		mg/30g	0.971	
CBN per 30g	< LOQ		mg/30g	0.971	
Δ8-THC per 30g	< LOQ		mg/30g	0.971	
Δ9-THC per 30g	23.3		mg/30g	0.971	
THC-A per 30g	< LOQ		mg/30g	0.971	
THC-Total per 30g	23.3		mg/30g	1.82	
THCV per 30g	< LOQ		mg/30g	0.971	
THCV-A per 30g	< LOQ		mg/30g	0.971	
THCV-Total per 30g	< LOQ		mg/30g	1.82	
<b>Total Cannabinoids 30g<sup>†</sup></b>	<b>873</b>		<b>mg/30g</b>		

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**Microbiology**

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
E.coli	< LOQ		cfu/g	10	2006223	08/01/20	AOAC 991.14 (Petrifilm)	X
Total Coliforms	< LOQ		cfu/g	10	2006223	08/01/20	AOAC 991.14 (Petrifilm)	X
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2006225	08/01/20	AOAC 2014.05 (RAPID)	X
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2006225	08/01/20	AOAC 2014.05 (RAPID)	X

Solvents		Method EPA5021A				Units µg/g	Batch 2006252	Analyze 07/30/20 12:46 PM			
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		Ethyl acetate	228	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	

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Pesticides											
Method AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 2006270 Analyze 07/30/20 04:08 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							

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Terpenes				Method J AOAC 2015 V98-6	Units %	Batch 2006239	Analyze 08/03/20 08:46 AM		
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
(-)-a-Terpineol <sup>†</sup>	< LOQ	0.020	0.00%		(-)-caryophyllene oxide <sup>†</sup>	< LOQ	0.020	0.00%	
(-)-Guaiol <sup>†</sup>	< LOQ	0.020	0.00%		(-)-Isopulegol <sup>†</sup>	< LOQ	0.020	0.00%	
(-)-β-Pinene <sup>†</sup>	< LOQ	0.020	0.00%		(+)-Borneol <sup>†</sup>	< LOQ	0.020	0.00%	
(+)-Cedrol <sup>†</sup>	< LOQ	0.020	0.00%		(+)-fenchol <sup>†</sup>	< LOQ	0.020	0.00%	
(+)-Pulegone <sup>†</sup>	< LOQ	0.020	0.00%		(±)-Camphor <sup>†</sup>	< LOQ	0.020	0.00%	
(±)-cis-Nerolidol <sup>†</sup>	< LOQ	0.020	0.00%		(±)-fenchone <sup>†</sup>	< LOQ	0.020	0.00%	
(±)-trans-Nerolidol <sup>†</sup>	< LOQ	0.020	0.00%		(R)-(+)-Limonene <sup>†</sup>	< LOQ	0.020	0.00%	
a-Bisabolol <sup>†</sup>	< LOQ	0.020	0.00%		a-cedrene <sup>†</sup>	< LOQ	0.020	0.00%	
a-phellandrene <sup>†</sup>	< LOQ	0.020	0.00%		a-pinene <sup>†</sup>	< LOQ	0.020	0.00%	
a-Terpinene <sup>†</sup>	< LOQ	0.020	0.00%		Camphene <sup>†</sup>	< LOQ	0.020	0.00%	
cis-β-Ocimene <sup>†</sup>	< LOQ	0.006	0.00%		d-3-Carene <sup>†</sup>	< LOQ	0.020	0.00%	
Eucalyptol <sup>†</sup>	< LOQ	0.020	0.00%		farnesene <sup>†</sup>	< LOQ	0.020	0.00%	
gamma-Terpinene <sup>†</sup>	< LOQ	0.020	0.00%		Geraniol <sup>†</sup>	< LOQ	0.020	0.00%	
Geranyl acetate <sup>†</sup>	< LOQ	0.020	0.00%		Humulene <sup>†</sup>	< LOQ	0.020	0.00%	
Isoborneol <sup>†</sup>	< LOQ	0.020	0.00%		Linalool <sup>†</sup>	< LOQ	0.020	0.00%	
Menthol <sup>†</sup>	< LOQ	0.020	0.00%		nerol <sup>†</sup>	< LOQ	0.020	0.00%	
p-Cymene <sup>†</sup>	< LOQ	0.020	0.00%		Sabinene <sup>†</sup>	< LOQ	0.020	0.00%	
Sabinene hydrate <sup>†</sup>	< LOQ	0.020	0.00%		β-Caryophyllene <sup>†</sup>	< LOQ	0.020	0.00%	
β-Myrcene <sup>†</sup>	< LOQ	0.020	0.00%		Terpinolene <sup>†</sup>	< LOQ	0.020	0.00%	
trans-β-Ocimene <sup>†</sup>	< LOQ	0.013	0.00%		valencene <sup>†</sup>	< LOQ	0.020	0.00%	
<b>Total Terpenes</b>	<b>&lt; LOQ</b>								

Metals									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes	
Arsenic	< LOQ		mg/kg	0.0422	2006338	07/31/20	AOAC 2013.06 (mod.)	X	
Cadmium	< LOQ		mg/kg	0.0422	2006338	07/31/20	AOAC 2013.06 (mod.)	X	
Lead	< LOQ		mg/kg	0.0422	2006338	07/31/20	AOAC 2013.06 (mod.)	X	
Mercury	< LOQ		mg/kg	0.0211	2006338	07/31/20	AOAC 2013.06 (mod.)	X	

Mycotoxins									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes	
Aflatoxin B1 <sup>†</sup>	< LOQ		µg/kg	5.00	2006271	07/30/20	AOAC 2007.01 & EN 15662		
Aflatoxin B2 <sup>†</sup>	< LOQ		µg/kg	5.00	2006271	07/30/20	AOAC 2007.01 & EN 15662		
Aflatoxin G1 <sup>†</sup>	< LOQ		µg/kg	5.00	2006271	07/30/20	AOAC 2007.01 & EN 15662		
Aflatoxin G2 <sup>†</sup>	< LOQ		µg/kg	5.00	2006271	07/30/20	AOAC 2007.01 & EN 15662		
Deoxynivalenol <sup>†</sup>	< LOQ		µg/kg	200	2006271	07/30/20	AOAC 2007.01 & EN 15662		
Fumonisin B1 <sup>†</sup>	< LOQ		µg/kg	200	2006271	07/30/20	AOAC 2007.01 & EN 15662		
Fumonisin B2 <sup>†</sup>	< LOQ		µg/kg	200	2006271	07/30/20	AOAC 2007.01 & EN 15662		
HT2-Toxin <sup>†</sup>	< LOQ		µg/kg	40.0	2006271	07/30/20	AOAC 2007.01 & EN 15662		
Nivalenol <sup>†</sup>	< LOQ		µg/kg	400	2006271	07/30/20	AOAC 2007.01 & EN 15662		
Ochratoxin A <sup>†</sup>	< LOQ		µg/kg	5.00	2006271	07/30/20	AOAC 2007.01 & EN 15662		
Ochratoxin B <sup>†</sup>	< LOQ		µg/kg	2.00	2006271	07/30/20	AOAC 2007.01 & EN 15662		
T2-Toxin <sup>†</sup>	< LOQ		µg/kg	20.0	2006271	07/30/20	AOAC 2007.01 & EN 15662		
Zearalenone <sup>†</sup>	< LOQ		µg/kg	200	2006271	07/30/20	AOAC 2007.01 & EN 15662		

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**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**

cfu/g = Colony forming units per gram

g = Gram

µg/g = Microgram per gram

µg/kg = Micrograms per kilogram = parts per billion (ppb)

mg/kg = Milligram per kilogram = parts per million (ppm)

mg/1g = Milligram per 1g

mg/30g = Milligram per 30g

% = Percentage of sample

% wt = µg/g divided by 10,000

**Glossary of Qualifiers**

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner  
General Manager