Columbia LABORATORIES
A Tentamus Company

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

Report Number: 21-006705/D002.R001
Report Date: 07/06/2021
ORELAP#: OR100028
Purchase Order:
Received: 06/16/21 10:21

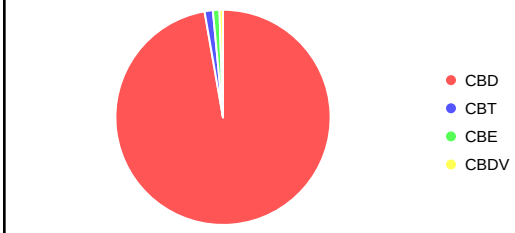
This is an amended version of report# 21-006705/D002.R00.
Reason: Updated batch number.

Customer: GVB Biopharma
Product identity: Cool - Relief Balm
Client/Metrc ID: B: 061021-001
Laboratory ID: 21-006705-0002 **Sample Date:** 06/15/21 12:00

Summary

Potency:

Analyte	Result (%)
CBD	0.825
CBT†	0.0106
CBE†	0.00830
CBDV†	0.00446



CBD-Total 0.825%

THC-Total <LOQ

(Reported in percent of total sample)

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†	1.99	35.10%	Eucalyptol†	1.68	29.63%
p-Cymene†	0.592	10.44%	(R)-(+)-Limonene†	0.481	8.48%
a-Terpinene†	0.268	4.73%	a-pinene†	0.170	3.00%
(±)-Camphor†	0.157	2.77%	ß-Caryophyllene†	0.103	1.82%
a-phellandrene†	0.0635	1.12%	Camphene†	0.0610	1.08%
ß-Myrcene†	0.0363	0.64%	(-)-ß-Pinene†	0.0358	0.63%
Linalool†	0.0356	0.63%	**Total Terpenes†**	**5.67**	**100.00%**

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.

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Customer: GVB Biopharma
4456 E. Graig Rd
Las Vegas Nevada 89115
United States of America (USA)

Product identity: Cool - Relief Balm
Client/Metrc ID: B: 061021-001
Sample Date: 06/15/21 12:00
Laboratory ID: 21-006705-0002
Evidence of Cooling: No
Temp: 21.3 °C

Sample Results

Potency **Method** J AOAC 2015 V98-6 (mod) **Units** % **Batch:** 2105426 **Analyze:** 6/18/21 1:23:00 PM

Analyte	As Received	Dry weight	LOQ	Notes
CBC	< LOQ		0.0033	
CBC-A†	< LOQ		0.0033	
CBC-Total†	< LOQ		0.0061	
CBD	0.825		0.0033	
CBD-A	< LOQ		0.0033	
CBD-Total	0.825		0.0061	
CBDV†	0.00446		0.0033	
CBDV-A†	< LOQ		0.0033	
CBDV-Total†	< LOQ		0.0061	
CBE†	0.00830		0.0033	
CBG†	< LOQ		0.0033	
CBG-A†	< LOQ		0.0033	
CBG-Total	< LOQ		0.0061	
CBL†	< LOQ		0.0033	
CBL-A†	< LOQ		0.0033	
CBL-Total†	< LOQ		0.0061	
CBN	< LOQ		0.0033	
CBT†	0.0106		0.0033	
Δ8-THC†	< LOQ		0.0033	
Δ8-THCV	< LOQ		0.0033	
Δ9-THC	< LOQ		0.0033	
THC-A	< LOQ		0.0033	
THC-Total	< LOQ		0.0061	
THCV†	< LOQ		0.0033	
THCV-A†	< LOQ		0.0033	
THCV-Total†	< LOQ		0.0061	
Total Cannabinoids†	0.848			

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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
E.coli	< LOQ		cfu/g	10	2105341	06/19/21	AOAC 991.14 (Petrifilm)	X
Total Coliforms	< LOQ		cfu/g	10	2105341	06/19/21	AOAC 991.14 (Petrifilm)	X
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2105342	06/19/21	AOAC 2014.05 (RAPID)	X
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2105342	06/19/21	AOAC 2014.05 (RAPID)	X

Solvents

Method Residual Solvents by GC/MS **Units** µg/g **Batch** 2105348 **Analyze** 06/17/21 09:16 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	20.0	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	60.0	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** 2105400 **Analyze** 06/18/21 10:12 AM

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		Flonicamid	< 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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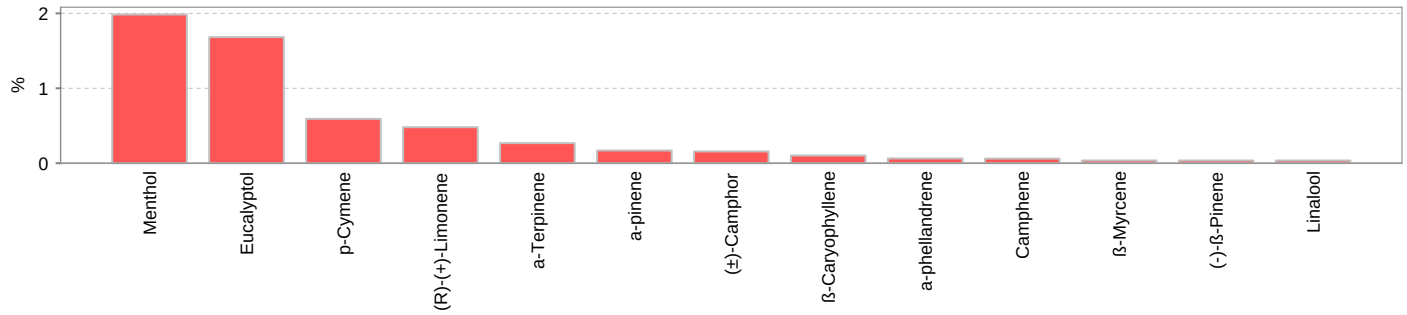
Terpenes

Method J AOAC 2015 V98-6 **Units** % **Batch** 2105420 **Analyze** 06/18/21 11:44 AM

Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
Menthol†	1.99	0.018	35.10%		Eucalyptol†	1.68	0.018	29.63%	
p-Cymene†	0.592	0.018	10.44%		(R)-(+)-Limonene†	0.481	0.018	8.48%	
a-Terpinene†	0.268	0.018	4.73%		a-pinene†	0.170	0.018	3.00%	
(±)-Camphor†	0.157	0.018	2.77%		ß-Caryophyllene†	0.103	0.018	1.82%	
a-phellandrene†	0.0635	0.018	1.12%		Camphene†	0.0610	0.018	1.08%	
ß-Myrcene†	0.0363	0.018	0.64%		(-)-ß-Pinene†	0.0358	0.018	0.63%	
Linalool†	0.0356	0.018	0.63%		(-)-a-Terpineol†	< LOQ	0.018	0.00%	
Humulene†	< LOQ	0.018	0.00%		d-3-Carene†	< LOQ	0.018	0.00%	
(+)-Pulegone†	< LOQ	0.018	0.00%		farnesene†	< LOQ	0.018	0.00%	
gamma-Terpinene†	< LOQ	0.018	0.00%		Sabinene†	< LOQ	0.018	0.00%	
Terpinolene†	< LOQ	0.018	0.00%		trans-ß-Ocimene†	< LOQ	0.012	0.00%	
nerol†	< LOQ	0.018	0.00%		Sabinene hydrate†	< LOQ	0.018	0.00%	
(+)-fenchol†	< LOQ	0.018	0.00%		(±)-fenchone†	< LOQ	0.018	0.00%	
(-)-caryophyllene oxide†	< LOQ	0.018	0.00%		(-)-Guaiol†	< LOQ	0.018	0.00%	
(-)-Isopulegol†	< LOQ	0.018	0.00%		(+)-Borneol†	< LOQ	0.018	0.00%	
(+)-Cedrol†	< LOQ	0.018	0.00%		(±)-cis-Nerolidol†	< LOQ	0.018	0.00%	
(±)-trans-Nerolidol†	< LOQ	0.018	0.00%		a-Bisabolol†	< LOQ	0.018	0.00%	
a-cedrene†	< LOQ	0.018	0.00%		cis-ß-Ocimene†	< LOQ	0.006	0.00%	
Geraniol†	< LOQ	0.018	0.00%		Geranyl acetate†	< LOQ	0.018	0.00%	
Isoborneol†	< LOQ	0.018	0.00%		valencene†	< LOQ	0.018	0.00%	
Total Terpenes	**5.67**								



Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Arsenic	< LOQ		mg/kg	0.0421	2105384	06/17/21	AOAC 2013.06 (mod.)	X
Cadmium	< LOQ		mg/kg	0.0421	2105384	06/17/21	AOAC 2013.06 (mod.)	X
Lead	< LOQ		mg/kg	0.0421	2105384	06/17/21	AOAC 2013.06 (mod.)	X
Mercury	< LOQ		mg/kg	0.0211	2105384	06/17/21	AOAC 2013.06 (mod.)	X

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Mycotoxins

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Aflatoxin B2†	< LOQ		µg/kg	5.00	2105447	06/21/21	AOAC 2007.01 & EN 15662	
Aflatoxin B1†	< LOQ		µg/kg	5.00	2105447	06/21/21	AOAC 2007.01 & EN 15662	
Aflatoxin G1†	< LOQ		µg/kg	5.00	2105447	06/21/21	AOAC 2007.01 & EN 15662	
Aflatoxin G2†	< LOQ		µg/kg	5.00	2105447	06/21/21	AOAC 2007.01 & EN 15662	
Deoxynivalenol†	< LOQ		µg/kg	200	2105447	06/21/21	AOAC 2007.01 & EN 15662	
Fumonisin B1†	< LOQ		µg/kg	200	2105447	06/21/21	AOAC 2007.01 & EN 15662	
Fumonisin B2†	< LOQ		µg/kg	200	2105447	06/21/21	AOAC 2007.01 & EN 15662	
HT2-Toxin†	< LOQ		µg/kg	40.0	2105447	06/21/21	AOAC 2007.01 & EN 15662	
Nivalenol†	< LOQ		µg/kg	400	2105447	06/21/21	AOAC 2007.01 & EN 15662	
Ochratoxin A†	< LOQ		µg/kg	5.00	2105447	06/21/21	AOAC 2007.01 & EN 15662	
Ochratoxin B†	< LOQ		µg/kg	2.00	2105447	06/21/21	AOAC 2007.01 & EN 15662	
T2-Toxin†	< LOQ		µg/kg	20.0	2105447	06/21/21	AOAC 2007.01 & EN 15662	
Zearalenone†	< LOQ		µg/kg	200	2105447	06/21/21	AOAC 2007.01 & EN 15662	

Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Moisture as loss on drying	9.90		g/100g	0.10	2105446	06/17/21	AOAC 925.10 (mod.)	X
Water Activity	0.350		Aw	0.030	2105449	06/18/21	AOAC 978.18	X

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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

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/100g = Grams per 100 Grams
µg/g = Microgram per gram
µg/kg = Micrograms per kilogram = parts per billion (ppb)
mg/kg = Milligram per kilogram = parts per million (ppm)
% = Percentage of sample
Aw = Water Activity
% wt = µg/g divided by 10,000

Glossary of Qualifiers

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner
General Manager

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Laboratory Quality Control Results

Residual Solvents							Batch ID: 2105348					
Method Blank					Laboratory Control Sample							
Analyte	Result		LOQ	Notes	Result	Spike	Units	%Rec	Limits			Notes
Propane	ND	<	200		465	595	µg/g	78.2	70	-	130	
Isobutane	ND	<	200		621	761	µg/g	81.6	70	-	130	
Butane	ND	<	200		634	761	µg/g	83.3	70	-	130	
2,2-Dimethylpropane	ND	<	200		756	955	µg/g	79.2	70	-	130	
Methanol	ND	<	200		1400	1600	µg/g	87.5	70	-	130	
Ethylene Oxide	ND	<	30		44.8	58.3	µg/g	76.8	70	-	130	
2-Methylbutane	ND	<	200		1320	1600	µg/g	82.5	70	-	130	
Pentane	ND	<	200		1350	1600	µg/g	84.4	70	-	130	
Ethanol	ND	<	200		1410	1610	µg/g	87.6	70	-	130	
Ethyl Ether	ND	<	200		1390	1600	µg/g	86.9	70	-	130	
2,2-Dimethylbutane	ND	<	30		138	160	µg/g	86.3	70	-	130	
Acetone	ND	<	200		1390	1600	µg/g	86.9	70	-	130	
2-Propanol	ND	<	200		1430	1610	µg/g	88.8	70	-	130	
Ethyl Formate	ND	<	500		1430	1610	µg/g	88.8	70	-	130	
Acetonitrile	ND	<	100		413	481	µg/g	85.9	70	-	130	
Methyl Acetate	ND	<	500		1640	1600	µg/g	102.5	70	-	130	
2,3-Dimethylbutane	ND	<	30		139	164	µg/g	84.8	70	-	130	
Dichloromethane	ND	<	60		421	490	µg/g	85.9	70	-	130	
2-Methylpentane	ND	<	30		141	162	µg/g	87.0	70	-	130	
MTBE	ND	<	500		1610	1610	µg/g	100.0	70	-	130	
3-Methylpentane	ND	<	30		135	163	µg/g	82.8	70	-	130	
Hexane	ND	<	30		126	163	µg/g	77.3	70	-	130	
1-Propanol	ND	<	500		1690	1600	µg/g	105.6	70	-	130	
Methylethylketone	ND	<	500		1690	1620	µg/g	104.3	70	-	130	
Ethyl acetate	ND	<	200		1410	1600	µg/g	88.1	70	-	130	
2-Butanol	ND	<	200		1330	1600	µg/g	83.1	70	-	130	
Tetrahydrofuran	ND	<	100		397	485	µg/g	81.9	70	-	130	
Cyclohexane	ND	<	200		1490	1610	µg/g	92.5	70	-	130	
2-methyl-1-propanol	ND	<	500		1300	1610	µg/g	80.7	70	-	130	
Benzene	ND	<	1		3.97	4.36	µg/g	91.1	70	-	130	
Isopropyl Acetate	ND	<	200		1480	1610	µg/g	91.9	70	-	130	
Heptane	ND	<	200		1350	1610	µg/g	83.9	70	-	130	
1-Butanol	ND	<	500		1770	1610	µg/g	109.9	70	-	130	
Propyl Acetate	ND	<	500		1610	1610	µg/g	100.0	70	-	130	
1,4-Dioxane	ND	<	100		465	481	µg/g	96.7	70	-	130	
2-Ethoxyethanol	ND	<	30		148	162	µg/g	91.4	70	-	130	
Methylisobutylketone	ND	<	500		1510	1650	µg/g	91.5	70	-	130	
3-Methyl-1-butanol	ND	<	500		1390	1610	µg/g	86.3	70	-	130	
Ethylene Glycol	ND	<	200		398	484	µg/g	82.2	70	-	130	
Tduene	ND	<	200		473	500	µg/g	94.6	70	-	130	
Isobutyl Acetate	ND	<	500		1420	1610	µg/g	88.2	70	-	130	
1-Pentanol	ND	<	500		1440	1610	µg/g	89.4	70	-	130	
Butyl Acetate	ND	<	500		1420	1620	µg/g	87.7	70	-	130	
Ethylbenzene	ND	<	200		962	971	µg/g	99.1	70	-	130	
m,p-Xylene	ND	<	200		1020	966	µg/g	105.6	70	-	130	
o-Xylene	ND	<	200		1040	967	µg/g	107.5	70	-	130	
Cumene	ND	<	30		168	164	µg/g	102.4	70	-	130	
Anisole	ND	<	500		1610	1620	µg/g	99.4	70	-	130	
DMSO	ND	<	500		1350	1640	µg/g	82.3	70	-	130	
1,2-dimethoxyethane	ND	<	50		162	164	µg/g	98.8	70	-	130	
Triethylamine	ND	<	500		1560	1600	µg/g	97.5	70	-	130	
N,N-dimethylformamide	ND	<	150		527	518	µg/g	101.7	70	-	130	
N,N-dimethylacetamide	ND	<	150		505	488	µg/g	103.5	70	-	130	
Pyridine	ND	<	50		159	172	µg/g	92.4	70	-	130	
Trichloroethylene	ND	<	1		1.09	1	µg/g	109.0	70	-	130	
Chloroform	ND	<	1		1.04	1	µg/g	104.0	70	-	130	
1,2-Dichloroethane	ND	<	1		1.05	1	µg/g	105.0	70	-	130	