



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

**Report Number:** 20-006001/D01.R01  
**Report Date:** 06/18/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 06/11/20 12:25



This is an amended version of report# 20-006001/D01.R00.

Reason: Corrected lot number

**Customer:** Trace Minerals Research  
**Product identity:** CBD + Magnesium Cream  
**Client/Metric ID:** Lot# SN128744  
**Laboratory ID:** 20-006001-0001

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

### Summary

#### Potency:

Analyte	Result	Limits	Units	Status	
CBC	0.0139		%		CBD-Total per 1g
CBD	0.547		%		5.47 mg/1g
CBDV <sup>†</sup>	0.00413		%		THC-Total per 1g
CBG <sup>†</sup>	0.0148		%		0.219 mg/1g
Δ9-THC	0.0219		%		CBD-Total per 113g
					618 mg/113g
Analyte per 1g	Result	Limits	Units	Status	
CBC per 1g	0.139		mg/1g		THC-Total per 113g
CBD per 1g	5.47		mg/1g		24.7 mg/113g
CBDV per 1g	0.0413		mg/1g		(Reported in milligrams per serving)
CBG per 1g	0.148		mg/1g		
Δ9-THC per 1g	0.219		mg/1g		
Analyte per 113g	Result	Limits	Units	Status	
CBC per 113g	15.7		mg/113g		
CBD per 113g	618		mg/113g		
CBDV per 113g	4.67		mg/113g		
CBG per 113g	16.7		mg/113g		
Δ9-THC per 113g	24.7		mg/113g		

#### Residual Solvents:

All analytes passing and less than LOQ.

#### Pesticides:

All analytes passing and less than LOQ.

#### Terpenes:

Analyte	Percent by weight	Percent of Total	Analyte	Percent by weight	Percent of Total
Menthol <sup>†</sup>	6.14	99.51%	Eucalyptol <sup>†</sup>	0.0333	0.54%
<b>Total Terpenes<sup>†</sup></b>	<b>6.17</b>	<b>100.00%</b>			

#### Metals:

Analyte	Result	Limits
Arsenic	0.0469	

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**Microbiology:**

*Less than LOQ for all analytes.*



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**Customer:** Trace Minerals Research

**Product identity:** CBD + Magnesium Cream  
**Client/Metric ID:** Lot# SN128744  
**Sample Date:** 05/26/20  
**Laboratory ID:** 20-006001-0001  
**Relinquished by:** FEDEX  
**Temp:** 23 °C

### Sample Results

Potency					
Method J AOAC 2015 V98-6 (mod) Batch: 2005060 Analyze: 6/15/20 8:12:00 PM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC	0.0139		%	0.0032	
CBC-A†	< LOQ		%	0.0032	
CBC-Total†	0.0139		%	0.0061	
CBD	0.547		%	0.0032	
CBD-A	< LOQ		%	0.0032	
CBD-Total	0.547		%	0.0061	
CBDV†	0.00413		%	0.0032	
CBDV-A†	< LOQ		%	0.0032	
CBDV-Total†	< LOQ		%	0.0060	
CBG†	0.0148		%	0.0032	
CBG-A†	< LOQ		%	0.0032	
CBG-Total	0.0148		%	0.0060	
CBL†	< LOQ		%	0.0032	
CBN	< LOQ		%	0.0032	
Δ8-THC†	< LOQ		%	0.0032	
Δ9-THC	0.0219		%	0.0032	
THC-A	< LOQ		%	0.0032	
THC-Total	0.0219		%	0.0061	
THCV†	< LOQ		%	0.0032	
THCV-A†	< LOQ		%	0.0032	
THCV-Total†	< LOQ		%	0.0060	
<b>Total Cannabinoids†</b>	<b>0.602</b>		%		

Potency per 1g					
Method J AOAC 2015 V98-6 (mod) Batch: 2005060 Analyze: 6/15/20 8:12:00 PM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	0.139		mg/1g	0.0323	
CBC-A per 1g	< LOQ		mg/1g	0.0323	
CBC-Total per 1g	0.139		mg/1g	0.0606	
CBD per 1g	5.47		mg/1g	0.0323	
CBD-A per 1g	< LOQ		mg/1g	0.0323	
CBD-Total per 1g	5.47		mg/1g	0.0606	
CBDV per 1g	0.0413		mg/1g	0.0323	
CBDV-A per 1g	< LOQ		mg/1g	0.0323	
CBDV-Total per 1g	< LOQ		mg/1g	0.0603	

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Potency per 1g **Method J AOAC 2015 V98-6 (mod) Batch: 2005060 Analyze: 6/15/20 8:12:00 PM**

Analyte	Result	Limits	Units	LOQ	Notes
CBG per 1g	0.148		mg/1g	0.0323	
CBG-A per 1g	< LOQ		mg/1g	0.0323	
CBG-Total per 1g	0.148		mg/1g	0.0603	
CBL per 1g	< LOQ		mg/1g	0.0323	
CBN per 1g	< LOQ		mg/1g	0.0323	
Δ8-THC per 1g	< LOQ		mg/1g	0.0323	
Δ9-THC per 1g	0.219		mg/1g	0.0323	
THC-A per 1g	< LOQ		mg/1g	0.0323	
THC-Total per 1g	0.219		mg/1g	0.0606	
THCV per 1g	< LOQ		mg/1g	0.0323	
THCV-A per 1g	< LOQ		mg/1g	0.0323	
THCV-Total per 1g	< LOQ		mg/1g	0.0606	
<b>Total Cannabinoids 1g<sup>†</sup></b>	<b>6.02</b>		mg/1g		

Potency per 113g **Method J AOAC 2015 V98-6 (mod) Batch: 2005060 Analyze: 6/15/20 8:12:00 PM**

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 113g	15.7		mg/113g	3.65	
CBC-A per 113g	< LOQ		mg/113g	3.65	
CBC-Total per 113g	15.7		mg/113g	6.85	
CBD per 113g	618		mg/113g	3.65	
CBD-A per 113g	< LOQ		mg/113g	3.65	
CBD-Total per 113g	618		mg/113g	6.85	
CBDV per 113g	4.67		mg/113g	3.65	
CBDV-A per 113g	< LOQ		mg/113g	3.65	
CBDV-Total per 113g	< LOQ		mg/113g	6.81	
CBG per 113g	16.7		mg/113g	3.65	
CBG-A per 113g	< LOQ		mg/113g	3.65	
CBG-Total per 113g	16.7		mg/113g	6.81	
CBL per 113g	< LOQ		mg/113g	3.65	
CBN per 113g	< LOQ		mg/113g	3.65	
Δ8-THC per 113g	< LOQ		mg/113g	3.65	
Δ9-THC per 113g	24.7		mg/113g	3.65	
THC-A per 113g	< LOQ		mg/113g	3.65	
THC-Total per 113g	24.7		mg/113g	6.85	
THCV per 113g	< LOQ		mg/113g	3.65	
THCV-A per 113g	< LOQ		mg/113g	3.65	
THCV-Total per 113g	< LOQ		mg/113g	6.85	
<b>Total Cannabinoids 113g<sup>†</sup></b>	<b>680</b>		mg/113g		

**Microbiology**

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
E.coli	< LOQ		cfu/g	10	2004908	06/14/20	AOAC 991.14 (Petrifilm)	X
Total Coliforms	< LOQ		cfu/g	10	2004908	06/14/20	AOAC 991.14 (Petrifilm)	X
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2004910	06/14/20	AOAC 2014.05 (RAPID)	X
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2004910	06/14/20	AOAC 2014.05 (RAPID)	X

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Solvents		Method EPA5021A				Units µg/g	Batch 2004904	Analyze 06/12/20 08:07 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		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	

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Pesticides											
Method AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 2005056 Analyze 06/17/20 12:22 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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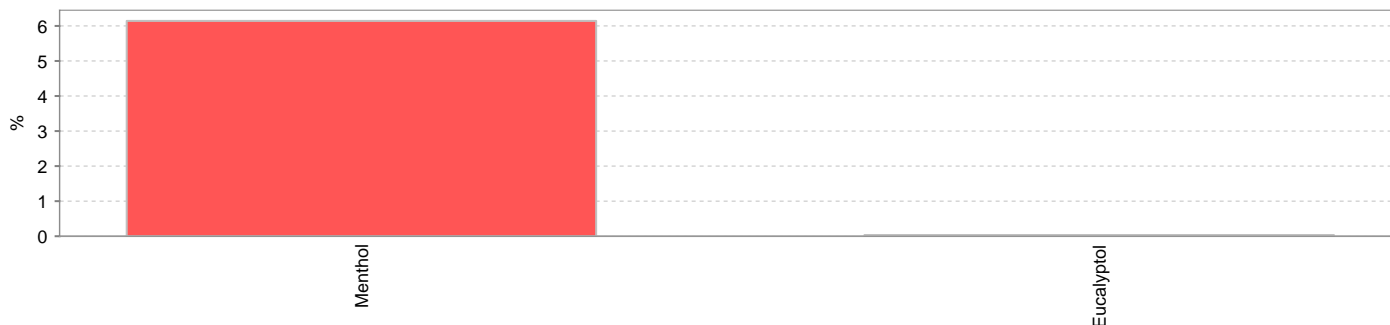


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Terpenes				Method J AOAC 2015 V98-6	Units %	Batch 2004906	Analyze 06/12/20 08:22 AM		
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
Menthol†	6.14	0.020	99.51%		Eucalyptol†	0.0333	0.020	0.54%	
(-)-a-Terpineol†	< LOQ	0.020	0.00%		(-)-caryophyllene oxide†	< LOQ	0.020	0.00%	
(-)-Guaiol†	< LOQ	0.020	0.00%		(-)-Isopulegol†	< LOQ	0.020	0.00%	
(-)-β-Pinene†	< LOQ	0.020	0.00%		(+)-Borneol†	< LOQ	0.020	0.00%	
(+)-Cedrol†	< LOQ	0.020	0.00%		(+)-fenchol†	< LOQ	0.020	0.00%	
(+)-Pulegone†	< LOQ	0.020	0.00%		(±)-Camphor†	< LOQ	0.020	0.00%	
(±)-cis-Nerolidol†	< LOQ	0.020	0.00%		(±)-fenchone†	< LOQ	0.020	0.00%	
(±)-trans-Nerolidol†	< LOQ	0.020	0.00%		(R)-(+)-Limonene†	< LOQ	0.020	0.00%	
a-Bisabolol†	< LOQ	0.020	0.00%		a-cedrene†	< LOQ	0.020	0.00%	
a-phellandrene†	< LOQ	0.020	0.00%		a-pinene†	< LOQ	0.020	0.00%	
a-Terpinene†	< LOQ	0.020	0.00%		Camphene†	< LOQ	0.020	0.00%	
cis-β-Ocimene†	< LOQ	0.006	0.00%		d-3-Carene†	< LOQ	0.020	0.00%	
farnesene†	< LOQ	0.020	0.00%		gamma-Terpinene†	< LOQ	0.020	0.00%	
Geraniol†	< LOQ	0.020	0.00%		Geranyl acetate†	< LOQ	0.020	0.00%	
Humulene†	< LOQ	0.020	0.00%		Isoborneol†	< LOQ	0.020	0.00%	
Linalool†	< LOQ	0.020	0.00%		nerol†	< LOQ	0.020	0.00%	
p-Cymene†	< LOQ	0.020	0.00%		Sabinene†	< LOQ	0.020	0.00%	
Sabinene hydrate†	< LOQ	0.020	0.00%		β-Caryophyllene†	< LOQ	0.020	0.00%	
β-Myrcene†	< LOQ	0.020	0.00%		Terpinolene†	< LOQ	0.020	0.00%	
trans-β-Ocimene†	< LOQ	0.013	0.00%		valencene†	< 0.0200	0.020	0.00%	
<b>Total Terpenes</b>	<b>6.17</b>								



Metals									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes	
Arsenic	0.0469		mg/kg	0.0402	2004994	06/15/20	AOAC 2013.06 (mod.)	X	
Cadmium	< LOQ		mg/kg	0.0402	2004994	06/15/20	AOAC 2013.06 (mod.)	X	
Lead	< LOQ		mg/kg	0.0402	2004994	06/15/20	AOAC 2013.06 (mod.)	X	
Mercury	< LOQ		mg/kg	0.0201	2004994	06/15/20	AOAC 2013.06 (mod.)	X	

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**Mycotoxins**

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Aflatoxin B1 <sup>†</sup>	< LOQ		µg/kg	5.00	2004971	06/15/20	AOAC 2007.01 & EN 15662	
Aflatoxin B2 <sup>†</sup>	< LOQ		µg/kg	5.00	2004971	06/15/20	AOAC 2007.01 & EN 15662	
Aflatoxin G1 <sup>†</sup>	< LOQ		µg/kg	5.00	2004971	06/15/20	AOAC 2007.01 & EN 15662	
Aflatoxin G2 <sup>†</sup>	< LOQ		µg/kg	5.00	2004971	06/15/20	AOAC 2007.01 & EN 15662	
Deoxynivalenol <sup>†</sup>	< LOQ		µg/kg	200	2004971	06/15/20	AOAC 2007.01 & EN 15662	
Fumonisin B1 <sup>†</sup>	< LOQ		µg/kg	200	2004971	06/15/20	AOAC 2007.01 & EN 15662	
Fumonisin B2 <sup>†</sup>	< LOQ		µg/kg	200	2004971	06/15/20	AOAC 2007.01 & EN 15662	
HT2-Toxin <sup>†</sup>	< LOQ		µg/kg	40.0	2004971	06/15/20	AOAC 2007.01 & EN 15662	
Nivalenol <sup>†</sup>	< LOQ		µg/kg	400	2004971	06/15/20	AOAC 2007.01 & EN 15662	
Ochratoxin A <sup>†</sup>	< LOQ		µg/kg	5.00	2004971	06/15/20	AOAC 2007.01 & EN 15662	
Ochratoxin B <sup>†</sup>	< LOQ		µg/kg	2.00	2004971	06/15/20	AOAC 2007.01 & EN 15662	
T2-Toxin <sup>†</sup>	< LOQ		µg/kg	20.0	2004971	06/15/20	AOAC 2007.01 & EN 15662	
Zearalenone <sup>†</sup>	< LOQ		µg/kg	200	2004971	06/15/20	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/113g = Milligram per 113g

% = Percentage of sample

% wt = µg/g divided by 10,000

**Glossary of Qualifiers**

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner  
General Manager