



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



Report Number: 22-010691/D002.R002
Report Date: 09/30/2022
ORELAP#: OR100028
Purchase Order: 0097
Received: 09/08/22 08:18

This is an amended version of report# 22-010691/D002.R001.
 Reason: Combine results with reporty 22-008952/D003.R000.

Customer: R&R
Product identity: R&R Organic Full Spectrum 500mg Tincture - Fresh Mint
Client/Metric ID: Lot 0309
Laboratory ID: 22-010691-0001

Summary

Potency:

Analyte per 1ml	Result	Limits	Units	Status	
CBC per 1ml	0.625		mg/1ml		CBD-Total per Serving Size 17.0 mg/1ml
CBD per 1ml	16.7		mg/1ml		
CBD-A per 1ml	0.386		mg/1ml		THC-Total per Serving Size 0.639 mg/1ml
CBDV per 1ml	0.115		mg/1ml		
CBE per 1ml	0.165		mg/1ml		CBD-Total per Serving Size 511 mg/30ml
CBG per 1ml	0.142		mg/1ml		
CBN per 1ml	0.0904		mg/1ml		THC-Total per Serving Size 19.2 mg/30ml
CBT per 1ml	0.268		mg/1ml		
Δ9-THC per 1ml	0.639		mg/1ml		(Reported in milligrams per serving)
Analyte per 30ml	Result	Limits	Units	Status	
CBC per 30ml	18.7		mg/30ml		
CBD per 30ml	501		mg/30ml		
CBD-A per 30ml	11.6		mg/30ml		
CBDV per 30ml	3.44		mg/30ml		
CBE per 30ml	4.95		mg/30ml		
CBG per 30ml	4.27		mg/30ml		
CBN per 30ml	2.71		mg/30ml		
CBT per 30ml	8.05		mg/30ml		
Δ9-THC per 30ml	19.2		mg/30ml		

Terpenes:

Analyte	Percent by weight	Percent of Total	Analyte	Percent by weight	Percent of Total
Menthol	0.0561	71.37%	a-Bisabolol	0.0225	28.63%
Total Terpenes	0.0786	100.00%			



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Report Number: 22-008952/D003.R000
Report Date: 08/30/2022
ORELAP#: OR100028
Purchase Order:
Received: 07/29/22 08:08

Customer: R&R
Product identity: R&R Organic Full Spectrum 500mg Tincture - Fresh Mint
Client/Metric ID: Lot 0309
Laboratory ID: 22-008952-0001

Summary

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.



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Received: 09/08/22 08:18

Customer: R&R

Product identity: R&R Organic Full Spectrum 500mg Tincture - Fresh Mint
Client/Metric ID: Lot 0309
Sample Date:
Laboratory ID: 22-010691-0001
Evidence of Cooling: No
Temp: 21.1 °C
Relinquished by: Client
Serving Size #1: 0.948 g
Density: 0.9480 g/ml
Serving Size #2: 28.44 g



Sample Results

Potency per 1ml	Method: J AOAC 2015 V98-6 (mod) ^b	Units mg/se	Batch: 2207680	Analyze: 9/12/22 8:32:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1ml	0.625		mg/1ml	0.0313	
CBC-A per 1ml	< LOQ		mg/1ml	0.0312	
CBC-Total per 1ml	0.625		mg/1ml	0.0587	
CBD per 1ml	16.7		mg/1ml	0.312	
CBD-A per 1ml	0.386		mg/1ml	0.0313	
CBD-Total per 1ml	17.0		mg/1ml	0.340	
CBDV per 1ml	0.115		mg/1ml	0.0312	
CBDV-A per 1ml	< LOQ		mg/1ml	0.0312	
CBDV-Total per 1ml	0.115		mg/1ml	0.0583	
CBE per 1ml	0.165		mg/1ml	0.0312	
CBG per 1ml	0.142		mg/1ml	0.0312	
CBG-A per 1ml	< LOQ		mg/1ml	0.0312	
CBG-Total per 1ml	0.142		mg/1ml	0.0583	
CBL per 1ml	< LOQ		mg/1ml	0.0312	
CBL-A per 1ml	< LOQ		mg/1ml	0.0312	
CBL-Total per 1ml	< LOQ		mg/1ml	0.0587	
CBN per 1ml	0.0904		mg/1ml	0.0313	
CBT per 1ml	0.268		mg/1ml	0.0312	
Δ8-THCV per 1ml	< LOQ		mg/1ml	0.0312	
Δ10-THC per 1ml	< LOQ		mg/1ml	0.0312	
Δ8-THC per 1ml	< LOQ		mg/1ml	0.0312	
Δ9-THC per 1ml	0.639		mg/1ml	0.0313	
exo-THC per 1ml	< LOQ		mg/1ml	0.0312	
THC-A per 1ml	< LOQ		mg/1ml	0.0312	
THC-Total per 1ml	0.639		mg/1ml	0.0587	
THCV per 1ml	< LOQ		mg/1ml	0.0312	
THCV-A per 1ml	< LOQ		mg/1ml	0.0312	
THCV-Total per 1ml	< LOQ		mg/1ml	0.0587	



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Potency per 1ml **Method:** J AOAC 2015 V98-6 (mod)^b **Units** mg/se **Batch:** 2207680 **Analyze:** 9/12/22 8:32:00 PM

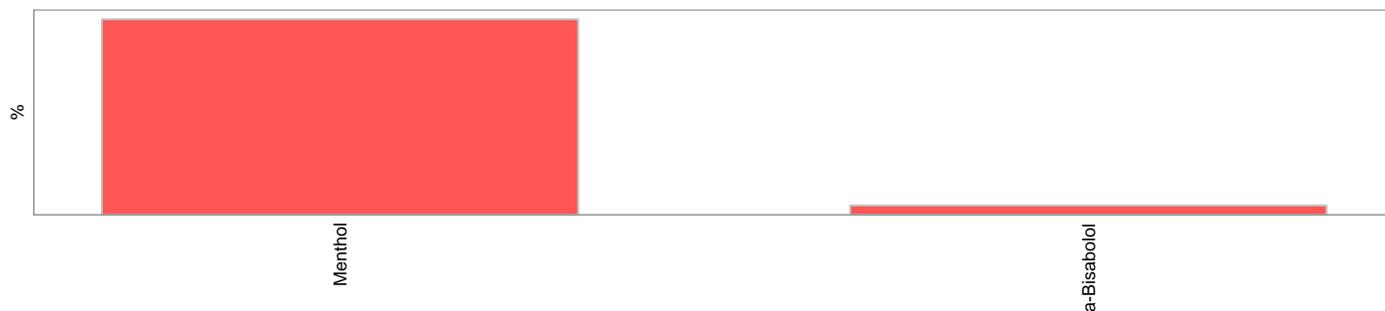
Analyte	Result	Limits	Units	LOQ	Notes
Total Cannabinoids per 1ml	19.1		mg/1ml		

Potency per 30ml **Method:** J AOAC 2015 V98-6 (mod)^b **Units** mg/se **Batch:** 2207680 **Analyze:** 9/12/22 8:32:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 30ml	18.7		mg/30ml	0.938	
CBC-A per 30ml	< LOQ		mg/30ml	0.938	
CBC-Total per 30ml	18.7		mg/30ml	1.76	
CBD per 30ml	501		mg/30ml	9.38	
CBD-A per 30ml	11.6		mg/30ml	0.938	
CBD-Total per 30ml	511		mg/30ml	10.2	
CBDV per 30ml	3.44		mg/30ml	0.938	
CBDV-A per 30ml	< LOQ		mg/30ml	0.938	
CBDV-Total per 30ml	3.44		mg/30ml	1.75	
CBE per 30ml	4.95		mg/30ml	0.938	
CBG per 30ml	4.27		mg/30ml	0.938	
CBG-A per 30ml	< LOQ		mg/30ml	0.938	
CBG-Total per 30ml	4.27		mg/30ml	1.75	
CBL per 30ml	< LOQ		mg/30ml	0.938	
CBL-A per 30ml	< LOQ		mg/30ml	0.938	
CBL-Total per 30ml	< LOQ		mg/30ml	1.76	
CBN per 30ml	2.71		mg/30ml	0.938	
CBT per 30ml	8.05		mg/30ml	0.938	
Δ8-THCV per 30ml	< LOQ		mg/30ml	0.938	
Δ10-THC per 30ml	< LOQ		mg/30ml	0.938	
Δ8-THC per 30ml	< LOQ		mg/30ml	0.938	
Δ9-THC per 30ml	19.2		mg/30ml	0.938	
exo-THC per 30ml	< LOQ		mg/30ml	0.938	
THC-A per 30ml	< LOQ		mg/30ml	0.938	
THC-Total per 30ml	19.2		mg/30ml	1.76	
THCV per 30ml	< LOQ		mg/30ml	0.938	
THCV-A per 30ml	< LOQ		mg/30ml	0.938	
THCV-Total per 30ml	< LOQ		mg/30ml	1.76	
Total Cannabinoids per 30ml	573		mg/30ml		



Terpenes				Method: J AOAC 2015 V98-6	Units %	Batch 2207727	Analyze 09/13/22 07:54 PM		
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
Menthol	0.0561	0.019	71.3740%		a-Bisabolol	0.0225	0.019	28.6260%	
a-cedrene	< LOQ	0.019	0.00%		β-Caryophyllene	< LOQ	0.019	0.00%	
farnesene	< LOQ	0.019	0.00%		nerol	< LOQ	0.019	0.00%	
Isoborneol	< LOQ	0.019	0.00%		Geraniol	< LOQ	0.019	0.00%	
Sabinene hydrate	< LOQ	0.019	0.00%		gamma-Terpinene	< LOQ	0.019	0.00%	
(+)-Borneol	< LOQ	0.019	0.00%		p-Cymene	< LOQ	0.019	0.00%	
(-)-Guaiol	< LOQ	0.019	0.00%		(-)-caryophyllene oxide	< LOQ	0.019	0.00%	
a-Terpinene	< LOQ	0.019	0.00%		(R)-(+)-Limonene	< LOQ	0.019	0.00%	
Linalool	< LOQ	0.019	0.00%		valencene	< LOQ	0.019	0.00%	
Eucalyptol	< LOQ	0.019	0.00%		(+)-Pulegone	< LOQ	0.019	0.00%	
Sabinene	< LOQ	0.019	0.00%		Humulene	< LOQ	0.019	0.00%	
(-)-β-Pinene	< LOQ	0.019	0.00%		(±)-trans-Nerolidol	< LOQ	0.019	0.00%	
(±)-cis-Nerolidol	< LOQ	0.019	0.00%		(-)-a-Terpineol	< LOQ	0.019	0.00%	
Camphene	< LOQ	0.019	0.00%		(+)-Cedrol	< LOQ	0.019	0.00%	
a-pinene	< LOQ	0.019	0.00%		(-)-Isopulegol	< LOQ	0.019	0.00%	
(+)-fenchol	< LOQ	0.019	0.00%		(±)-Camphor	< LOQ	0.019	0.00%	
(±)-fenchone	< LOQ	0.019	0.00%		a-phellandrene	< LOQ	0.019	0.00%	
cis-β-Ocimene	< LOQ	0.006	0.00%		d-3-Carene	< LOQ	0.019	0.00%	
Geranyl acetate	< LOQ	0.019	0.00%		β-Myrcene	< LOQ	0.019	0.00%	
Terpinolene	< LOQ	0.019	0.00%		trans-β-Ocimene	< LOQ	0.013	0.00%	
Total Terpenes	0.0786								





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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Aerobic Plate Count	< LOQ	10,000	cfu/g	10	2206428	08/01/22 AOAC 990.12 (Petrifilm) ^P	pass	
E.coli	< LOQ	100.00	cfu/g	10	2206426	08/01/22 AOAC 991.14 (Petrifilm) ^P	pass	
Total Coliforms	< LOQ	100.00	cfu/g	10	2206426	08/01/22 AOAC 991.14 (Petrifilm) ^P	pass	
Mold (RAPID Petrifilm)	< LOQ	1,000.	cfu/g	10	2206427	08/02/22 AOAC 2014.05 (RAPID) ^P	pass	
Yeast (RAPID Petrifilm)	< LOQ	1,000.	cfu/g	10	2206427	08/02/22 AOAC 2014.05 (RAPID) ^P	pass	
Salmonella spp. by PCR	Negative		/25g		2206431	07/31/22 AOAC 2020.02 ^P		
EHEC including STEC	Negative		/25g		2206434	07/31/22 AOAC RI 121806 ^P		

Solvents Method: Residual Solvents by GC/MS^P Units µg/g Batch 2206521 Analyze 08/03/22 10:30 AM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
2-Methylbutane (Isopentane)	< LOQ	1000	200	pass		2-Methylpentane	< LOQ	60.0	30.0	pass	
2-Propanol (IPA)	< LOQ	1000	200	pass		2,2-Dimethylbutane	< LOQ	60.0	30.0	pass	
2,2-Dimethylpropane (neo-pentane)	< LOQ	1000	200	pass		2,3-Dimethylbutane	< LOQ	60.0	30.0	pass	
3-Methylpentane	< LOQ	60.0	30.0	pass		Acetone	< LOQ	1000	200	pass	
Benzene	< LOQ	2.00	1.00	pass		Butanes (sum)	< LOQ	1000	400	pass	
Ethanol	< LOQ	1000	200	pass		Ethyl acetate	< LOQ	1000	200	pass	
Hexanes (sum)	< LOQ	60.0	150	pass		m,p-Xylene	< LOQ	430	200	pass	
Methanol	< LOQ	600	200	pass		Methylpropane (Isobutane)	< LOQ	1000	200	pass	
n-Butane	< LOQ	1000	200	pass		n-Heptane	< LOQ	1000	200	pass	
n-Hexane	< LOQ	60.0	30.0	pass		n-Pentane	< LOQ	1000	200	pass	
o-Xylene	< LOQ	430	200	pass		Pentanes (sum)	< LOQ	1000	600	pass	
Propane	< LOQ	1000	200	pass		Toluene	< LOQ	180	100	pass	
Total Xylenes	< LOQ	430	400	pass							



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Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod)											
Units mg/kg Batch 2206539 Analyze 08/03/22 04:14 PM											
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.25	0.070	pass		Acephate	< LOQ	0.050	0.020	pass	
Acequinocyl	< LOQ	0.030	0.025	pass		Acetamidrid	< LOQ	0.050	0.050	pass	
Aldicarb	< LOQ	0.50	0.100	pass		Allethrin	< LOQ	0.10	0.100	pass	
Atrazine	< LOQ	0.0250	0.025	pass		Azadirachtin	< LOQ	1.0	0.500	pass	
Azoxystrobin	< LOQ	0.010	0.010	pass		Benzovindiflupyr	< LOQ	0.010	0.010	pass	
Bifenazate	< LOQ	0.010	0.010	pass		Bifenthrin	< LOQ	1.0	0.100	pass	
Boscalid	< LOQ	0.010	0.010	pass		Buprofezin	< LOQ	0.020	0.010	pass	
Carbaryl	< LOQ	0.025	0.025	pass		Carbofuran	< LOQ	0.010	0.010	pass	
Chlorantraniliprole	< LOQ	0.020	0.010	pass		Chlorfenapyr	< LOQ	1.5	0.100	pass	
Chlorpyrifos	< LOQ	0.50	0.010	pass		Clofentezine	< LOQ	0.010	0.010	pass	
Clothianidin	< LOQ	0.025	0.025	pass		Coumaphos	< LOQ	0.010	0.010	pass	
Cyantraniliprole	< LOQ	0.010	0.010	pass		Cyfluthrin	< LOQ	0.20	0.200	pass	
Cyhalothrin,lambda	< LOQ	0.0200	0.250	pass		Cypermethrin	< LOQ	0.30	0.300	pass	
Cyprodinil	< LOQ	0.010	0.010	pass		Daminozide	< LOQ	0.10	0.050	pass	
Deltamethrin	< LOQ	0.50	0.500	pass		Diazinon	< LOQ	0.020	0.010	pass	
Dichlorvos	< LOQ	0.050	0.050	pass		Dimethoate	< LOQ	0.010	0.010	pass	
Dimethomorph	< LOQ	0.050	0.050	pass		Dinotefuran	< LOQ	0.050	0.050	pass	
Diuron	< LOQ	0.125	0.125	pass		Dodemorph	< LOQ	0.050	0.050	pass	
Endosulfan I (alpha)	< LOQ	2.5	0.050	pass		Endosulfan II (beta)	< LOQ	2.5	0.050	pass	
Endosulfan sulfate	< LOQ	2.5	0.050	pass		Ethoprophos	< LOQ	0.010	0.010	pass	
Etofenprox	< LOQ	0.050	0.010	pass		Etozazole	< LOQ	0.020	0.010	pass	
Etridiazole	< LOQ	0.15	0.050	pass		Fenhexamid	< LOQ	0.13	0.100	pass	
Fenoxycarb	< LOQ	0.010	0.010	pass		Fenpyroximate	< LOQ	0.020	0.020	pass	
Fensulfothion	< LOQ	0.010	0.010	pass		Fenthion	< LOQ	0.010	0.010	pass	
Fenvalerate	< LOQ		0.200			Fipronil	< LOQ	0.010	0.010	pass	
Flonicamid	< LOQ	0.025	0.025	pass		Fludioxonil	< LOQ	0.010	0.010	pass	
Fluopyram	< LOQ	0.010	0.010	pass		Hexythiazox	< LOQ	0.010	0.010	pass	
Imazalil	< LOQ	0.010	0.010	pass		Imidacloprid	< LOQ	0.010	0.010	pass	
Iprodione	< LOQ	0.50	0.500	pass		Kinoprene	< LOQ	1.3	0.200	pass	
Kresoxim-methyl	< LOQ	0.15	0.010	pass		Malathion	< LOQ	0.010	0.010	pass	
Metalaxyl	< LOQ	0.010	0.010	pass		Methiocarb	< LOQ	0.010	0.010	pass	
Methomyl	< LOQ	0.025	0.025	pass		Methoprene	< LOQ	2.0	1.00	pass	
Mevinphos	< LOQ	0.025	0.025	pass		MGK-264	< LOQ	0.050	0.050	pass	
Myclobutanil	< LOQ	0.010	0.010	pass		Naled	< LOQ	0.10	0.100	pass	
Novaluron	< LOQ	0.025	0.025	pass		Oxamyl	< LOQ	1.5	0.500	pass	
Paclobotrazole	< LOQ	0.010	0.010	pass		Parathion-Methyl	< LOQ	0.050	0.030	pass	
Permethrin	< LOQ	0.50	0.040	pass		Phenothrin	< LOQ	0.050	0.025	pass	
Phosmet	< LOQ	0.020	0.010	pass		Piperonyl butoxide	< LOQ	1.3	0.200	pass	
Pirimicarb	< LOQ	0.010	0.010	pass		Prallethrin	< LOQ	0.050	0.050	pass	
Propiconazole	< LOQ	0.10	0.010	pass		Propoxur	< LOQ	0.010	0.010	pass	
Pyraclostrobin	< LOQ	0.010	0.010	pass		Pyrethrins (total)	< LOQ	0.050	0.025	pass	
Pyridaben	< LOQ	0.020	0.020	pass		Pyriproxyfen	< LOQ	0.0100	0.010	pass	
Quintozene	< LOQ	0.020	0.020	pass		Resmethrin	< LOQ	0.050	0.020	pass	
Spinetoram	< LOQ	0.010	0.010	pass		Spinosad	< LOQ	0.010	0.010	pass	
Spirodiclofen	< LOQ	0.25	0.250	pass		Spiromesifen	< LOQ	3.0	0.030	pass	
Spirotetramat	< LOQ	0.010	0.010	pass		Spiroxamine	< LOQ	0.10	0.010	pass	



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Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod)						Units mg/kg	Batch 2206539	Analyze 08/03/22 04:14 PM			
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Tebuconazole	< LOQ	0.010	0.010	pass		Tebufenozide	< LOQ	0.010	0.010	pass	
Teflubenzuron	< LOQ	0.025	0.025	pass		Tetrachlorvinphos	< LOQ	0.010	0.010	pass	
Tetramethrin	< LOQ	0.10	0.050	pass		Thiacloprid	< LOQ	0.010	0.010	pass	
Thiamethoxam	< LOQ	0.010	0.010	pass		Thiophanate-Methyl	< LOQ	0.050	0.030	pass	
Trifloxystrobin	< LOQ	0.010	0.010	pass							

Metals										
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method		Status	Notes	
Arsenic	< LOQ	1.50	mg/kg	0.0906	2206603	08/04/22	AOAC 2013.06 (mod.) ^p	pass		
Cadmium	< LOQ	0.50	mg/kg	0.0906	2206603	08/04/22	AOAC 2013.06 (mod.) ^p	pass	Q1	
Lead	< LOQ	0.50	mg/kg	0.0906	2206603	08/04/22	AOAC 2013.06 (mod.) ^p	pass		
Mercury	< LOQ	1.50	mg/kg	0.0453	2206603	08/04/22	AOAC 2013.06 (mod.) ^p	pass		

Mycotoxins										
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method		Status	Notes	
Aflatoxin B2 [‡]	< LOQ	5.00	µg/kg	5.00	2206530	08/03/22	AOAC 2007.01 & EN 15662 (mod) ^p	pass		
Aflatoxin B1 [‡]	< LOQ	5.00	µg/kg	5.00	2206530	08/03/22	AOAC 2007.01 & EN 15662 (mod) ^p	pass		
Aflatoxin G1 [‡]	< LOQ	5.00	µg/kg	5.00	2206530	08/03/22	AOAC 2007.01 & EN 15662 (mod) ^p	pass		
Aflatoxin G2 [‡]	< LOQ	5.00	µg/kg	5.00	2206530	08/03/22	AOAC 2007.01 & EN 15662 (mod) ^p	pass		
Ochratoxin A [‡]	< LOQ	5.00	µg/kg	5.00	2206530	08/03/22	AOAC 2007.01 & EN 15662 (mod) ^p	pass		
Total Aflatoxins [‡]	0.000		µg/kg	20.0		08/05/22	AOAC 2007.01 & EN 15662 (mod) ^p			

Nutrition										
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method		Status	Notes	
Density	0.9473		g/ml	0.1000	2206600	08/04/22	DMA 35™			



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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, 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.

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

Units of Measure

- g = g
- g/ml = Gram per milliliter
- mg/1ml = Milligram per 1ml
- mg/30ml = Milligram per 30ml
- % = Percentage of sample
- % wt = $\mu\text{g/g}$ divided by 10,000

Approved Signatory

Derrick Tanner
General Manager