Columbia LABORATORIES
A Tentamus Company

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

Report Number: 25-000055/D001.R001
Report Date: 01/16/2025
ORELAP#: OR100028
Purchase Order:
Received: 01/03/25 10:43

This is an amended version of report# 25-000055/D001.R000.
Reason: Updated serving size

Customer: Nightingale Remedies
Product identity: Topical CBD Cream
Metrc ID: .
Metrc Source ID:
Laboratory ID: 25-000055-0001

Summary

Potency:

Analyte per 52g	Result	Limits	Units	Status
CBD per 52g	478		mg/52g	

CBD-Total per Serving Size 478 mg/52g

Delta-9-THC-Total per <LOQ

(Reported in milligrams per serving)

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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Customer: Nightingale Remedies

Product identity: Topical CBD Cream
Metrc ID: .
Metrc Source ID:
Material: Cannabinoid Topical
Sample Date:
Laboratory ID: 25-000055-0001
Evidence of Cooling: No
Temp: 21.2 °C
Serving Size #1: 52 g

Sample Results

Potency per 52g **Method:** J AOAC 2015 V98-6 (mod)[þ] **Units** mg/se **Batch:** 2500162 **Analyze:** 1/9/25 3:10:00 AM

Analyte	Result	Limits	Units	LOQ	Notes
CBD per 52g	478		mg/52g	1.69	
CBD-A per 52g[⊥]	< LOQ		mg/52g	1.53	
CBD-Total per 52g[⊥]	478		mg/52g	3.17	
CBG per 52g	< LOQ		mg/52g	1.53	
CBG-A per 52g	< LOQ		mg/52g	1.53	
CBG-Total per 52g	< LOQ		mg/52g	2.85	
CBN per 52g	< LOQ		mg/52g	1.53	
Δ10-THC-9R per 52g	< LOQ		mg/52g	1.53	
Δ10-THC-9S per 52g	< LOQ		mg/52g	1.53	
Δ10-THC-Total per 52g	< LOQ		mg/52g	3.06	
Δ8-THC per 52g[⊥]	< LOQ		mg/52g	1.53	
Δ9-THC per 52g[⊥]	< LOQ		mg/52g	1.53	
Δ9-THC-Total per 52g	< LOQ		mg/52g	2.87	
THC-A per 52g[⊥]	< LOQ		mg/52g	1.53	

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2500053	01/07/25	AOAC 2014.05 (RAPID)		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2500053	01/07/25	AOAC 2014.05 (RAPID)		

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Solvents **Method:** Residual Solvents by HS-GC-MS^{b} **Units** µg/g **Batch** 2500106 **Analyze** 01/07/25 12:18 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,4-Dioxane$^{\perp}$	< LOQ	380	100	pass		2-Butanol$^{\perp}$	< LOQ	5000	200	pass	
2-Ethoxyethanol$^{\perp}$	< LOQ	160	30.0	pass		2-Methylbutane (Isopentane)$^{\perp}$	< LOQ		200		
2-Methylpentane$^{\perp}$	< LOQ		30.0			2-Propanol (IPA)$^{\perp}$	< LOQ	5000	200	pass	
2,2-Dimethylbutane$^{\perp}$	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)$^{\perp}$	< LOQ		200		
2,3-Dimethylbutane$^{\perp}$	< LOQ		30.0			3-Methylpentane$^{\perp}$	< LOQ		30.0		
Acetone$^{\perp}$	< LOQ	5000	200	pass		Acetonitrile$^{\perp}$	< LOQ	410	100	pass	
Benzene$^{\perp}$	< LOQ	2.00	1.00	pass		Butanes (sum)$^{\perp}$	< LOQ	5000	400	pass	
Cyclohexane$^{\perp}$	< LOQ	3880	200	pass		Ethyl acetate$^{\perp}$	< LOQ	5000	200	pass	
Ethyl benzene	< LOQ		200			Ethyl ether$^{\perp}$	< LOQ	5000	200	pass	
Ethylene glycol$^{\perp}$	< LOQ	620	200	pass		Ethylene oxide$^{\perp}$	< LOQ	50.0	20.0	pass	
Hexanes (sum)$^{\perp}$	< LOQ	290	150	pass		Isopropyl acetate$^{\perp}$	< LOQ	5000	200	pass	
Isopropylbenzene (Cumene)$^{\perp}$	< LOQ	70.0	30.0	pass		m,p-Xylene$^{\perp}$	< LOQ		200		
Methanol$^{\perp}$	< LOQ	3000	200	pass		Methylene chloride$^{\perp}$	< LOQ	600	60.0	pass	
Methylpropane (Isobutane)$^{\perp}$	< LOQ		200			n-Butane$^{\perp}$	< LOQ		200		
n-Heptane$^{\perp}$	< LOQ	5000	200	pass		n-Hexane$^{\perp}$	< LOQ		30.0		
n-Pentane$^{\perp}$	< LOQ		200			o-Xylene$^{\perp}$	< LOQ		200		
Pentanes (sum)	< LOQ	5000	600	pass		Propane	< LOQ	5000	200	pass	
Tetrahydrofuran$^{\perp}$	< LOQ	720	100	pass		Toluene$^{\perp}$	< LOQ	890	100	pass	
Total Xylenes$^{\perp}$	< LOQ		400			Total Xylenes and Ethyl benzene	< LOQ	2170	600	pass	

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Pesticides

Method: AOAC 2007.01 & EN 15662 (mod) **Units** mg/kg **Batch** 2500085 **Analyze** 01/06/25 01:36 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin⊥	< LOQ	0.50	0.250	pass		Acephate⊥	< LOQ	0.40	0.200	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-ethyl⊥	< LOQ	0.20	0.100	pass	
Clofentezine⊥	< LOQ	0.20	0.100	pass		Cyfluthrin (sum)⊥	< LOQ	1.0	0.500	pass	
Cypermethrin and	< 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	0.100	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							

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Arsenic⊥	< LOQ	0.200	mg/kg	0.0930	2500105	01/07/25	AOAC 2013.06 (mod.)þ	pass	
Cadmium⊥	< LOQ	0.200	mg/kg	0.0930	2500105	01/07/25	AOAC 2013.06 (mod.)þ	pass	
Lead⊥	< LOQ	0.500	mg/kg	0.0930	2500105	01/07/25	AOAC 2013.06 (mod.)þ	pass	
Mercury⊥	< LOQ	0.100	mg/kg	0.0465	2500105	01/07/25	AOAC 2013.06 (mod.)þ	pass	

Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Lead	*pending*						JETRO		

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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.

þ = ISO/IEC 17025:2017 accredited method.
⊥ = TNI accredited analyte.

Units of Measure

cfu/g = Colony forming units per gram
g = Gram
µg/g = Microgram per gram
mg/kg = Milligram per kilogram = parts per million (ppm)
mg/52g = Milligram per 52g
% = Percentage of sample
% wt = µg/g divided by 10,000

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Hemp & Cannabis Chain of Custody

Nightingale-Remedies-1735929732

Company Details
Company: Nightingale Remedies
Contact: Patrick Brennan
Street Address: 1401 NE Rosa Parks Way
City, State, Zip: Portland, OR 97211
Email: patrick@nightingale-remedies.com
Contact Phone: 3105261174

Billing Information
Billing Email: patrick@nightingale-remedies.com

Project Details
Turnaround Time: 5 Business Days | Reg. For Micro Testing | Standard
Relinquishment | Sampling, Courier & Shipping Options: Drop Off at Laboratory

Receipt Information
Evidence of Cooling?: No
Sample Condition: Satisfactory

#	Sample Name	Material	Amount Provided	Reporting Unit	Serving Size	Specifications	Testing: H0014 – Potency Cannabis (Basic)	P2120 – Pesticides (OR – Cannabis)	H0008 – Residual Solvents (Cannabis – Oregon)	M283 – RAPID Yeast and Mold Count (RYM) Petrifilm	H0013 – Cannabis Heavy Metals Profile OR
1	Topical CBD Cream	Cannabinoid Extract	47 g	mg/serving	47 g	Report per container 47g weight	✓	✓	✓	✓	✓

Relinquished By	Date	Time	Received By	Date	Time	Received Temp., °C	IR Therm. CL#
Patrick Brennan	01/03/2025	10:42	rbs	01/03/2025	10:43	21.2	CL-0843

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of services associated with this COC. By signing "Relinquished by" you are agreeing to these terms.

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Revision: 3 Document ID: 3120
Legacy ID: CFL-C21 Worksheet Validated 10/30/2020

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 **Units:** mg/Kg **Batch ID:** 2500085

Method Blank				Laboratory Control Sample					
Analyte	**Blank Result**	**Blank Limits**	**Notes**	**LCS Result**	**LCS Spike**	**LCS % Rec**	**Limits**		**Notes**
Abamectin	0.000	< 0.250		1.154	1.000	115.4	50.0	150	
Acephate	0.000	< 0.200		0.870	0.800	108.8	60.0	120	
Acequinocyl	0.000	< 1.000		3.897	4.000	97.4	40.0	160	
Acetamiprid	0.000	< 0.100		0.421	0.400	105.2	60.0	120	
Aldicarb	0.000	< 0.200		0.953	0.800	119.1	60.0	120	
Azoxystrobin	0.000	< 0.100		0.410	0.400	102.4	60.0	120	
Bifenazate	0.000	< 0.100		1.000	0.400	***250.0***	60.0	120	Q7, deg
Bifenthrin	0.000	< 0.100		0.403	0.400	100.8	50.0	150	
Boscalid	0.000	< 0.200		0.887	0.800	110.9	60.0	120	
Carbaryl	0.000	< 0.100		0.408	0.400	101.9	60.0	120	
Carbofuran	0.000	< 0.100		0.407	0.400	101.7	60.0	120	
Chlorantraniliprole	0.000	< 0.100		0.430	0.400	107.5	60.0	120	
Chlorfenapyr	0.038	< 0.500		2.160	2.000	108.0	60.0	120	
Chlorpyrifos	0.005	< 0.100		0.369	0.400	92.3	60.0	120	
Clofentezine	0.000	< 0.100		0.335	0.400	83.7	60.0	120	
Cyfluthrin	0.000	< 0.500		1.899	2.000	94.9	50.0	150	
Cypermethrin	0.000	< 0.500		1.862	2.000	93.1	50.0	150	
Daminozide	0.000	< 0.500		0.899	2.000	***45.0***	60.0	120	Q1
Diazinon	0.000	< 0.100		0.525	0.400	***131.2***	60.0	120	Q7
Dichlorvos	0.000	< 0.500		1.853	2.000	92.6	60.0	120	
Dimethoate	0.000	< 0.100		0.447	0.400	111.8	60.0	120	
Ethoprophos	0.000	< 0.100		0.394	0.400	98.6	60.0	120	
Etofenprox	0.000	< 0.200		0.849	0.800	106.1	50.0	150	
Etoxazole	0.000	< 0.100		0.534	0.400	***133.5***	60.0	120	Q7
Fenoxycarb	0.000	< 0.100		0.467	0.400	116.8	60.0	120	
Fenpyroximate	0.000	< 0.200		0.798	0.800	99.8	60.0	120	
Fipronil	0.000	< 0.200		0.788	0.800	98.5	60.0	120	
Flonicamid	0.000	< 0.250		1.127	1.000	112.7	60.0	120	
Fludioxonil	0.000	< 0.200		0.806	0.800	100.7	50.0	150	
Hexythiazox	0.000	< 0.250		1.130	1.000	113.0	60.0	120	
Imazalil	0.000	< 0.100		0.492	0.400	***122.9***	60.0	120	Q7
Imidacloprid	0.000	< 0.200		0.882	0.800	110.3	60.0	120	
Kresoxim-methyl	0.000	< 0.200		0.926	0.800	115.7	60.0	120	
Malathion	0.000	< 0.100		0.482	0.400	***120.6***	60.0	120	Q7
Metalaxyl	0.000	< 0.100		0.478	0.400	119.6	60.0	120	
Methiocarb	0.000	< 0.100		0.391	0.400	97.8	60.0	120	
Methomyl	0.000	< 0.200		0.883	0.800	110.4	60.0	120	
MGK-264	0.000	< 0.100		0.450	0.400	112.6	50.0	150	
Myclobutanil	0.000	< 0.100		0.479	0.400	119.7	60.0	120	
Naled	0.000	< 0.250		0.941	1.000	94.1	50.0	150	
Oxamyl	0.000	< 0.500		2.194	2.000	109.7	60.0	120	
Paclobutrazole	0.000	< 0.200		0.921	0.800	115.1	60.0	120	
Parathion-Methyl	0.000	< 0.100		0.468	0.400	117.0	50.0	150	
Permethrin	0.000	< 0.100		0.412	0.400	103.1	50.0	150	
Phosmet	0.000	< 0.100		0.456	0.400	113.9	50.0	150	
Piperonyl butoxide	0.000	< 0.500		2.232	2.000	111.6	60.0	120	
Prallethrin	0.000	< 0.100		0.466	0.400	116.6	60.0	120	
Propiconazole	0.000	< 0.200		0.940	0.800	117.4	60.0	120	
Propoxur	0.000	< 0.100		0.399	0.400	99.8	60.0	120	
Pyrethrin (Summe)	0.000	< 0.100		0.507	0.488	103.8	60.0	120	
Pyridaben	0.000	< 0.100		0.460	0.400	114.9	50.0	150	
Spinosad	0.000	< 0.100		0.404	0.388	104.1	50.0	150	
Spiromesifen	0.000	< 0.100		0.439	0.400	109.8	60.0	120	
Spirotetramat	0.000	< 0.100		0.443	0.400	110.7	60.0	120	
Spiroxamine	0.000	< 0.200		0.956	0.800	119.5	60.0	120	

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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 **Units:** mg/Kg **Batch ID:** 2500085

Matrix Spike/Matrix Spike Duplicate Recoveries **Sample ID: 25-000050-0001**

Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.019	0.962	0.960	1.000	0.2%	< 30	94.3%	94.1%	50 - 150	
Acephate	0.000	0.835	0.780	0.800	6.7%	< 30	104.3%	97.6%	50 - 150	
Acequinocyl	0.000	3.864	0.050	4.000	194.9%	< 30	96.6%	1.3%	50 - 150	R, Q
Acetamiprid	0.000	0.396	0.390	0.400	1.5%	< 30	99.1%	97.6%	50 - 150	
Aldicarb	0.000	0.894	0.867	0.800	3.1%	< 30	111.8%	108.3%	50 - 150	
Azoxystrobin	0.000	0.368	0.362	0.400	1.6%	< 30	91.9%	90.5%	50 - 150	
Bifenazate	0.000	0.929	0.930	0.400	0.1%	< 30	232.2%	232.5%	50 - 150	Q, deg
Bifenthrin	0.000	0.327	0.324	0.400	1.0%	< 30	81.9%	81.0%	50 - 150	
Boscalid	0.000	0.828	0.844	0.800	1.8%	< 30	103.6%	105.5%	50 - 150	
Carbaryl	0.000	0.373	0.369	0.400	1.0%	< 30	93.2%	92.3%	50 - 150	
Carbofuran	0.000	0.377	0.381	0.400	1.2%	< 30	94.1%	95.3%	50 - 150	
Chlorantraniliprole	0.000	0.402	0.412	0.400	2.6%	< 30	100.4%	103.1%	50 - 150	
Chlorfenapyr	0.107	2.069	2.175	2.000	5.3%	< 30	98.1%	103.4%	50 - 150	
Chlorpyrifos	0.007	0.321	0.308	0.400	4.1%	< 30	78.6%	75.4%	50 - 150	
Clofentezine	0.000	0.449	0.442	0.400	1.5%	< 30	112.2%	110.5%	50 - 150	
Cyfluthrin	0.000	1.939	1.993	2.000	2.7%	< 30	97.0%	99.7%	30 - 150	
Cypermethrin	0.003	1.251	1.148	2.000	8.6%	< 30	62.4%	57.2%	50 - 150	
Daminozide	0.000	0.931	0.828	2.000	11.7%	< 30	46.6%	41.4%	30 - 150	
Diazinon	0.000	0.486	0.501	0.400	3.0%	< 30	121.6%	125.3%	50 - 150	
Dichlorvos	0.000	1.723	1.717	2.000	0.4%	< 30	86.2%	85.8%	50 - 150	
Dimethoate	0.000	0.427	0.416	0.400	2.6%	< 30	106.8%	104.0%	50 - 150	
Ethoprophos	0.000	0.358	0.358	0.400	0.0%	< 30	89.6%	89.6%	50 - 150	
Etofenprox	0.000	0.616	0.493	0.800	22.3%	< 30	77.0%	61.6%	50 - 150	
Etoxazole	0.000	0.442	0.439	0.400	0.6%	< 30	110.4%	109.8%	50 - 150	
Fenoxycarb	0.000	0.432	0.430	0.400	0.5%	< 30	107.9%	107.4%	50 - 150	
Fenpyroximate	0.000	0.708	0.681	0.800	3.8%	< 30	88.5%	85.1%	50 - 150	
Fipronil	0.000	0.718	0.700	0.800	2.5%	< 30	89.7%	87.5%	50 - 150	
Flonicamid	0.000	1.074	1.007	1.000	6.4%	< 30	107.4%	100.7%	50 - 150	
Fludioxonil	0.000	0.730	0.714	0.800	2.3%	< 30	91.2%	89.2%	50 - 150	
Hexythiazox	0.000	1.219	1.236	1.000	1.4%	< 30	121.9%	123.6%	50 - 150	
Imazalil	0.000	0.452	0.449	0.400	0.7%	< 30	113.0%	112.2%	50 - 150	
Imidacloprid	0.000	0.794	0.773	0.800	2.8%	< 30	99.3%	96.6%	50 - 150	
Kresoxim-methyl	0.000	0.849	0.928	0.800	8.8%	< 30	106.2%	116.0%	50 - 150	
Malathion	0.000	0.436	0.439	0.400	0.6%	< 30	109.1%	109.8%	50 - 150	
Metalaxyl	0.000	0.461	0.438	0.400	5.1%	< 30	115.2%	109.4%	50 - 150	
Methiocarb	0.000	0.363	0.353	0.400	2.7%	< 30	90.8%	88.4%	50 - 150	
Methomyl	0.000	0.816	0.759	0.800	7.3%	< 30	102.1%	94.9%	50 - 150	
MGK-264	0.000	0.420	0.407	0.400	3.2%	< 30	105.0%	101.7%	50 - 150	
Myclobutanil	0.000	0.449	0.423	0.400	5.8%	< 30	112.2%	105.8%	50 - 150	
Naled	0.000	0.849	0.849	1.000	0.1%	< 30	84.9%	84.9%	50 - 150	
Oxamyl	0.000	2.004	1.901	2.000	5.3%	< 30	100.2%	95.0%	50 - 150	
Paclobutrazole	0.000	0.860	0.797	0.800	7.6%	< 30	107.5%	99.6%	50 - 150	
Parathion-Methyl	0.000	0.405	0.400	0.400	1.2%	< 30	101.1%	99.9%	30 - 150	
Permethrin	0.000	0.410	0.360	0.400	12.9%	< 30	102.5%	90.1%	50 - 150	
Phosmet	0.000	0.438	0.431	0.400	1.7%	< 30	109.6%	107.8%	50 - 150	
Piperonyl butoxide	0.000	2.107	2.174	2.000	3.1%	< 30	105.3%	108.7%	50 - 150	
Prallethrin	0.000	0.430	0.431	0.400	0.4%	< 30	107.5%	107.8%	50 - 150	
Propiconazole	0.000	0.885	0.923	0.800	4.2%	< 30	110.7%	115.4%	50 - 150	
Propoxur	0.000	0.373	0.373	0.400	0.0%	< 30	93.2%	93.2%	50 - 150	
Pyrethrin (Summe)	0.001	0.470	0.434	0.488	7.9%	< 30	96.2%	88.9%	50 - 150	
Pyridaben	0.019	0.243	0.236	0.400	3.2%	< 30	56.1%	54.4%	50 - 150	
Spinosad	0.000	0.365	0.365	0.388	0.2%	< 30	94.0%	94.1%	50 - 150	
Spiromesifen	0.000	0.211	0.203	0.400	4.3%	< 30	52.9%	50.7%	50 - 150	
Spirotetramat	0.000	0.423	0.423	0.400	0.2%	< 30	105.6%	105.8%	50 - 150	
Spiroxamine	0.000	0.903	0.881	0.800	2.5%	< 30	112.8%	110.1%	50 - 150	

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 25-000055/D001.R001
Report Date: 01/16/2025
ORELAP#: OR100028
Purchase Order:
Received: 01/03/25 10:43

Revision: 2 Document ID: 7087
Legacy ID: CFL-E33Effective:

Laboratory Quality Control Results

Residual Solvents **Batch ID:** 2500106

Method Blank					Laboratory Control Sample							
Analyte	**Result**		**LOQ**	**Notes**	**Result**	**Spike**	**Units**	**% Rec**	**Limits**			**Notes**
Propane	ND	<	200		625	585	µg/g	106.8	60	-	120	
Isobutane	ND	<	200		794	770	µg/g	103.1	60	-	120	
Butane	ND	<	200		794	769	µg/g	103.3	60	-	120	
2,2-Dimethylpropane	ND	<	200		975	956	µg/g	102.0	60	-	120	
Methanol	ND	<	200		1670	1620	µg/g	103.1	60	-	120	
Ethylene Oxide	ND	<	30		58.9	57.7	µg/g	102.1	60	-	120	
2-Methylbutane	ND	<	200		1630	1640	µg/g	99.4	60	-	120	
Pentane	ND	<	200		1630	1640	µg/g	99.4	60	-	120	
Ethanol	ND	<	200		1650	1620	µg/g	101.9	70	-	130	
Ethyl Ether	ND	<	200		1650	1630	µg/g	101.2	60	-	120	
2,2-Dimethylbutane	ND	<	30		220	212	µg/g	103.8	60	-	120	
Acetone	ND	<	200		1670	1630	µg/g	102.5	60	-	120	
2-Propanol	ND	<	200		1660	1620	µg/g	102.5	60	-	120	
Ethyl Formate	ND	<	500		1190	1600	µg/g	74.4	70	-	130	
Acetonitrile	ND	<	100		507	504	µg/g	100.6	60	-	120	
Methyl Acetate	ND	<	500		1540	1600	µg/g	96.3	70	-	130	
2,3-Dimethylbutane	ND	<	30		197	189	µg/g	104.2	60	-	120	
Dichloromethane	ND	<	60		512	538	µg/g	95.2	60	-	120	
2-Methylpentane	ND	<	30		191	182	µg/g	104.9	60	-	120	
MTBE	ND	<	500		1530	1600	µg/g	95.6	70	-	130	
3-Methylpentane	ND	<	30		186	179	µg/g	103.9	60	-	120	
Hexane	ND	<	30		183	178	µg/g	102.8	60	-	120	
1-Propanol	ND	<	500		1530	1600	µg/g	95.6	70	-	130	
Methylethylketone	ND	<	500		1530	1600	µg/g	95.6	70	-	130	
Ethyl acetate	ND	<	200		1630	1620	µg/g	100.6	60	-	120	
2-Butanol	ND	<	200		1630	1620	µg/g	100.6	60	-	120	
Tetrahydrofuran	ND	<	100		524	511	µg/g	102.5	60	-	120	
Cyclohexane	ND	<	200		1640	1620	µg/g	101.2	60	-	120	
2-methyl-1-propanol	ND	<	500		1490	1600	µg/g	93.1	70	-	130	
Benzene	ND	<	1		6.01	6.03	µg/g	99.7	60	-	120	
Isopropyl Acetate	ND	<	200		1590	1620	µg/g	98.1	60	-	120	
Heptane	ND	<	200		1570	1620	µg/g	96.9	60	-	120	
1-Butanol	ND	<	500		1500	1600	µg/g	93.8	70	-	130	
Propyl Acetate	ND	<	500		1520	1610	µg/g	94.4	70	-	130	
1,4-Dioxane	ND	<	100		521	503	µg/g	103.6	60	-	120	
2-Ethoxyethanol	ND	<	30		177	176	µg/g	100.6	60	-	120	
Methylisobutylketone	ND	<	500		1520	1610	µg/g	94.4	70	-	130	
3-Methyl-1-butanol	ND	<	500		1490	1600	µg/g	93.1	70	-	130	
Ethylene Glycol	ND	<	200		485	501	µg/g	96.8	60	-	120	
Toluene	ND	<	100		530	543	µg/g	97.6	60	-	120	
Isobutyl Acetate	ND	<	500		1460	1600	µg/g	91.3	70	-	130	
1-Pentanol	ND	<	500		1450	1600	µg/g	90.6	70	-	130	
Butyl Acetate	ND	<	500		1420	1600	µg/g	88.8	70	-	130	
Ethylbenzene	ND	<	200		951	983	µg/g	96.7	60	-	120	
m,p-Xylene	ND	<	200		999	1030	µg/g	97.0	60	-	120	
o-Xylene	ND	<	200		949	979	µg/g	96.9	60	-	120	
Cumene	ND	<	30		177	183	µg/g	96.7	60	-	120	
Anisole	ND	<	500		1420	1610	µg/g	88.2	70	-	130	
DMSO	ND	<	500		1220	1600	µg/g	76.3	70	-	130	
1,2-dimethoxyethane	ND	<	50		154	164	µg/g	93.9	70	-	130	
Triethylamine	ND	<	500		1440	1600	µg/g	90.0	70	-	130	
N,N-dimethylformamide	ND	<	150		382	481	µg/g	79.4	70	-	130	
N,N-dimethylacetamide	ND	<	150		439	486	µg/g	90.3	70	-	130	
Pyridine	ND	<	50		138	168	µg/g	82.1	70	-	130	
Sulfolane	ND	<	50		104	165	µg/g	63.0	70	-	130	Q6
1,2-Dichloroethane	ND	<	1		0.937	1	µg/g	93.7	70	-	130	
Chloroform	ND	<	1		0.912	1	µg/g	91.2	70	-	130	
Trichloroethylene	ND	<	1		0.853	1	µg/g	85.3	70	-	130	
1,1-Dichloroethane	ND	<	1		0.879	1	µg/g	87.9	70	-	130	

Columbia LABORATORIES
A Tentamus Company

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503-254-1794

Report Number: 25-000055/D001.R001
Report Date: 01/16/2025
ORELAP#: OR100028
Purchase Order:
Received: 01/03/25 10:43

QC - Sample Duplicate **Sample ID: 24-014550-0001**

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/Fail	Notes
Propane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60	µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
MTBE	ND	ND	500	µg/g	0.0	< 20	Acceptable	
3-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
1-Propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Methylethylketone	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Butanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Tetrahydrofuran	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-methyl-1-propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
1-Butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Propyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,4-Dioxane	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Methylisobutylketone	ND	ND	500	µg/g	0.0	< 20	Acceptable	
3-Methyl-1-butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Toluene	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Isobutyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1-Pentanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Butyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylbenzene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
m,p-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
o-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Cumene	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Anisole	ND	ND	500	µg/g	0.0	< 20	Acceptable	
DMSO	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,2-dimethoxyethane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
Triethylamine	ND	ND	500	µg/g	0.0	< 20	Acceptable	
N,N-dimethylformamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
N,N-dimethylacetamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
Pyridine	ND	ND	50	µg/g	0.0	< 20	Acceptable	
Sulfolane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
1,2-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Trichloroethylene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
1,1-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation

Units of Measure:

µg/g- Microgram per gram or ppm

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 25-000055/D001.R001
Report Date: 01/16/2025
ORELAP#: OR100028
Purchase Order:
Received: 01/03/25 10:43

Revision: 4 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2500162**

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	2	0.0239	0.0255	%	93.8	80.0 - 120	Acceptable	
CBDV	2	0.0254	0.0271	%	93.7	80.0 - 120	Acceptable	
CBE	2	0.0248	0.0273	%	90.8	80.0 - 120	Acceptable	
CBDA	1	0.0281	0.0289	%	97.5	90.0 - 110	Acceptable	
CBGA	1	0.0275	0.0282	%	97.4	80.0 - 120	Acceptable	
CBG	1	0.0273	0.0275	%	99.3	80.0 - 120	Acceptable	
CBD	1	0.0265	0.0271	%	97.9	90.0 - 110	Acceptable	
THCV	2	0.0251	0.0272	%	92.4	80.0 - 120	Acceptable	
d8THCV	2	0.0256	0.0277	%	92.2	80.0 - 120	Acceptable	
THCVA	2	0.0241	0.0248	%	96.9	80.0 - 120	Acceptable	
CBN	1	0.0260	0.0265	%	98.1	80.0 - 120	Acceptable	
exo-THC	2	0.0245	0.0253	%	96.8	80.0 - 120	Acceptable	
d9THC	1	0.0270	0.0271	%	99.7	90.0 - 110	Acceptable	
d8THC	1	0.0265	0.0278	%	95.2	90.0 - 110	Acceptable	
9S-d10THC	1	0.0282	0.0287	%	98.2	80.0 - 120	Acceptable	
CBL	2	0.0243	0.0256	%	95.0	80.0 - 120	Acceptable	
9R-d10THC	1	0.0290	0.0298	%	97.3	80.0 - 120	Acceptable	
CBC	2	0.0264	0.0270	%	97.9	80.0 - 120	Acceptable	
THCA	1	0.0278	0.0290	%	95.9	90.0 - 110	Acceptable	
CBCA	2	0.0246	0.0262	%	94.0	80.0 - 120	Acceptable	
CBLA	2	0.0261	0.0266	%	98.0	80.0 - 120	Acceptable	
d9THCP	2	0.0250	0.0260	%	96.2	80.0 - 120	Acceptable	
CBT	2	0.0279	0.0272	%	103	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBDV	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBE	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBDA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBGA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBG	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBD	<LOQ	0.00326	%	< 0.00326	Acceptable	
THCV	<LOQ	0.00326	%	< 0.00326	Acceptable	
d8THCV	<LOQ	0.00326	%	< 0.00326	Acceptable	
THCVA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBN	<LOQ	0.00326	%	< 0.00326	Acceptable	
exo-THC	<LOQ	0.00326	%	< 0.00326	Acceptable	
d9THC	<LOQ	0.00326	%	< 0.00326	Acceptable	
d8THC	<LOQ	0.00326	%	< 0.00326	Acceptable	
9S-d10THC	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBL	<LOQ	0.00326	%	< 0.00326	Acceptable	
9R-d10THC	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBC	<LOQ	0.00326	%	< 0.00326	Acceptable	
THCA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBCA	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBLA	<LOQ	0.00326	%	< 0.00326	Acceptable	
d9THCP	<LOQ	0.00326	%	< 0.00326	Acceptable	
CBT	<LOQ	0.00326	%	< 0.00326	Acceptable	

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation

Units of Measure:

% - Percent

Columbia LABORATORIES
A Tentamus Company

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503-254-1794

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Purchase Order:
Received: 01/03/25 10:43

Revision: 4 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2500162**

Sample Duplicate Sample ID: **25-000050-0001**

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	0.0552	0.0563	0.00317	%	1.94	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBDA	0.528	0.528	0.00317	%	0.0385	< 20	Acceptable	
CBGA	0.00749	0.00717	0.00317	%	4.29	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBD	0.0132	0.0141	0.00317	%	6.90	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBN	0.00781	0.00783	0.00317	%	0.302	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
d9THC	0.132	0.130	0.00317	%	1.21	< 20	Acceptable	
d8THC	3.40	3.37	0.00317	%	0.987	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
THCA	0.0201	0.0201	0.00317	%	0.108	< 20	Acceptable	
CBCA	0.0218	0.0218	0.00317	%	0.273	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	

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Units of Measure:

% - Percent

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A Tentamus Company

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Purchase Order:	
Received:	01/03/25 10:43

Columbia LABORATORIES
A Tentamus Company

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Portland, OR 97230
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Report Number: 25-000055/D001.R001
Report Date: 01/16/2025
ORELAP#: OR100028
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Explanation of QC Flag Comments:

Code	Explanation
Q	Matrix interferences affecting spike or surrogate recoveries.
Q1	Quality control result biased high. Only non-detect samples reported.
Q2	Quality control outside QC limits. Data considered estimate.
Q3	Sample concentration greater than four times the amount spiked.
Q4	Non-homogenous sample matrix, affecting RPD result and/or % recoveries.
Q5	Spike results above calibration curve.
Q6	Quality control outside QC limits. Data acceptable based on remaining QC.
R	Relative percent difference (RPD) outside control limit.
R1	RPD non-calculable, as sample or duplicate results are less than five times the LOQ.
R2	Sample replicates RPD non-calculable, as only one replicate is within the analytical range.
LOQ1	Quantitation level raised due to low sample volume and/or dilution.
LOQ2	Quantitaion level raised due to matrix interference.
B	Analyte detected in method blank, but not in associated samples.
B1	The sample concentration is greater than 5 times the blank concentration.
B2	The sample concentration is less than 5 times the blank concentration.