Lazarus Naturals

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU TN.FS.SLP50 **BATCH #** FC52

PRODUCT NAME Cannabinoid Sleep Tincture **SERVING SIZE** 1 mL

LABORATORY: Columbia Laboratories **OREGON ACCREDITATION:** OR100028

LOQ: Limit Of Quantitation
LOD: Limit Of Detection

1 g = 10^{-3} kg = 10^{3} mg = 10^{6} µg 1 mg/kg = 1 ppm = 1000 ppb

POTENCY	PER SERVING		PER GRAM		Percent
Cannabidiol (CBD)	**29.92**	**mg/serving**	31.50	mg/g	3.15 %
Total THC (d9-THC, THCA)	**0.86**	**mg/serving**	0.91	mg/g	0.09 %
Cannabigerol (CBG)	**10.07**	**mg/serving**	10.60	mg/g	1.06 %
Cannabinol (CBN)	**10.45**	**mg/serving**	11.00	mg/g	1.10 %
Cannabichromene (CBC)	**1.49**	**mg/serving**	1.57	mg/g	0.16 %
Tetrahydrocannabinolic Acid (THCA)	**<LOQ**	**mg/serving**	<LOQ	mg/g	<LOQ %
Delta-9-THC (d9-THC)	**0.86**	**mg/serving**	0.91	mg/g	0.09 %
Delta-8-THC (d8-THC)	**<LOQ**	**mg/serving**	<LOQ	mg/g	<LOQ %

HEAVY METALS	PER SERVING		PER GRAM		REGULATORY ACTION LEVEL
Arsenic	**<LOQ**	**µg/serving**	<LOQ	µg/g	10 µg/day [1]
Cadmium	**<LOQ**	**µg/serving**	<LOQ	µg/g	4.1 µg/day [1]
Lead	**<LOQ**	**µg/serving**	<LOQ	µg/g	6 µg/day [1]
Mercury	**<LOQ**	**µg/serving**	<LOQ	µg/g	2 µg/day [1]

PESTICIDES	REGULATORY ACTION LEVEL
None of the other 59 pesticides tested found above limit of detection in the sample.	10 ppb [1]

RESIDUAL SOLVENTS	Results		REGULATORY ACTION LEVEL
Ethanol	<LOQ	µg/g	50,000 mg/day
Heptane	<LOQ	µg/g	50,000 mg/day
None of the 34 residual solvents tested found above limit of quantitation in the sample.			

MICROBIAL	PASS/FAIL
Yeast & Mold	Pass
Coliform	Pass

TERPENES	% OF SAMPLE	
Farnesene	<LOQ	%
ß-Caryophyllene	30.00	%
a-Bisabolol	26.58	%
Guaiol	<LOQ	%
Humulene	18.42	%
Caryophyllene Oxide	24.93	%

1. American Herbal Pharmacopoeia. (2014). Cannabis Inflorescence: Standards of Identity, Analysis, and Quality Control. Washington DC: AHP.

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Customer: Etz Hayim Holdings
Product identity: FORM-TN.FS.SLP50-FC52
Client/Metrc ID: .
Laboratory ID: 23-005890-0001

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status
CBC per 1g	1.57		mg/1g	
CBD per 1g	31.5		mg/1g	
CBDV per 1g	0.197		mg/1g	
CBE per 1g	0.605		mg/1g	
CBG per 1g	10.6		mg/1g	
CBL per 1g	0.139		mg/1g	
CBN per 1g	11.0		mg/1g	
CBT per 1g	1.20		mg/1g	
Δ9-THC per 1g	0.910		mg/1g	

CBD-Total per Serving Size 31.5 mg/1g

THC-Total per Serving Size 0.910 mg/1g

(Reported in milligrams per serving)

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
ß-Caryophyllene	0.0438	30.00%	a-Bisabolol	0.0388	26.58%
(-)-caryophyllene oxide	0.0364	24.93%	Humulene	0.0269	18.42%
Total Terpenes	**0.146**	**100.00%**			

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Customer: Etz Hayim Holdings
16427 NE Airport Way
PORTLAND 97230
United States of America (USA)

Product identity: FORM-TN.FS.SLP50-FC52
Client/Metrc ID: .
Sample Date:
Laboratory ID: 23-005890-0001
Evidence of Cooling: No
Temp: 24.9
Relinquished by: client
Serving Size #1: 1 g

Sample Results

Potency per 1g **Method:** J AOAC 2015 V98-6 (mod)[b] **Units** mg/se **Batch:** 2307426 **Analyze:** 5/17/23 8:29:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	1.57		mg/1g	0.0326	
CBC-A per 1g	< LOQ		mg/1g	0.0326	
CBC-Total per 1g	1.57		mg/1g	0.0612	
CBD per 1g	31.5		mg/1g	0.326	
CBD-A per 1g	< LOQ		mg/1g	0.0326	
CBD-Total per 1g	31.5		mg/1g	0.355	
CBDV per 1g	0.197		mg/1g	0.0326	
CBDV-A per 1g	< LOQ		mg/1g	0.0326	
CBDV-Total per 1g	0.197		mg/1g	0.0609	
CBE per 1g	0.605		mg/1g	0.0326	
CBG per 1g	10.6		mg/1g	0.326	
CBG-A per 1g	< LOQ		mg/1g	0.0326	
CBG-Total per 1g	10.6		mg/1g	0.354	
CBL per 1g	0.139		mg/1g	0.0326	
CBL-A per 1g	< LOQ		mg/1g	0.0326	
CBL-Total per 1g	0.139		mg/1g	0.0612	
CBN per 1g	11.0		mg/1g	0.326	
CBT per 1g	1.20		mg/1g	0.0326	
Δ8-THCV per 1g	< LOQ		mg/1g	0.0326	
Δ10-THC-9R per 1g	< LOQ		mg/1g	0.0326	
Δ10-THC-9S per 1g	< LOQ		mg/1g	0.0326	
Δ10-THC-Total per 1g	< LOQ		mg/1g	0.0652	
Δ8-THC per 1g	< LOQ		mg/1g	0.0326	
Δ9-THC per 1g	0.910		mg/1g	0.0326	
exo-THC per 1g	< LOQ		mg/1g	0.0326	
THC-A per 1g	< LOQ		mg/1g	0.0326	
THC-Total per 1g	0.910		mg/1g	0.0612	
THCV per 1g	< LOQ		mg/1g	0.0326	
THCV-A per 1g	< LOQ		mg/1g	0.0326	
THCV-Total per 1g	< LOQ		mg/1g	0.0612	

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Potency per 1g

Method: J AOAC 2015 V98-6 (mod)þ **Units** mg/se **Batch:** 2307426 **Analyze:** 5/17/23 8:29:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
Total Cannabinoids per 1g	57.7		mg/1g		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2307414	05/20/23	AOAC 991.14 (Petrifilm)þ		
Total Coliforms	< LOQ		cfu/g	10	2307414	05/20/23	AOAC 991.14 (Petrifilm)þ		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2307415	05/21/23	AOAC 2014.05 (RAPID)þ		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2307415	05/21/23	AOAC 2014.05 (RAPID)þ		

Solvents

Method: Residual Solvents by GC/MSþ **Units** µg/g **Batch** 2307514 **Analyze** 05/22/23 11:29 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 (Isopentane)	< LOQ		200		
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass	
2,2-Dimethylbutane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< 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		Ethanol	< LOQ		200		
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 (Cumene)	< LOQ	70.0	30.0	pass	
m,p-Xylene	< LOQ		200			Methanol	< LOQ	3000	200	pass	
Methylene chloride	< LOQ	600	60.0	pass		Methylpropane (Isobutane)	< 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 benzene	< LOQ	2170	600	pass							

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Pesticides **Method:** AOAC 2007.01 & EN 15662 (mod)þ **Units** mg/kg **Batch** 2307557 **Analyze** 05/23/23 09:36 AM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin¥	< LOQ	0.50	0.250	pass		Acephate¥	< LOQ	0.40	0.200	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¥	< 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	0.100	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							

Columbia LABORATORIES
A Tentamus Company

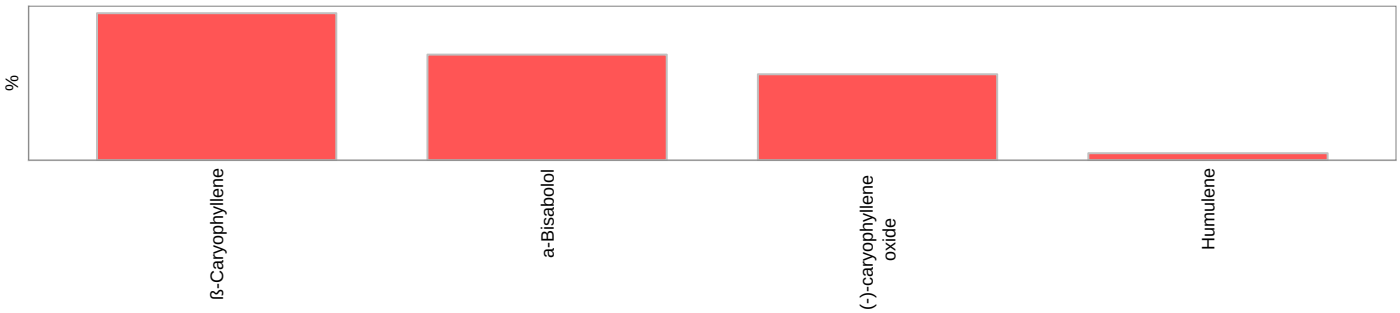
12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Terpenes

Method: J AOAC 2015 V98-6 **Units** % **Batch** 2307526 **Analyze** 05/20/23 05:32 AM

Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
ß-Caryophyllene	0.0438	0.018	30.0000%		a-Bisabolol	0.0388	0.018	26.5753%	
(-)-caryophyllene oxide	0.0364	0.018	24.9315%		Humulene	0.0269	0.018	18.4247%	
(+)-Cedrol	< LOQ	0.018	0.00%		(-)-Guaiol	< LOQ	0.018	0.00%	
(±)-cis-Nerolidol	< LOQ	0.018	0.00%		Eucalyptol	< LOQ	0.018	0.00%	
(R)-(+)-Limonene	< LOQ	0.018	0.00%		cis-ß-Ocimene	< LOQ	0.006	0.00%	
Geraniol	< LOQ	0.018	0.00%		Sabinene	< LOQ	0.018	0.00%	
a-Terpinene	< LOQ	0.018	0.00%		(-)-ß-Pinene	< LOQ	0.018	0.00%	
ß-Myrcene	< LOQ	0.018	0.00%		p-Cymene	< LOQ	0.018	0.00%	
(+)-Pulegone	< LOQ	0.018	0.00%		(±)-Camphor	< LOQ	0.018	0.00%	
Sabinene hydrate	< LOQ	0.018	0.00%		trans-ß-Ocimene	< LOQ	0.012	0.00%	
(+)-Borneol	< LOQ	0.018	0.00%		(+)-fenchol	< LOQ	0.018	0.00%	
Linalool	< LOQ	0.018	0.00%		(±)-fenchone	< LOQ	0.018	0.00%	
gamma-Terpinene	< LOQ	0.018	0.00%		(±)-trans-Nerolidol	< LOQ	0.018	0.00%	
valencene	< LOQ	0.018	0.00%		Isoborneol	< LOQ	0.018	0.00%	
(-)-a-Terpineol	< LOQ	0.018	0.00%		(-)-Isopulegol	< LOQ	0.018	0.00%	
a-cedrene	< LOQ	0.018	0.00%		a-phellandrene	< LOQ	0.018	0.00%	
a-pinene	< LOQ	0.018	0.00%		Camphene	< LOQ	0.018	0.00%	
d-3-Carene	< LOQ	0.018	0.00%		farnesene	< LOQ	0.018	0.00%	
Geranyl acetate	< LOQ	0.018	0.00%		Menthol	< LOQ	0.018	0.00%	
nerol	< LOQ	0.018	0.00%		Terpinolene	< LOQ	0.018	0.00%	
Total Terpenes	**0.146**								



Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Arsenic¥	< LOQ	0.200	mg/kg	0.0896	2307509	05/19/23	AOAC 2013.06 (mod.)þ	pass	
Cadmium¥	< LOQ	0.200	mg/kg	0.0896	2307509	05/19/23	AOAC 2013.06 (mod.)þ	pass	
Lead¥	< LOQ	0.500	mg/kg	0.0896	2307509	05/19/23	AOAC 2013.06 (mod.)þ	pass	
Mercury¥	< LOQ	0.100	mg/kg	0.0448	2307509	05/19/23	AOAC 2013.06 (mod.)þ	pass	

Columbia LABORATORIES
A Tentamus Company

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

Report Number:	23-005890/D003.R000
Report Date:	05/23/2023
ORELAP#:	OR100028
Purchase Order:	
Received:	05/16/23 16:34

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 = g
µg/g = Microgram per gram
mg/kg = Milligram per kilogram = parts per million (ppm)
mg/1g = Milligram per 1g
% = Percentage of sample
% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Revision: 1 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V986 — Batch ID: 2307426

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	%Rec	Limits	Evaluation	Notes
CBDVA	2	0.0322	0.0305	%	106	80.0 - 120	Acceptable	
CBDV	2	0.0312	0.0296	%	105	80.0 - 120	Acceptable	
CBE	2	0.0353	0.0339	%	104	80.0 - 120	Acceptable	
CBDA	1	0.0310	0.0311	%	99.5	90.0 - 110	Acceptable	
CBGA	1	0.0309	0.0311	%	99.6	80.0 - 120	Acceptable	
CBG	1	0.0323	0.0322	%	100	80.0 - 120	Acceptable	
CBD	1	0.0321	0.0323	%	99.2	90.0 - 110	Acceptable	
THCV	2	0.0243	0.0226	%	108	80.0 - 120	Acceptable	
d8THCV	2	0.0272	0.0266	%	102	80.0 - 120	Acceptable	
THCVA	2	0.0331	0.0313	%	106	80.0 - 120	Acceptable	
CBN	1	0.0330	0.0329	%	100	80.0 - 120	Acceptable	
exo-THC	2	0.0315	0.0307	%	103	80.0 - 120	Acceptable	
d9THC	1	0.0347	0.0341	%	102	90.0 - 110	Acceptable	
d8THC	1	0.0420	0.0420	%	99.8	90.0 - 110	Acceptable	
9Sd10THC	1	0.0241	0.0240	%	100	80.0 - 120	Acceptable	
CBL	2	0.0366	0.0323	%	114	80.0 - 120	Acceptable	
9Rd10THC	1	0.0309	0.0310	%	99.5	80.0 - 120	Acceptable	
CBC	2	0.0304	0.0302	%	101	80.0 - 120	Acceptable	
THCA	1	0.0311	0.0314	%	99.2	90.0 - 110	Acceptable	
CBCA	2	0.0339	0.0324	%	105	80.0 - 120	Acceptable	
CBLA	2	0.0334	0.0321	%	104	80.0 - 120	Acceptable	
d9THCP	2	0.0324	0.0315	%	103	80.0 - 120	Acceptable	
CBT	2	0.0345	0.0331	%	104	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBDV	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBE	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBDA	0.00477	0.00319	%	< 0.00319	Outlier	B1 (except 23-0057880001)
CBGA	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBG	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBD	<LOQ	0.00319	%	< 0.00319	Acceptable	
THCV	<LOQ	0.00319	%	< 0.00319	Acceptable	
d8THCV	<LOQ	0.00319	%	< 0.00319	Acceptable	
THCVA	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBN	<LOQ	0.00319	%	< 0.00319	Acceptable	
exo-THC	<LOQ	0.00319	%	< 0.00319	Acceptable	
d9THC	<LOQ	0.00319	%	< 0.00319	Acceptable	
d8THC	<LOQ	0.00319	%	< 0.00319	Acceptable	
9Sd10THC	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBL	<LOQ	0.00319	%	< 0.00319	Acceptable	
9Rd10THC	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBC	<LOQ	0.00319	%	< 0.00319	Acceptable	
THCA	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBCA	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBLA	<LOQ	0.00319	%	< 0.00319	Acceptable	
d9THCP	<LOQ	0.00319	%	< 0.00319	Acceptable	
CBT	<LOQ	0.00319	%	< 0.00319	Acceptable	

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation
B1 - The sample concentration is greater than 5 times the blank concentration.

Units of Measure:

% - Percent

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Revision: 1 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V98 Batch ID: 2307426
Sample Duplicate Sample ID: 23-0057880001

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
CBDV	0.0659	0.0656	0.00322	%	0.515	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
CBDA	0.00376	0.00375	0.00322	%	0.0535	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
CBG	11.3	12.2	0.00322	%	7.74	< 20	Acceptable	
CBD	11.6	12.6	0.00322	%	8.10	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
CBN	0.00803	0.00768	0.00322	%	4.46	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
d9THC	0.0395	0.0398	0.00322	%	0.575	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
9Sd10THC	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
9Rd10THC	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
CBC	0.0482	0.0469	0.00322	%	2.81	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00322	%	NA	< 20	Acceptable	
CBT	0.183	0.183	0.00322	%	0.0271	< 20	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

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

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

Laboratory Quality Control Results

Residual Solvents — Batch ID: 2307514

Analyte	Method Blank Result		LOQ	Notes	Laboratory Control Sample Result	Spike	Units	%Rec	Limits		Notes
Propane	ND	<	200		532	584	µg/g	91.1	60	- 120	
Isobutane	ND	<	200		671	767	µg/g	87.5	60	- 120	
Butane	ND	<	200		675	782	µg/g	86.3	60	- 120	
2,2-Dimethylpropane	ND	<	200		941	939	µg/g	100.2	60	- 120	
Methanol	ND	<	200		1340	1610	µg/g	83.2	60	- 120	
Ethylene Oxide	ND	<	30		52	57.1	µg/g	91.1	60	- 120	
2-Methylbutane	ND	<	200		1230	1600	µg/g	76.9	60	- 120	
Pentane	ND	<	200		1240	1610	µg/g	77.0	60	- 120	
Ethanol	ND	<	200		1260	1600	µg/g	78.8	70	- 130	
Ethyl Ether	ND	<	200		1260	1610	µg/g	78.3	60	- 120	
2,2-Dimethylbutane	ND	<	30		134	173	µg/g	77.5	60	- 120	
Acetone	ND	<	200		1280	1620	µg/g	79.0	60	- 120	
2-Propanol	ND	<	200		1250	1600	µg/g	78.1	60	- 120	
Ethyl Formate	ND	<	500		1510	1610	µg/g	93.8	70	- 130	
Acetonitrile	ND	<	100		380	488	µg/g	77.9	60	- 120	
Methyl Acetate	ND	<	500		1370	1610	µg/g	85.1	70	- 130	
2,3-Dimethylbutane	ND	<	30		127	165	µg/g	77.0	60	- 120	
Dichloromethane	ND	<	60		382	487	µg/g	78.4	60	- 120	
2-Methylpentane	ND	<	30		121	160	µg/g	75.6	60	- 120	
MTBE	ND	<	500		1420	1600	µg/g	88.8	70	- 130	
3-Methylpentane	ND	<	30		126	161	µg/g	78.3	60	- 120	
Hexane	ND	<	30		126	162	µg/g	77.8	60	- 120	
1-Propanol	ND	<	500		1470	1620	µg/g	90.7	70	- 130	
Methylethylketone	ND	<	500		1440	1610	µg/g	89.4	70	- 130	
Ethyl acetate	ND	<	200		1240	1600	µg/g	77.5	60	- 120	
2-Butanol	ND	<	200		1250	1610	µg/g	77.6	60	- 120	
Tetrahydrofuran	ND	<	100		377	483	µg/g	78.1	60	- 120	
Cyclohexane	ND	<	200		1270	1610	µg/g	78.9	60	- 120	
2-methyl-1-propanol	ND	<	500		1480	1630	µg/g	90.8	70	- 130	
Benzene	ND	<	1		3.85	4.98	µg/g	77.3	60	- 120	
Isopropyl Acetate	ND	<	200		1240	1610	µg/g	77.0	60	- 120	
Heptane	ND	<	200		1260	1620	µg/g	77.8	60	- 120	
1-Butanol	ND	<	500		1460	1600	µg/g	91.3	70	- 130	
Propyl Acetate	ND	<	500		1460	1620	µg/g	90.1	70	- 130	
1,4-Dioxane	ND	<	100		383	494	µg/g	77.5	60	- 120	
2-Ethoxyethanol	ND	<	30		135	165	µg/g	81.8	60	- 120	
Methylisobutylketone	ND	<	500		1450	1610	µg/g	90.1	70	- 130	
3-Methyl-1-butanol	ND	<	500		1390	1610	µg/g	86.3	70	- 130	
Ethylene Glycol	ND	<	200		310	486	µg/g	63.8	60	- 120	
Toluene	ND	<	100		374	513	µg/g	72.9	60	- 120	
Isobutyl Acetate	ND	<	500		1430	1600	µg/g	89.4	70	- 130	
1-Pentanol	ND	<	500		1400	1610	µg/g	87.0	70	- 130	
Butyl Acetate	ND	<	500		1450	1610	µg/g	90.1	70	- 130	
Ethylbenzene	ND	<	200		742	967	µg/g	76.7	60	- 120	
m,p-Xylene	ND	<	200		798	994	µg/g	80.3	60	- 120	
o-Xylene	ND	<	200		751	992	µg/g	75.7	60	- 120	
Cumene	ND	<	30		132	171	µg/g	77.2	60	- 120	
Anisole	ND	<	500		1420	1610	µg/g	88.2	70	- 130	
DMSO	ND	<	500		1180	1610	µg/g	73.3	70	- 130	
1,2-dimethoxyethane	ND	<	50		157	172	µg/g	91.3	70	- 130	
Triethylamine	ND	<	500		1510	1620	µg/g	93.2	70	- 130	
N,N-dimethylformamide	ND	<	150		440	499	µg/g	88.2	70	- 130	
N,N-dimethylacetamide	ND	<	150		367	491	µg/g	74.7	70	- 130	
Pyridine	ND	<	50		153	171	µg/g	89.5	70	- 130	
Sulfolane	ND	<	50		145	160	µg/g	90.6	70	- 130	
1,2-Dichloroethane	ND	<	1		0.957	1	µg/g	95.7	70	- 130	
Chloroform	ND	<	1		0.978	1	µg/g	97.8	70	- 130	
Trichloroethylene	ND	<	1		0.903	1	µg/g	90.3	70	- 130	
1,1-Dichloroethane	ND	<	1		0.963	1	µg/g	96.3	70	- 130	

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

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

QC- Sample Duplicate — Sample ID: 23-005910-0001

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: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Revision: 1 Document ID: 7086
Legacy ID: CFL-E57Worksheet Validated 11/04/2020

Terpenes Quality Control Results

Method Reference: EPA 5035 — Batch ID: 2307526

	Method Blank				Laboratory Control Sample					
Analyte	Result		LOQ	Notes	Result	LCS	Units	LCS % Rec	Limits	Notes
a-pinene	<LOQ	<	200		492	500	µg/g	98%	70 - 130	
Camphene	<LOQ	<	200		492	500	µg/g	98%	70 - 130	
Sabinene	<LOQ	<	200		486	500	µg/g	97%	70 - 130	
b-Pinene	<LOQ	<	200		479	500	µg/g	96%	70 - 130	
b-Myrcene	<LOQ	<	200		481	500	µg/g	96%	70 - 130	
a-phelllandrene	<LOQ	<	200		506	500	µg/g	101%	70 - 130	
d-3-Carene	<LOQ	<	200		503	500	µg/g	101%	70 - 130	
a-Terpinene	<LOQ	<	200		497	500	µg/g	99%	70 - 130	
p-Cymene	<LOQ	<	200		487	500	µg/g	97%	70 - 130	
D-Limonene	<LOQ	<	200		491	500	µg/g	98%	70 - 130	
Eucalyptol	<LOQ	<	200		497	500	µg/g	99%	70 - 130	
b-cis-Ocimene	<LOQ	<	67		156	167	µg/g	93%	70 - 130	
b-trans-Ocimene	<LOQ	<	133		333	333	µg/g	100%	70 - 130	
g-Terpinene	<LOQ	<	200		484	500	µg/g	97%	70 - 130	
Sabinene_Hydrate	<LOQ	<	200		514	500	µg/g	103%	70 - 130	
Terpinolene	<LOQ	<	200		501	500	µg/g	100%	70 - 130	
D-Fenchone	<LOQ	<	200		501	500	µg/g	100%	70 - 130	
Linalool	<LOQ	<	200		529	500	µg/g	106%	70 - 130	
Fenchol	<LOQ	<	200		508	500	µg/g	102%	70 - 130	
Camphor	<LOQ	<	200		503	500	µg/g	101%	70 - 130	
Isopulego	<LOQ	<	200		516	500	µg/g	103%	70 - 130	
Isoborneol	<LOQ	<	200		523	500	µg/g	105%	70 - 130	
Borneol	<LOQ	<	200		526	500	µg/g	105%	70 - 130	
DL-Menthol	<LOQ	<	200		496	500	µg/g	99%	70 - 130	
Terpineol	<LOQ	<	200		531	500	µg/g	106%	70 - 130	
Nerol	<LOQ	<	200		485	500	µg/g	97%	70 - 130	
Pulegone	<LOQ	<	200		524	500	µg/g	105%	70 - 130	
Geraniol	<LOQ	<	200		504	500	µg/g	101%	70 - 130	
Geranyl_Acetate	<LOQ	<	200		506	500	µg/g	101%	70 - 130	
a-Cedrene	<LOQ	<	200		511	500	µg/g	102%	70 - 130	
b-Caryophyllene	<LOQ	<	200		510	500	µg/g	102%	70 - 130	
a-Humulene	<LOQ	<	200		527	500	µg/g	105%	70 - 130	
Valencene	<LOQ	<	200		479	500	µg/g	96%	70 - 130	
cis-Nerolidol	<LOQ	<	200		520	500	µg/g	104%	70 - 130	
a-Farnesene	<LOQ	<	200		530	500	µg/g	106%	70 - 130	
trans-Nerolidol	<LOQ	<	200		529	500	µg/g	106%	70 - 130	
Caryophyllene_Oxide	<LOQ	<	200		519	500	µg/g	104%	70 - 130	
Guaiol	<LOQ	<	200		534	500	µg/g	107%	70 - 130	
Cedrol	<LOQ	<	200		526	500	µg/g	105%	70 - 130	
a-Bisabolol	<LOQ	<	200		520	500	µg/g	104%	70 - 130	

Definitions

LOQ	Limit of Quantitation
LCS	Laboratory Control Sample
% REC	Percent Recovery

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Revision: 1 Document ID: 7086
Legacy ID: CFL-E57Worksheet Validated 11/04/2020

Terpenes Quality Control Results

Method Reference: EPA 5035 — Batch ID: 2307526

Sample/ Sample Duplicate — Sample ID: 23-005874-0001

Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	2470	2460	191	µg/g	0%	< 20	
Camphene	466	477	191	µg/g	2%	< 20	
Sabinene	<LOQ	<LOQ	191	µg/g	0%	< 20	
b-Pinene	3110	3110	191	µg/g	0%	< 20	
b-Myrcene	3780	3770	191	µg/g	0%	< 20	
a-phelllandrene	<LOQ	<LOQ	191	µg/g	0%	< 20	
d-3-Carene	<LOQ	<LOQ	191	µg/g	0%	< 20	
a-Terpinene	<LOQ	<LOQ	191	µg/g	0%	< 20	
p-Cymene	<LOQ	<LOQ	191	µg/g	0%	< 20	
D-Limonene	31400	31400	191	µg/g	0%	< 20	
Eucalyptol	<LOQ	<LOQ	191	µg/g	0%	< 20	
b-cis-Ocimene	<LOQ	<LOQ	63.7	µg/g	0%	< 20	
b-trans-Ocimene	<LOQ	<LOQ	127	µg/g	0%	< 20	
g-Terpinene	<LOQ	<LOQ	191	µg/g	0%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	191	µg/g	0%	< 20	
Terpinolene	<LOQ	<LOQ	191	µg/g	0%	< 20	
D-Fenchone	<LOQ	<LOQ	191	µg/g	0%	< 20	
Linalool	4420	4400	191	µg/g	0%	< 20	
Fenchol	2460	2470	191	µg/g	0%	< 20	
Camphor	<LOQ	<LOQ	191	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	191	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	191	µg/g	0%	< 20	
Borneol	348	348	191	µg/g	0%	< 20	
DL-Menthol	<LOQ	<LOQ	191	µg/g	0%	< 20	
Terpineol	1450	1490	191	µg/g	3%	< 20	
Nerol	<LOQ	<LOQ	191	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	191	µg/g	0%	< 20	
Geraniol	<LOQ	<LOQ	191	µg/g	0%	< 20	
Geranyl_Acetate	<LOQ	<LOQ	191	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	191	µg/g	0%	< 20	
b-Caryophyllene	3990	4020	191	µg/g	1%	< 20	
a-Humulene	852	850	191	µg/g	0%	< 20	
Valencene	<LOQ	<LOQ	191	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	191	µg/g	0%	< 20	
a-Farnesene	<LOQ	<LOQ	191	µg/g	0%	< 20	
trans-Nerolidol	<LOQ	<LOQ	191	µg/g	0%	< 20	
Caryophyllene_Oxide	938	956	191	µg/g	2%	< 20	
Guaiol	<LOQ	<LOQ	191	µg/g	0%	< 20	
Cedrol	<LOQ	<LOQ	191	µg/g	0%	< 20	
a-Bisabolol	<LOQ	<LOQ	191	µg/g	0%	< 20	

Definitions

RPD — Relative Percent Difference

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Revision: 3 Document ID: 3120
LegacyID: CFLC21WorksheetValidated 10/30/2020

Laboratory Pesticide Quality Control Results

AOAC 2007.1 &EN 15662			Units: mg/Kg				Batch ID: 2307557			
Method Blank				Laboratory Control Sample						
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Re	Limits			Notes
Abamectin	0.000	< 0.250		0.883	1.000	88.3	50.0	150		
Acephate	0.000	< 0.200		0.810	0.800	101.2	60.0	120		
Acequinocyl	0.000	< 1.000		3.545	4.000	88.6	40.0	160		
Acetamiprid	0.000	< 0.100		0.368	0.400	92.1	60.0	120		
Aldicarb	0.000	< 0.200		0.736	0.800	92.0	60.0	120		
Azoxystrobin	0.000	< 0.100		0.365	0.400	91.1	60.0	120		
Bifenazate	0.000	< 0.100		0.400	0.400	99.9	60.0	120		
Bifenthrin	0.000	< 0.100		0.361	0.400	90.1	50.0	150		
Boscalid	0.000	< 0.200		0.762	0.800	95.3	60.0	120		
Carbaryl	0.000	< 0.100		0.368	0.400	92.1	60.0	120		
Carbofuran	0.000	< 0.100		0.367	0.400	91.9	60.0	120		
Chlorantraniliprole	0.000	< 0.100		0.372	0.400	93.1	60.0	120		
Chlorfenapyr	0.000	< 0.500		1.675	2.000	83.8	60.0	120		
Chlorpyrifos	0.000	< 0.100		0.360	0.400	90.0	60.0	120		
Clofentezine	0.000	< 0.100		0.356	0.400	89.0	60.0	120		
Cyfluthrin	0.000	< 0.500		1.802	2.000	90.1	50.0	150		
Cypermethrin	0.000	< 0.500		1.837	2.000	91.8	50.0	150		
Daminozide	0.000	< 0.500		0.617	2.000	30.9	60.0	120		Q6
Diazinon	0.000	< 0.100		0.369	0.400	92.4	60.0	120		
Dichlorvos	0.000	< 0.500		1.858	2.000	92.9	60.0	120		
Dimethoate	0.000	< 0.100		0.299	0.400	74.7	60.0	120		
Ethoprophos	0.000	< 0.100		0.360	0.400	90.0	60.0	120		
Etofenprox	0.000	< 0.200		0.726	0.800	90.8	50.0	150		
Etoxazole	0.000	< 0.100		0.373	0.400	93.2	60.0	120		
Fenoxycarb	0.000	< 0.100		0.369	0.400	92.3	60.0	120		
Fenpyroximate	0.000	< 0.200		0.753	0.800	94.1	60.0	120		
Fipronil	0.000	< 0.200		0.743	0.800	92.9	60.0	120		
Flonicamid	0.000	< 0.250		0.789	1.000	78.9	60.0	120		
Fludioxonil	0.000	< 0.200		0.778	0.800	97.2	50.0	150		
Hexythiazox	0.000	< 0.250		0.915	1.000	91.5	60.0	120		
Imazalil	0.000	< 0.100		0.374	0.400	93.5	60.0	120		
Imidacloprid	0.000	< 0.200		0.569	0.800	71.2	60.0	120		
Kresoxim-methyl	0.000	< 0.200		0.731	0.800	91.4	60.0	120		
Malathion	0.000	< 0.100		0.355	0.400	88.7	60.0	120		
Metalaxyl	0.000	< 0.100		0.368	0.400	91.9	60.0	120		
Methiocarb	0.000	< 0.100		0.372	0.400	93.1	60.0	120		
Methomyl	0.000	< 0.200		0.621	0.800	77.6	60.0	120		
MGK-264	0.000	< 0.100		0.359	0.400	89.7	50.0	150		
Myclobutanil	0.000	< 0.100		0.388	0.400	97.1	60.0	120		
Naled	0.000	< 0.250		0.922	1.000	92.2	50.0	150		
Oxamyl	0.000	< 0.500		1.581	2.000	79.0	60.0	120		
Paclobutrazole	0.000	< 0.200		0.721	0.800	90.1	60.0	120		
Parathion-Methyl	0.000	< 0.100		0.338	0.400	84.6	50.0	150		
Permethrin	0.000	< 0.100		0.361	0.400	90.3	50.0	150		
Phosmet	0.000	< 0.100		0.370	0.400	92.5	50.0	150		
Piperonyl butoxide	0.000	< 0.500		1.833	2.000	91.7	60.0	120		
Prallethrin	0.000	< 0.100		0.373	0.400	93.3	60.0	120		
Propiconazole	0.000	< 0.200		0.745	0.800	93.1	60.0	120		
Propoxur	0.000	< 0.100		0.363	0.400	90.7	60.0	120		
Pyrethrin (Summe)	0.001	< 0.100		0.442	0.488	90.6	60.0	120		
Pyridaben	0.000	< 0.100		0.369	0.400	92.3	50.0	150		
Spinosad	0.000	< 0.100		0.355	0.388	91.6	50.0	150		
Spiromesifen	0.000	< 0.100		0.372	0.400	92.9	60.0	120		
Spirotetramat	0.000	< 0.100		0.370	0.400	92.6	60.0	120		
Spiroxamine	0.000	< 0.200		0.740	0.800	92.5	60.0	120		
Tebuconazole	0.000	< 0.200		0.733	0.800	91.6	60.0	120		
Thiadoprid	0.000	< 0.100		0.370	0.400	92.5	60.0	120		
Thiamethoxam	0.000	< 0.100		0.330	0.400	82.6	60.0	120		
Trifloxystrobin	0.000	< 0.100		0.364	0.400	91.1	60.0	120		

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

Revision: 3 Document ID: 3120
LegacyID: CFLC21WorksheetValidated 10/30/2020

Laboratory Pesticide Quality Control Results

AOAC 2007.1 &EN 15662			Units: mg/Kg					Batch ID: 2307557			
Matrix Spike/Matrix Spike Duplicate Recoveries							Sample ID: 23-0058900001				
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits		Notes
Abamectin	0.000	0.774	0.818	1.000	5.5%	< 30	77.4%	81.8%	50	- 150	
Acephate	0.000	0.655	0.699	0.800	6.6%	< 30	81.8%	87.4%	50	- 150	
Acequinocyl	0.000	1.465	1.492	4.000	1.8%	< 30	36.6%	37.3%	50	- 150	Q
Acetamiprid	0.000	0.347	0.354	0.400	1.9%	< 30	86.9%	88.6%	50	- 150	
Aldicarb	0.000	0.698	0.726	0.800	4.0%	< 30	87.2%	90.8%	50	- 150	
Azoxystrobin	0.000	0.277	0.283	0.400	2.1%	< 30	69.3%	70.8%	50	- 150	
Bifenazate	0.000	0.304	0.301	0.400	1.0%	< 30	76.0%	75.2%	50	- 150	
Bifenthrin	0.000	0.180	0.186	0.400	3.1%	< 30	45.0%	46.4%	50	- 150	Q
Boscalid	0.000	0.556	0.592	0.800	6.2%	< 30	69.5%	74.0%	50	- 150	
Carbaryl	0.000	0.301	0.301	0.400	0.1%	< 30	75.3%	75.3%	50	- 150	
Carbofuran	0.000	0.305	0.310	0.400	1.5%	< 30	76.3%	77.4%	50	- 150	
Chlorantraniliprole	0.000	0.337	0.342	0.400	1.3%	< 30	84.3%	85.4%	50	- 150	
Chlorfenapyr	0.000	1.254	1.191	2.000	5.2%	< 30	62.7%	59.5%	50	- 150	
Chlorpyrifos	0.000	0.336	0.323	0.400	4.1%	< 30	84.0%	80.6%	50	- 150	
Clofentezine	0.000	0.270	0.275	0.400	2.0%	< 30	67.4%	68.8%	50	- 150	
Cyfluthrin	0.000	1.050	1.029	2.000	2.0%	< 30	52.5%	51.5%	30	- 150	
Cypermethrin	0.000	1.069	1.084	2.000	1.4%	< 30	53.4%	54.2%	50	- 150	
Daminozide	0.000	0.606	0.641	2.000	5.6%	< 30	30.3%	32.1%	30	- 150	
Diazinon	0.000	0.207	0.218	0.400	5.3%	< 30	51.8%	54.6%	50	- 150	
Dichlorvos	0.000	1.599	1.604	2.000	0.3%	< 30	79.9%	80.2%	50	- 150	
Dimethoate	0.000	0.337	0.348	0.400	3.4%	< 30	84.2%	87.0%	50	- 150	
Ethoprophos	0.000	0.279	0.279	0.400	0.0%	< 30	69.8%	69.8%	50	- 150	
Etofenprox	0.000	0.313	0.316	0.800	1.0%	< 30	39.2%	39.5%	50	- 150	Q
Etoxazole	0.000	0.254	0.270	0.400	6.1%	< 30	63.5%	67.5%	50	- 150	
Fenoxycarb	0.000	0.263	0.280	0.400	6.1%	< 30	65.8%	69.9%	50	- 150	
Fenpyroximate	0.000	0.273	0.289	0.800	5.7%	< 30	34.1%	36.1%	50	- 150	Q
Fipronil	0.000	0.455	0.462	0.800	1.7%	< 30	56.8%	57.8%	50	- 150	
Flonicamid	0.000	0.824	0.908	1.000	9.7%	< 30	82.4%	90.8%	50	- 150	
Fludioxonil	0.000	0.926	0.949	0.800	2.4%	< 30	115.7%	118.6%	50	- 150	
Hexythiazox	0.000	0.614	0.641	1.000	4.3%	< 30	61.4%	64.1%	50	- 150	
Imazalil	0.010	0.328	0.349	0.400	6.3%	< 30	79.7%	84.9%	50	- 150	
Imidacloprid	0.000	0.625	0.661	0.800	5.6%	< 30	78.1%	82.7%	50	- 150	
Kresoxim-methyl	0.000	0.525	0.553	0.800	5.4%	< 30	65.6%	69.2%	50	- 150	
Malathion	0.003	0.274	0.286	0.400	4.5%	< 30	67.8%	70.9%	50	- 150	
Metalaxyl	0.000	0.313	0.330	0.400	5.4%	< 30	78.2%	82.6%	50	- 150	
Methiocarb	0.000	0.290	0.301	0.400	4.0%	< 30	72.4%	75.3%	50	- 150	
Methomyl	0.000	0.672	0.683	0.800	1.7%	< 30	84.0%	85.4%	50	- 150	
MGK-264	0.000	0.208	0.215	0.400	3.7%	< 30	51.9%	53.9%	50	- 150	
Myclobutanil	0.000	0.283	0.305	0.400	7.5%	< 30	70.7%	76.2%	50	- 150	
Naled	0.000	0.738	0.741	1.000	0.4%	< 30	73.8%	74.1%	50	- 150	
Oxamyl	0.000	1.644	1.741	2.000	5.7%	< 30	82.2%	87.1%	50	- 150	
Paclobutrazole	0.000	0.523	0.559	0.800	6.6%	< 30	65.4%	69.8%	50	- 150	
Parathion-Methyl	0.000	0.209	0.223	0.400	6.8%	< 30	52.2%	55.9%	30	- 150	
Permethrin	0.000	0.223	0.225	0.400	0.8%	< 30	55.7%	56.1%	50	- 150	
Phosmet	0.000	0.280	0.306	0.400	8.9%	< 30	70.0%	76.6%	50	- 150	
Piperonyl butoxide	0.000	1.414	1.496	2.000	5.7%	< 30	70.7%	74.8%	50	- 150	
Prallethrin	0.000	0.257	0.261	0.400	1.5%	< 30	64.3%	65.3%	50	- 150	
Propiconazole	0.000	0.533	0.561	0.800	5.2%	< 30	66.6%	70.2%	50	- 150	
Propoxur	0.000	0.329	0.321	0.400	2.6%	< 30	82.3%	80.1%	50	- 150	
Pyrethrin (Summe)	0.000	0.312	0.327	0.488	4.6%	< 30	64.0%	67.1%	50	- 150	
Pyridaben	0.000	0.179	0.185	0.400	3.2%	< 30	44.8%	46.2%	50	- 150	Q
Spinosad	0.000	0.275	0.280	0.388	2.1%	< 30	70.8%	72.2%	50	- 150	
Spiromesifen	0.000	0.253	0.269	0.400	6.4%	< 30	63.1%	67.3%	50	- 150	
Spirotetramat	0.000	0.441	0.452	0.400	2.4%	< 30	110.2%	112.9%	50	- 150	
Spiroxamine	0.000	0.618	0.667	0.800	7.7%	< 30	77.2%	83.4%	50	- 150	
Tebuconazole	0.000	0.503	0.532	0.800	4.5%	< 30	63.5%	66.5%	50	- 150	
Thiadoprid	0.000	0.345	0.352	0.400	2.0%	< 30	86.3%	88.0%	50	- 150	
Thiamethoxam	0.000	0.349	0.363	0.400	3.9%	< 30	87.3%	90.8%	50	- 150	
Trifloxystrobin	0.000	0.253	0.265	0.400	4.5%	< 30	63.2%	66.2%	50	- 150	

Columbia LABORATORIES
A Tentamus Company

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

Report Number:	23-005890/D003.R000
Report Date:	05/23/2023
ORELAP#:	OR100028
Purchase Order:	
Received:	05/16/23 16:34

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-005890/D003.R000
Report Date: 05/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/16/23 16:34

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.