



Product identity: CBD 1200mg Lot 9339A
Laboratory ID: 19-010752-0002

Client/Metric ID:
Sample Date:

Summary

Potency:

Analyte	Result	Limits	Units	LOQ	
CBC [†]	0.198		%	0.00	CBD-Total per 1g 4.00 mg/1g
CBD	0.400		%	0.00	THC-Total per 1g 1.81 mg/1g
CBDV [†]	0.0282		%	0.00	CBD-Total per 30g 120 mg/30g
CBG [†]	0.146		%	0.00	THC-Total per 30g 54.3 mg/30g
Δ9-THC	0.181		%	0.00	(Reported in milligrams per serving)
Analyte per 1g	Result	Limits	Units	LOQ	
CBC per 1g [†]	1.98		mg/1g	0.03	
CBD per 1g	4.00		mg/1g	0.03	
CBDV per 1g [†]	0.282		mg/1g	0.03	
CBG per 1g [†]	1.46		mg/1g	0.03	
Δ9-THC per 1g	1.81		mg/1g	0.03	
Analyte per 30g	Result	Limits	Units	LOQ	
CBC per 30g [†]	59.4		mg/30g	1.00	
CBD per 30g	120		mg/30g	1.00	
CBDV per 30g [†]	8.46		mg/30g	1.00	
CBG per 30g [†]	43.8		mg/30g	1.00	
Δ9-THC per 30g	54.3		mg/30g	1.00	

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
β-Caryophyllene [†]	0.0384	100.00%	Total Terpenes [†]	0.0384	100.00%

Metals:

Analyte	Result	Limits
Lead	0.0701	

Microbiology:

Less than LOQ for all analytes.

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Customer: Trace Minerals Research

Product identity: CBD 1200mg Lot 9339A

Client/Metric ID: .

Sample Date:

Laboratory ID: 19-010752-0002

Relinquished by: Received By Mail

Temp: 25.2 °C

Serving Size #1: 1 g

Serving Size #2: 30 g



Sample Results

Potency		Batch: 1908221					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC†	0.198		%	0.0032	09/10/19	J AOAC 2015 V98-6	
CBC-A†	< LOQ		%	0.0032	09/10/19	J AOAC 2015 V98-6	
CBC-Total†	0.198		%	0.0060	09/16/19	J AOAC 2015 V98-6	
CBD	0.400		%	0.0032	09/10/19	J AOAC 2015 V98-6	
CBD-A	< LOQ		%	0.0032	09/10/19	J AOAC 2015 V98-6	
CBD-Total	0.400		%	0.0060	09/16/19	J AOAC 2015 V98-6	
CBDV†	0.0282		%	0.0032	09/10/19	J AOAC 2015 V98-6	
CBDV-A†	< LOQ		%	0.0032	09/10/19	J AOAC 2015 V98-6	
CBDV-Total†	0.0282		%	0.0060	09/16/19	J AOAC 2015 V98-6	
CBG†	0.146		%	0.0032	09/10/19	J AOAC 2015 V98-6	
CBG-A†	< LOQ		%	0.0032	09/10/19	J AOAC 2015 V98-6	
CBG-Total†	0.146		%	0.0060	09/16/19	J AOAC 2015 V98-6	
CBL†	< LOQ		%	0.0032	09/10/19	J AOAC 2015 V98-6	
CBN	< LOQ		%	0.0032	09/10/19	J AOAC 2015 V98-6	
Δ8-THC†	< LOQ		%	0.0032	09/10/19	J AOAC 2015 V98-6	
Δ9-THC	0.181		%	0.0032	09/10/19	J AOAC 2015 V98-6	
THC-A	< LOQ		%	0.0032	09/10/19	J AOAC 2015 V98-6	
THC-Total	0.181		%	0.0060	09/16/19	J AOAC 2015 V98-6	
THCV†	< LOQ		%	0.0032	09/10/19	J AOAC 2015 V98-6	
THCV-A†	< LOQ		%	0.0032	09/10/19	J AOAC 2015 V98-6	
THCV-Total†	0.000		%	0.0060	09/16/19	J AOAC 2015 V98-6	

Potency per 1g		Batch: 1908221					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC per 1g†	1.98		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
CBC-A per 1g†	< LOQ		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
CBC-Total per 1g†	1.98		mg/1g	0.0626	09/16/19	J AOAC 2015 V98-6	
CBD per 1g	4.00		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
CBD-A per 1g	< LOQ		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	

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Potency per 1g Batch: 1908221

Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBD-Total per 1g	4.00		mg/1g	0.0626	09/16/19	J AOAC 2015 V98-6	
CBDV per 1g [†]	0.282		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
CBDV-A per 1g [†]	< LOQ		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
CBDV-Total per 1g [†]	0.282		mg/1g	0.0622	09/16/19	J AOAC 2015 V98-6	
CBG per 1g [†]	1.46		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
CBG-A per 1g [†]	< LOQ		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
CBG-Total per 1g [†]	1.46		mg/1g	0.0626	09/16/19	J AOAC 2015 V98-6	
CBL per 1g [†]	< LOQ		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
CBN per 1g	< LOQ		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
Δ8-THC per 1g [†]	< LOQ		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
Δ9-THC per 1g	1.81		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
THC-A per 1g	< LOQ		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
THC-Total per 1g	1.81		mg/1g	0.0626	09/16/19	J AOAC 2015 V98-6	
THCV per 1g [†]	< LOQ		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
THCV-A per 1g [†]	< LOQ		mg/1g	0.0333	09/16/19	J AOAC 2015 V98-6	
THCV-Total per 1g [†]	< LOQ		mg/1g	0.0622	09/16/19	J AOAC 2015 V98-6	

Potency per 30g Batch: 1908221

Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC per 30g [†]	59.4		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
CBC-A per 30g [†]	< LOQ		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
CBC-Total per 30g [†]	59.4		mg/30g	1.88	09/16/19	J AOAC 2015 V98-6	
CBD per 30g	120		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
CBD-A per 30g	< LOQ		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
CBD-Total per 30g	120		mg/30g	1.88	09/16/19	J AOAC 2015 V98-6	
CBDV per 30g [†]	8.46		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
CBDV-A per 30g [†]	< LOQ		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
CBDV-Total per 30g [†]	8.46		mg/30g	1.87	09/16/19	J AOAC 2015 V98-6	
CBG per 30g [†]	43.8		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
CBG-A per 30g [†]	< LOQ		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
CBG-Total per 30g [†]	43.8		mg/30g	1.88	09/16/19	J AOAC 2015 V98-6	
CBL per 30g [†]	< LOQ		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
CBN per 30g	< LOQ		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
Δ8-THC per 30g [†]	< LOQ		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
Δ9-THC per 30g	54.3		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
THC-A per 30g	< LOQ		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
THC-Total per 30g	54.3		mg/30g	1.88	09/16/19	J AOAC 2015 V98-6	
THCV per 30g [†]	< LOQ		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
THCV-A per 30g [†]	< LOQ		mg/30g	1.000	09/16/19	J AOAC 2015 V98-6	
THCV-Total per 30g [†]	< LOQ		mg/30g	1.87	09/16/19	J AOAC 2015 V98-6	

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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
E.coli	< LOQ		cfu/g	10	1908077	09/11/19	AOAC 991.14 (Petrifilm)	X
Total Coliforms	< LOQ		cfu/g	10	1908077	09/11/19	AOAC 991.14 (Petrifilm)	X
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	1908075	09/11/19	AOAC 2014.05 (RAPID)	X
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	1908075	09/11/19	AOAC 2014.05 (RAPID)	X

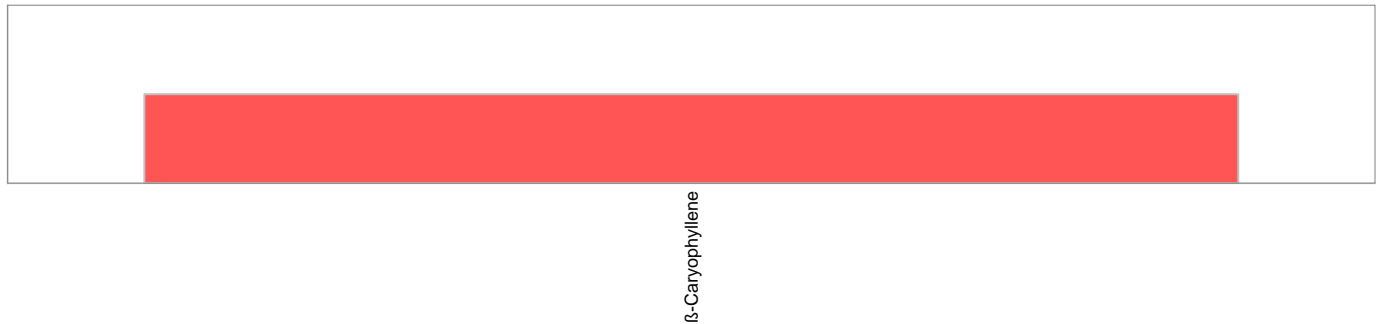
Solvents						Method EPA5021A		Units µg/g		Batch 1908072		Analyze 09/09/19 11:51 AM	
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes		
1,4-Dioxane	< LOQ	380	100	pass		2-Butanol	< LOQ	5000	200	pass			
2-Ethoxyethanol	< LOQ	160	30.0	pass		2-Methylbutane	< LOQ		200				
2-Methylpentane	< 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			

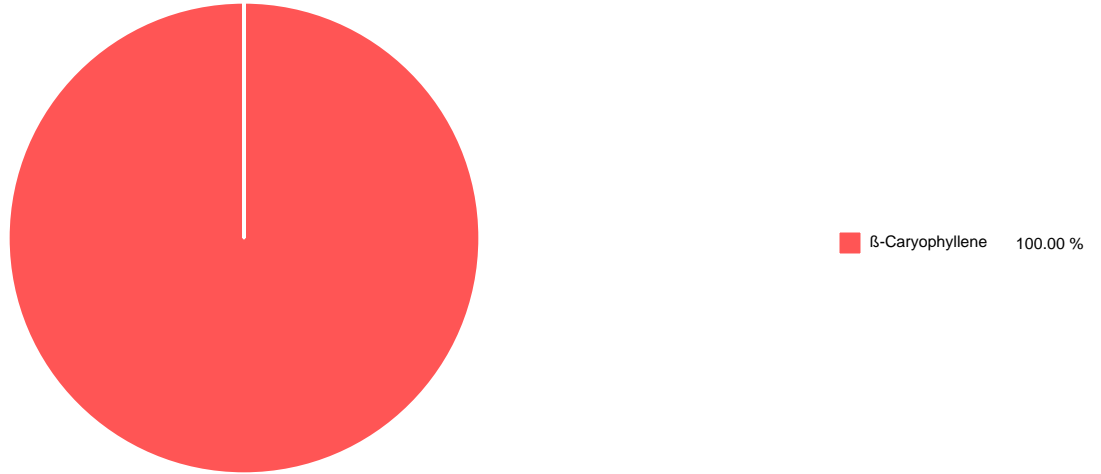


Pesticides					Method AOAC 2007.01 & EN 15662 (mod)	Units mg/kg	Batch 1908114	Analyze 09/10/19 01:46 PM				
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes	
Abamectin	< LOQ	0.50	0.250	pass		Acephate	< LOQ	0.40	0.250	pass		
Acequinocyl	< LOQ	2.0	1.00	pass		Acetamiprid	< LOQ	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	0.100	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 (incl.	< 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	0.100	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								



Terpenes				Method J AOAC 2015 V98-6	Units %	Batch 1908108	Analyze 09/10/19 11:56 AM		
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
β-Caryophyllene†	0.0384	0.020	100.00%		α-Bisabolol†	< LOQ	0.020	0.00%	
(-)-α-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%	
α-cedrene†	< LOQ	0.020	0.00%		α-phellandrene†	< LOQ	0.020	0.00%	
α-pinene†	< LOQ	0.020	0.00%		α-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%		Eucalyptol†	< LOQ	0.020	0.00%	
farnesene†	< LOQ	0.020	0.00%		γ-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%		Menthol†	< 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-Myrcene†	< LOQ	0.020	0.00%		Terpinolene†	< LOQ	0.020	0.00%	
trans-β-Ocimene†	< LOQ	0.013	0.00%		valencene†	< LOQ	0.020	0.00%	
Total Terpenes	0.0384								





Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Arsenic	< LOQ		mg/kg	0.0493	1908223	09/12/19	AOAC 2013.06 (mod.)	X
Cadmium	< LOQ		mg/kg	0.0493	1908223	09/12/19	AOAC 2013.06 (mod.)	X
Lead	0.0701		mg/kg	0.0493	1908223	09/12/19	AOAC 2013.06 (mod.)	X
Mercury	< LOQ		mg/kg	0.0246	1908240	09/12/19	AOAC 2013.06 (mod.)	X

Mycotoxins

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Aflatoxin B1 [†]	< LOQ		µg/kg	5.00	1908119	09/10/19	AOAC 2007.01 & EN 15662	
Aflatoxin B2 [†]	< LOQ		µg/kg	5.00	1908119	09/10/19	AOAC 2007.01 & EN 15662	
Aflatoxin G1 [†]	< LOQ		µg/kg	5.00	1908119	09/10/19	AOAC 2007.01 & EN 15662	
Aflatoxin G2 [†]	< LOQ		µg/kg	5.00	1908119	09/10/19	AOAC 2007.01 & EN 15662	
Deoxynivalenol [†]	< LOQ		µg/kg	200	1908119	09/10/19	AOAC 2007.01 & EN 15662	
Fumonisin B1 [†]	< LOQ		µg/kg	200	1908119	09/10/19	AOAC 2007.01 & EN 15662	
Fumonisin B2 [†]	< LOQ		µg/kg	400	1908119	09/10/19	AOAC 2007.01 & EN 15662	
HT2-Toxin [†]	< LOQ		µg/kg	40.0	1908119	09/10/19	AOAC 2007.01 & EN 15662	
Nivalenol [†]	< LOQ		µg/kg	400	1908119	09/10/19	AOAC 2007.01 & EN 15662	
Ochratoxin A [†]	< LOQ		µg/kg	5.00	1908119	09/10/19	AOAC 2007.01 & EN 15662	
Ochratoxin B [†]	< LOQ		µg/kg	2.00	1908119	09/10/19	AOAC 2007.01 & EN 15662	
T2-Toxin [†]	< LOQ		µg/kg	20.0	1908119	09/10/19	AOAC 2007.01 & EN 15662	
Zearalenone [†]	< LOQ		µg/kg	200	1908119	09/10/19	AOAC 2007.01 & EN 15662	



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