Lazarus Naturals

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU TN.O.FS50 **BATCH #** FK49

PRODUCT NAME Full Spectrum CBD Tincture **SERVING SIZE** 1 mL (~0.93g)

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)	**48.73**	**mg/serving**	52.4	mg/g	5.24 %
Total THC (d9-THC, THCA)	**1.36**	**mg/serving**	1.46	mg/g	0.15 %
Cannabigerol (CBG)	**1.45**	**mg/serving**	1.56	mg/g	0.16 %
Cannabinol (CBN)	**0.12**	**mg/serving**	0.13	mg/g	0.01 %
Cannabichromene (CBC)	**4.14**	**mg/serving**	4.45	mg/g	0.45 %
Tetrahydrocannabinolic Acid (THCA)	**<LOQ**	**mg/serving**	<LOQ	mg/g	<LOQ %
Delta-9-THC (d9-THC)	**1.36**	**mg/serving**	1.46	mg/g	0.15 %
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	21.06	%
ß-Caryophyllene	22.40	%
a-Bisabolol	12.40	%
Guaiol	9.54	%
Humulene	9.07	%
Caryophyllene Oxide	18.63	%

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:	23-014491/D008.R000
Report Date:	01/04/2024
ORELAP#:	OR100028
Purchase Order:	2761898
Received:	12/11/23 16:24

Customer:	Etz Hayim Holdings
Product identity:	FORM-TN.O.FS50-FK49
Client/Metrc ID:	.
Laboratory ID:	23-014491-0001

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status
CBC per 1g	4.45		mg/1g	
CBD per 1g	52.3		mg/1g	
CBD-A per 1g	0.0716		mg/1g	
CBDV per 1g	0.656		mg/1g	
CBE per 1g	1.09		mg/1g	
CBG per 1g	1.56		mg/1g	
CBN per 1g	0.127		mg/1g	
CBT per 1g	1.06		mg/1g	
Δ9-THC per 1g	1.46		mg/1g	

CBD-Total per Serving Size 52.4 mg/1g

THC-Total per Serving Size 1.46 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	0.0869	22.40%	farnesene	0.0817	21.06%
(-)-caryophyllene oxide	0.0723	18.63%	a-Bisabolol	0.0481	12.40%
(-)-Guaiol	0.0370	9.54%	Humulene	0.0352	9.07%
ß-Myrcene	0.0266	6.86%	**Total Terpenes**	**0.388**	**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:	23-014491/D008.R000
Report Date:	01/04/2024
ORELAP#:	OR100028
Purchase Order:	2761898
Received:	12/11/23 16:24

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

Product identity: FORM-TN.O.FS50-FK49
Client/Metrc ID: .
Sample Date:
Laboratory ID: 23-014491-0001
Evidence of Cooling: No
Temp: 19.3 °C
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:** 2313574 **Analyze:** 12/13/23 10:07:00 P

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	4.45		mg/1g	0.0322	
CBC-A per 1g	< LOQ		mg/1g	0.0322	
CBC-Total per 1g	4.45		mg/1g	0.0605	
CBD per 1g	52.3		mg/1g	0.322	
CBD-A per 1g	0.0716		mg/1g	0.0322	
CBD-Total per 1g	52.4		mg/1g	0.351	
CBDV per 1g	0.656		mg/1g	0.0322	
CBDV-A per 1g	< LOQ		mg/1g	0.0322	
CBDV-Total per 1g	0.656		mg/1g	0.0602	
CBE per 1g	1.09		mg/1g	0.0322	
CBG per 1g	1.56		mg/1g	0.0322	
CBG-A per 1g	< LOQ		mg/1g	0.0322	
CBG-Total per 1g	1.56		mg/1g	0.0602	
CBL per 1g	< LOQ		mg/1g	0.0322	
CBL-A per 1g	< LOQ		mg/1g	0.0322	
CBL-Total per 1g	< LOQ		mg/1g	0.0605	
CBN per 1g	0.127		mg/1g	0.0322	
CBT per 1g	1.06		mg/1g	0.0322	
Δ8-THCV per 1g	< LOQ		mg/1g	0.0322	
Δ10-THC-9R per 1g	< LOQ		mg/1g	0.0322	
Δ10-THC-9S per 1g	< LOQ		mg/1g	0.0322	
Δ10-THC-Total per 1g	< LOQ		mg/1g	0.0645	
Δ8-THC per 1g	< LOQ		mg/1g	0.0322	
Δ9-THC per 1g	1.46		mg/1g	0.0322	
delta-9-THCP per 1g	< LOQ		mg/1g	0.0322	
exo-THC per 1g	< LOQ		mg/1g	0.0322	
THC-A per 1g	< LOQ		mg/1g	0.0322	
THC-Total per 1g	1.46		mg/1g	0.0605	
THCV per 1g	< LOQ		mg/1g	0.0322	
THCV-A per 1g	< LOQ		mg/1g	0.0322	

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

Potency per 1g

Method: J AOAC 2015 V98-6 (mod)þ **Units** mg/se **Batch:** 2313574 **Analyze:** 12/13/23 10:07:00 P

Analyte	Result	Limits	Units	LOQ	Notes
THCV-Total per 1g	< LOQ		mg/1g	0.0605	
Total Cannabinoids per 1g	62.8		mg/1g		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2313675	12/21/23	AOAC 991.14 (Petrifilm)þ		
Total Coliforms	< LOQ		cfu/g	10	2313675	12/21/23	AOAC 991.14 (Petrifilm)þ		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2313676	12/21/23	AOAC 2014.05 (RAPID)þ		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2313676	12/21/23	AOAC 2014.05 (RAPID)þ		

Solvents

Method: Residual Solvents by GC/MSþ **Units** µg/g **Batch** 2313769 **Analyze** 12/21/23 07:32 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: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

Pesticides **Method:** AOAC 2007.01 & EN 15662 (mod)þ **Units** mg/kg **Batch** 2313738 **Analyze** 12/20/23 10:30 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

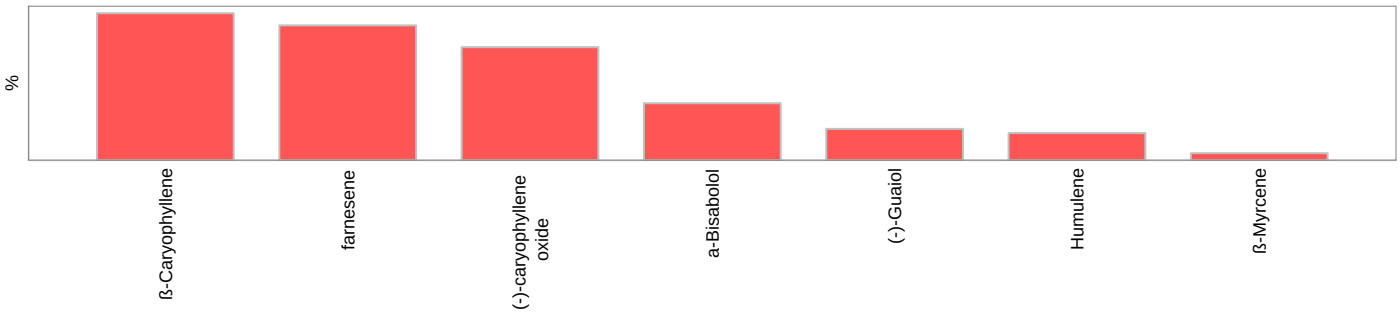
12423 NE Whitaker Way
Portland, OR 97230
503-254-1794

Report Number: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

Terpenes

Method: J AOAC 2015 V98-6 **Units** % **Batch** 2400070 **Analyze** 01/02/24 08:44 PM

Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
ß-Caryophyllene	0.0869	0.019	22.3969%		farnesene	0.0817	0.019	21.0567%	
(-)-caryophyllene oxide	0.0723	0.019	18.6340%		a-Bisabolol	0.0481	0.019	12.3969%	
(-)-Guaiol	0.0370	0.019	9.5361%		Humulene	0.0352	0.019	9.0722%	
ß-Myrcene	0.0266	0.019	6.8557%		a-Terpinene	< LOQ	0.019	0.00%	
(R)-(+)-Limonene	< LOQ	0.019	0.00%		Eucalyptol	< LOQ	0.019	0.00%	
p-Cymene	< LOQ	0.019	0.00%		Terpinolene	< LOQ	0.019	0.00%	
Linalool	< LOQ	0.019	0.00%		(±)-fenchone	< LOQ	0.019	0.00%	
(+)-fenchol	< LOQ	0.019	0.00%		(+)-Cedrol	< LOQ	0.019	0.00%	
(±)-trans-Nerolidol	< LOQ	0.019	0.00%		(-)-Isopulegol	< LOQ	0.019	0.00%	
valencene	< LOQ	0.019	0.00%		(±)-cis-Nerolidol	< LOQ	0.019	0.00%	
Geranyl acetate	< LOQ	0.019	0.00%		Menthol	< LOQ	0.019	0.00%	
Isoborneol	< LOQ	0.019	0.00%		(+)-Borneol	< LOQ	0.019	0.00%	
Geraniol	< LOQ	0.019	0.00%		(±)-Camphor	< LOQ	0.019	0.00%	
Camphene	< LOQ	0.019	0.00%		(-)-a-Terpineol	< LOQ	0.019	0.00%	
nerol	< LOQ	0.019	0.00%		trans-ß-Ocimene	< LOQ	0.013	0.00%	
(+)-Pulegone	< LOQ	0.019	0.00%		(-)-ß-Pinene	< LOQ	0.019	0.00%	
a-cedrene	< LOQ	0.019	0.00%		a-phellandrene	< LOQ	0.019	0.00%	
a-pinene	< LOQ	0.019	0.00%		cis-ß-Ocimene	< LOQ	0.006	0.00%	
d-3-Carene	< LOQ	0.019	0.00%		gamma-Terpinene	< LOQ	0.019	0.00%	
Sabinene	< LOQ	0.019	0.00%		Sabinene hydrate	< LOQ	0.019	0.00%	
Total Terpenes	**0.388**								



Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Arsenic¥	< LOQ	0.200	mg/kg	0.0952	2313730	12/19/23	AOAC 2013.06 (mod.)þ	pass	
Cadmium¥	< LOQ	0.200	mg/kg	0.0952	2313730	12/19/23	AOAC 2013.06 (mod.)þ	pass	
Lead¥	< LOQ	0.500	mg/kg	0.0952	2313730	12/19/23	AOAC 2013.06 (mod.)þ	pass	
Mercury¥	< LOQ	0.100	mg/kg	0.0476	2313730	12/19/23	AOAC 2013.06 (mod.)þ	pass	

Columbia LABORATORIES
A Tentamus Company

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

Report Number:	23-014491/D008.R000
Report Date:	01/04/2024
ORELAP#:	OR100028
Purchase Order:	2761898
Received:	12/11/23 16:24

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: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

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

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2313574**

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	2	0.0300	0.0322	%	93.1	80.0 - 120	Acceptable	
CBDV	2	0.0336	0.0349	%	96.4	80.0 - 120	Acceptable	
CBE	2	0.0336	0.0356	%	94.4	80.0 - 120	Acceptable	
CBDA	1	0.0315	0.0317	%	99.4	90.0 - 110	Acceptable	
CBGA	1	0.0322	0.0315	%	102	80.0 - 120	Acceptable	
CBG	1	0.0310	0.0309	%	100	80.0 - 120	Acceptable	
CBD	1	0.0325	0.0330	%	98.5	90.0 - 110	Acceptable	
THCV	2	0.0326	0.0342	%	95.4	80.0 - 120	Acceptable	
d8THCV	2	0.0275	0.0280	%	98.2	80.0 - 120	Acceptable	
THCVA	2	0.0310	0.0323	%	95.8	80.0 - 120	Acceptable	
CBN	1	0.0339	0.0330	%	103	80.0 - 120	Acceptable	
exo-THC	2	0.0303	0.0315	%	96.0	80.0 - 120	Acceptable	
d9THC	1	0.0341	0.0337	%	101	90.0 - 110	Acceptable	
d8THC	1	0.0328	0.0336	%	97.6	90.0 - 110	Acceptable	
9S-d10THC	1	0.0320	0.0326	%	98.2	80.0 - 120	Acceptable	
CBL	2	0.0313	0.0325	%	96.3	80.0 - 120	Acceptable	
9R-d10THC	1	0.0322	0.0318	%	101	80.0 - 120	Acceptable	
CBC	2	0.0335	0.0354	%	94.7	80.0 - 120	Acceptable	
THCA	1	0.0316	0.0322	%	98.2	90.0 - 110	Acceptable	
CBCA	2	0.0309	0.0344	%	90.0	80.0 - 120	Acceptable	
CBLA	2	0.0316	0.0341	%	92.6	80.0 - 120	Acceptable	
d9THCP	2	0.0345	0.0332	%	104	80.0 - 120	Acceptable	
CBT	2	0.0332	0.0350	%	94.8	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBDV	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBE	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBDA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBGA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBG	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBD	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCV	<LOQ	0.00329	%	< 0.00329	Acceptable	
d8THCV	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCVA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBN	<LOQ	0.00329	%	< 0.00329	Acceptable	
exo-THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
d9THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
d8THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
9S-d10THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBL	<LOQ	0.00329	%	< 0.00329	Acceptable	
9R-d10THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBC	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBCA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBLA	<LOQ	0.00329	%	< 0.00329	Acceptable	
d9THCP	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBT	<LOQ	0.00329	%	< 0.00329	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: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

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

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2313574**

Sample Duplicate Sample ID: **23-014491-0001**

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBDV	0.0653	0.0656	0.00328	%	0.398	< 20	Acceptable	
CBE	0.110	0.109	0.00328	%	1.25	< 20	Acceptable	
CBDA	0.00702	0.00716	0.00328	%	2.00	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBG	0.157	0.156	0.00328	%	0.417	< 20	Acceptable	
CBD	5.26	5.23	0.00328	%	0.505	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBN	0.0138	0.0127	0.00328	%	8.55	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
d9THC	0.145	0.146	0.00328	%	0.795	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBC	0.449	0.445	0.00328	%	0.949	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBT	0.118	0.106	0.00328	%	10.2	< 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: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

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: 2313738	
Method Blank				Laboratory Control Sample					
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits		Notes
Abamectin	0.000	< 0.250		0.981	1.000	98.1	50.0	150	
Acephate	0.000	< 0.200		0.719	0.800	89.9	60.0	120	
Acequinocyl	0.003	< 1.000		2.998	4.000	75.0	40.0	160	
Acetamiprid	0.000	< 0.100		0.386	0.400	96.5	60.0	120	
Aldicarb	0.000	< 0.200		0.791	0.800	98.8	60.0	120	
Azoxystrobin	0.000	< 0.100		0.358	0.400	89.4	60.0	120	
Bifenazate	0.000	< 0.100		0.355	0.400	88.7	60.0	120	
Bifenthrin	0.000	< 0.100		0.363	0.400	90.7	50.0	150	
Boscalid	0.004	< 0.200		0.766	0.800	95.8	60.0	120	
Carbaryl	0.000	< 0.100		0.370	0.400	92.6	60.0	120	
Carbofuran	0.000	< 0.100		0.393	0.400	98.2	60.0	120	
Chlorantraniliprole	0.000	< 0.100		0.343	0.400	85.7	60.0	120	
Chlorfenapyr	0.000	< 0.500		1.514	2.000	75.7	60.0	120	
Chlorpyrifos	0.000	< 0.100		0.368	0.400	91.9	60.0	120	
Clofentezine	0.000	< 0.100		0.281	0.400	70.3	60.0	120	
Cyfluthrin	0.000	< 0.500		1.791	2.000	89.5	50.0	150	
Cypermethrin	0.000	< 0.500		1.837	2.000	91.9	50.0	150	
Daminozide	0.000	< 0.500		0.580	2.000	***29.0***	60.0	120	Q7
Diazinon	0.000	< 0.100		0.384	0.400	95.9	60.0	120	
Dichlorvos	0.000	< 0.500		2.021	2.000	101.0	60.0	120	
Dimethoate	0.000	< 0.100		0.394	0.400	98.5	60.0	120	
Ethoprophos	0.000	< 0.100		0.361	0.400	90.3	60.0	120	
Etofenprox	0.000	< 0.200		0.668	0.800	83.5	50.0	150	
Etoxazole	0.000	< 0.100		0.378	0.400	94.4	60.0	120	
Fenoxycarb	0.000	< 0.100		0.391	0.400	97.9	60.0	120	
Fenpyroximate	0.000	< 0.200		0.771	0.800	96.4	60.0	120	
Fipronil	0.000	< 0.200		0.759	0.800	94.9	60.0	120	
Flonicamid	0.000	< 0.250		0.849	1.000	84.9	60.0	120	
Fludioxonil	0.000	< 0.200		0.818	0.800	102.2	50.0	150	
Hexythiazox	0.000	< 0.250		0.972	1.000	97.2	60.0	120	
Imazalil	0.000	< 0.100		0.372	0.400	93.0	60.0	120	
Imidacloprid	0.000	< 0.200		0.765	0.800	95.6	60.0	120	
Kresoxim-methyl	0.000	< 0.200		0.694	0.800	86.7	60.0	120	
Malathion	0.000	< 0.100		0.347	0.400	86.7	60.0	120	
Metalaxyl	0.000	< 0.100		0.379	0.400	94.6	60.0	120	
Methiocarb	0.000	< 0.100		0.360	0.400	90.1	60.0	120	
Methomyl	0.000	< 0.200		0.821	0.800	102.7	60.0	120	
MGK-264	0.000	< 0.100		0.352	0.400	87.9	50.0	150	
Myclobutanil	0.000	< 0.100		0.332	0.400	83.1	60.0	120	
Naled	0.000	< 0.250		1.025	1.000	102.5	50.0	150	
Oxamyl	0.000	< 0.500		1.885	2.000	94.2	60.0	120	
Paclobutrazole	0.000	< 0.200		0.728	0.800	91.0	60.0	120	
Parathion-Methyl	0.000	< 0.100		0.348	0.400	87.0	50.0	150	
Permethrin	0.000	< 0.100		0.375	0.400	93.7	50.0	150	
Phosmet	0.000	< 0.100		0.365	0.400	91.2	50.0	150	
Piperonyl butoxide	0.000	< 0.500		1.964	2.000	98.2	60.0	120	
Prallethrin	0.000	< 0.100		0.378	0.400	94.5	60.0	120	
Propiconazole	0.000	< 0.200		0.667	0.800	83.3	60.0	120	
Propoxur	0.000	< 0.100		0.382	0.400	95.6	60.0	120	
Pyrethrin (Summe)	0.000	< 0.100		0.456	0.488	93.4	60.0	120	
Pyridaben	0.000	< 0.100		0.385	0.400	96.2	50.0	150	
Spinosad	0.000	< 0.100		0.366	0.388	94.4	50.0	150	
Spiromesifen	0.000	< 0.100		0.393	0.400	98.2	60.0	120	
Spirotetramat	0.000	< 0.100		0.372	0.400	93.1	60.0	120	
Spiroxamine	0.000	< 0.200		0.782	0.800	97.8	60.0	120	
Tebuconazole	0.000	< 0.200		0.705	0.800	88.2	60.0	120	
Thiacloprid	0.000	< 0.100		0.373	0.400	93.2	60.0	120	
Thiamethoxam	0.000	< 0.100		0.390	0.400	97.6	60.0	120	
Trifloxystrobin	0.000	< 0.100		0.390	0.400	97.4	60.0	120	

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

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:** 2313738

Matrix Spike/Matrix Spike Duplicate Recoveries — **Sample ID:** 23-014491-0002

Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.000	0.396	0.517	1.000	26.6%	< 30	39.6%	51.7%	50 - 150	Q
Acephate	0.000	0.673	0.685	0.800	1.9%	< 30	84.1%	85.7%	50 - 150	
Acequinocyl	0.000	1.680	1.147	4.000	37.8%	< 30	42.0%	28.7%	50 - 150	R, Q
Acetamiprid	0.000	0.362	0.367	0.400	1.6%	< 30	90.4%	91.9%	50 - 150	
Aldicarb	0.000	0.636	0.670	0.800	5.1%	< 30	79.6%	83.7%	50 - 150	
Azoxystrobin	0.000	0.261	0.337	0.400	25.5%	< 30	65.2%	84.2%	50 - 150	
Bifenazate	0.000	0.246	0.256	0.400	4.2%	< 30	61.5%	64.1%	50 - 150	
Bifenthrin	0.000	0.184	0.183	0.400	0.7%	< 30	46.0%	45.7%	50 - 150	Q
Boscalid	0.000	0.577	0.634	0.800	9.5%	< 30	72.1%	79.3%	50 - 150	
Carbaryl	0.000	0.258	0.259	0.400	0.1%	< 30	64.6%	64.7%	50 - 150	
Carbofuran	0.000	0.244	0.253	0.400	3.7%	< 30	60.9%	63.2%	50 - 150	
Chlorantraniliprole	0.000	0.175	0.204	0.400	15.0%	< 30	43.9%	51.0%	50 - 150	Q
Chlorfenapyr	0.000	1.295	1.195	2.000	8.0%	< 30	64.7%	59.8%	50 - 150	
Chlorpyrifos	0.009	0.266	0.272	0.400	2.6%	< 30	64.2%	65.9%	50 - 150	
Clofentezine	0.000	0.238	0.249	0.400	4.8%	< 30	59.4%	62.3%	50 - 150	
Cyfluthrin	0.000	0.902	0.981	2.000	8.4%	< 30	45.1%	49.1%	30 - 150	
Cypermethrin	0.000	0.759	0.771	2.000	1.6%	< 30	37.9%	38.6%	50 - 150	Q
Daminozide	0.000	0.504	0.539	2.000	6.7%	< 30	25.2%	27.0%	30 - 150	Q
Diazinon	0.000	0.266	0.264	0.400	0.9%	< 30	66.5%	66.0%	50 - 150	
Dichlorvos	0.022	1.597	1.619	2.000	1.4%	< 30	78.8%	79.9%	50 - 150	
Dimethoate	0.000	0.335	0.338	0.400	0.9%	< 30	83.7%	84.5%	50 - 150	
Ethoprophos	0.000	0.286	0.288	0.400	0.7%	< 30	71.5%	72.0%	50 - 150	
Etofenprox	0.007	0.274	0.268	0.800	2.1%	< 30	33.3%	32.6%	50 - 150	Q
Etoxazole	0.000	0.214	0.201	0.400	5.9%	< 30	53.4%	50.4%	50 - 150	
Fenoxycarb	0.000	0.250	0.252	0.400	0.9%	< 30	62.4%	63.0%	50 - 150	
Fenpyroximate	0.000	0.428	0.418	0.800	2.5%	< 30	53.5%	52.2%	50 - 150	
Fipronil	0.000	0.349	0.360	0.800	3.3%	< 30	43.6%	45.1%	50 - 150	Q
Flonicamid	0.000	0.840	0.880	1.000	4.6%	< 30	84.0%	88.0%	50 - 150	
Fludioxonil	0.000	0.991	1.101	0.800	10.5%	< 30	123.9%	137.6%	50 - 150	
Hexythiazox	0.000	0.282	0.303	1.000	7.1%	< 30	28.2%	30.3%	50 - 150	Q
Imazalil	0.005	0.271	0.304	0.400	11.7%	< 30	66.5%	74.8%	50 - 150	
Imidacloprid	0.000	0.674	0.714	0.800	5.8%	< 30	84.2%	89.2%	50 - 150	
Kresoxim-methyl	0.000	0.494	0.521	0.800	5.2%	< 30	61.7%	65.1%	50 - 150	
Malathion	0.000	0.230	0.232	0.400	0.8%	< 30	57.5%	58.0%	50 - 150	
Metalaxyl	0.000	0.281	0.254	0.400	10.3%	< 30	70.3%	63.4%	50 - 150	
Methiocarb	0.026	0.252	0.271	0.400	7.7%	< 30	56.7%	61.3%	50 - 150	
Methomyl	0.000	0.725	0.766	0.800	5.4%	< 30	90.7%	95.7%	50 - 150	
MGK-264	0.000	0.250	0.235	0.400	6.0%	< 30	62.4%	58.8%	50 - 150	
Myclobutanil	0.000	0.285	0.302	0.400	5.9%	< 30	71.3%	75.6%	50 - 150	
Naled	0.000	0.648	0.571	1.000	12.5%	< 30	64.8%	57.1%	50 - 150	
Oxamyl	0.000	1.698	1.810	2.000	6.3%	< 30	84.9%	90.5%	50 - 150	
Paclobutrazole	0.000	0.556	0.618	0.800	10.6%	< 30	69.4%	77.2%	50 - 150	
Parathion-Methyl	0.000	0.227	0.214	0.400	5.6%	< 30	56.6%	53.5%	30 - 150	
Permethrin	0.000	0.209	0.201	0.400	3.6%	< 30	52.2%	50.4%	50 - 150	
Phosmet	0.000	0.238	0.265	0.400	10.8%	< 30	59.5%	66.3%	50 - 150	
Piperonyl butoxide	0.000	1.220	1.183	2.000	3.1%	< 30	61.0%	59.1%	50 - 150	
Prallethrin	0.000	0.133	0.143	0.400	7.0%	< 30	33.2%	35.6%	50 - 150	Q
Propiconazole	0.004	0.530	0.530	0.800	0.0%	< 30	65.8%	65.9%	50 - 150	
Propoxur	0.000	0.283	0.291	0.400	2.8%	< 30	70.7%	72.7%	50 - 150	
Pyrethrin (Summe)	0.000	0.241	0.244	0.488	1.1%	< 30	49.4%	49.9%	50 - 150	Q
Pyridaben	0.000	0.112	0.119	0.400	5.3%	< 30	28.1%	29.6%	50 - 150	Q
Spinosad	0.000	0.203	0.195	0.388	3.7%	< 30	52.2%	50.3%	50 - 150	
Spiromesifen	0.012	0.214	0.215	0.400	0.2%	< 30	50.6%	50.7%	50 - 150	
Spirotetramat	0.000	0.351	0.368	0.400	4.6%	< 30	87.8%	91.9%	50 - 150	
Spiroxamine	0.000	0.653	0.674	0.800	3.2%	< 30	81.6%	84.2%	50 - 150	
Tebuconazole	0.000	0.497	0.548	0.800	9.7%	< 30	62.2%	68.5%	50 - 150	
Thiacloprid	0.000	0.312	0.336	0.400	7.3%	< 30	78.0%	83.9%	50 - 150	
Thiamethoxam	0.000	0.324	0.359	0.400	10.4%	< 30	80.9%	89.9%	50 - 150	
Trifloxystrobin	0.000	0.204	0.208	0.400	2.3%	< 30	50.9%	52.1%	50 - 150	

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

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

Laboratory Quality Control Results

Residual Solvents **Batch ID:** 2313769

Method Blank					Laboratory Control Sample							
Analyte	**Result**		**LOQ**	**Notes**	**Result**	**Spike**	**Units**	**% Rec**	**Limits**			**Notes**
Propane	ND	<	200		568	584	µg/g	97.3	60	-	120	
Isobutane	ND	<	200		678	767	µg/g	88.4	60	-	120	
Butane	ND	<	200		679	782	µg/g	86.8	60	-	120	
2,2-Dimethylpropane	ND	<	200		942	939	µg/g	100.3	60	-	120	
Methanol	ND	<	200		1910	1600	µg/g	119.4	60	-	120	
Ethylene Oxide	ND	<	30		52.8	57.1	µg/g	92.5	60	-	120	
2-Methylbutane	ND	<	200		1820	1600	µg/g	113.8	60	-	120	
Pentane	ND	<	200		1780	1600	µg/g	111.3	60	-	120	
Ethanol	ND	<	200		1600	1600	µg/g	100.0	70	-	130	
Ethyl Ether	ND	<	200		1610	1600	µg/g	100.6	60	-	120	
2,2-Dimethylbutane	ND	<	30		159	161	µg/g	98.8	60	-	120	
Acetone	ND	<	200		1740	1600	µg/g	108.8	60	-	120	
2-Propanol	ND	<	200		1710	1600	µg/g	106.9	60	-	120	
Ethyl Formate	ND	<	500		1160	1600	µg/g	72.5	70	-	130	
Acetonitrile	ND	<	100		558	488	µg/g	114.3	60	-	120	
Methyl Acetate	ND	<	500		1580	1610	µg/g	98.1	70	-	130	
2,3-Dimethylbutane	ND	<	30		166	163	µg/g	101.8	60	-	120	
Dichloromethane	ND	<	60		469	488	µg/g	96.1	60	-	120	
2-Methylpentane	ND	<	30		152	161	µg/g	94.4	60	-	120	
MTBE	ND	<	500		1610	1650	µg/g	97.6	70	-	130	
3-Methylpentane	ND	<	30		164	162	µg/g	101.2	60	-	120	
Hexane	ND	<	30		144	161	µg/g	89.4	60	-	120	
1-Propanol	ND	<	500		1720	1620	µg/g	106.2	70	-	130	
Methylethylketone	ND	<	500		1580	1610	µg/g	98.1	70	-	130	
Ethyl acetate	ND	<	200		1760	1610	µg/g	109.3	60	-	120	
2-Butanol	ND	<	200		1660	1610	µg/g	103.1	60	-	120	
Tetrahydrofuran	ND	<	100		463	483	µg/g	95.9	60	-	120	
Cyclohexane	ND	<	200		1520	1600	µg/g	95.0	60	-	120	
2-methyl-1-propanol	ND	<	500		1410	1600	µg/g	88.1	70	-	130	
Benzene	ND	<	1		3	4.99	µg/g	60.1	60	-	120	
Isopropyl Acetate	ND	<	200		1760	1600	µg/g	110.0	60	-	120	
Heptane	ND	<	200		1770	1600	µg/g	110.6	60	-	120	
1-Butanol	ND	<	500		1530	1610	µg/g	95.0	70	-	130	
Propyl Acetate	ND	<	500		1620	1610	µg/g	100.6	70	-	130	
1,4-Dioxane	ND	<	100		430	480	µg/g	89.6	60	-	120	
2-Ethoxyethanol	ND	<	30		156	161	µg/g	96.9	60	-	120	
Methylisobutylketone	ND	<	500		1630	1610	µg/g	101.2	70	-	130	
3-Methyl-1-butanol	ND	<	500		1530	1610	µg/g	95.0	70	-	130	
Ethylene Glycol	ND	<	200		393	481	µg/g	81.7	60	-	120	
Toluene	ND	<	100		447	483	µg/g	92.5	60	-	120	
Isobutyl Acetate	ND	<	500		1640	1610	µg/g	101.9	70	-	130	
1-Pentanol	ND	<	500		1620	1610	µg/g	100.6	70	-	130	
Butyl Acetate	ND	<	500		1620	1600	µg/g	101.3	70	-	130	
Ethylbenzene	ND	<	200		896	962	µg/g	93.1	60	-	120	
m,p-Xylene	ND	<	200		893	972	µg/g	91.9	60	-	120	
o-Xylene	ND	<	200		893	965	µg/g	92.5	60	-	120	
Cumene	ND	<	30		157	169	µg/g	92.9	60	-	120	
Anisole	ND	<	500		1360	1600	µg/g	85.0	70	-	130	
DMSO	ND	<	500		1310	1600	µg/g	81.9	70	-	130	
1,2-dimethoxyethane	ND	<	50		157	163	µg/g	96.3	70	-	130	
Triethylamine	ND	<	500		1220	1600	µg/g	76.3	70	-	130	
N,N-dimethylformamide	ND	<	150		432	482	µg/g	89.6	70	-	130	
N,N-dimethylacetamide	ND	<	150		464	483	µg/g	96.1	70	-	130	
Pyridine	ND	<	50		136	161	µg/g	84.5	70	-	130	
Sulfolane	ND	<	50		132	163	µg/g	81.0	70	-	130	
1,2-Dichloroethane	ND	<	1		0.949	1	µg/g	94.9	70	-	130	
Chloroform	ND	<	1		0.872	1	µg/g	87.2	70	-	130	
Trichloroethylene	ND	<	1		0.758	1	µg/g	75.8	70	-	130	
1,1-Dichloroethane	ND	<	1		0.935	1	µg/g	93.5	70	-	130	

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

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

QC - Sample Duplicate **Sample ID: 23-014491-0001**

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

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: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

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

Terpenes Quality Control Results

Method Reference: EPA 5035 **Batch ID:** 2400070

Method Blank					Laboratory Control Sample					
Analyte	**Result**	**LOQ**		**Notes**	**Result**	**LCS**	**Units**	**LCS % Rec**	**Limits**	**Notes**
a-pinene	<LOQ	<	200		489	500	µg/g	***98%***	70 - 130	
Camphene	<LOQ	<	200		479	500	µg/g	***96%***	70 - 130	
Sabinene	<LOQ	<	200		488	500	µg/g	***98%***	70 - 130	
b-Pinene	<LOQ	<	200		489	500	µg/g	***98%***	70 - 130	
b-Myrcene	<LOQ	<	200		480	500	µg/g	***96%***	70 - 130	
a-phelllandrene	<LOQ	<	200		496	500	µg/g	***99%***	70 - 130	
d-3-Carene	<LOQ	<	200		493	500	µg/g	***99%***	70 - 130	
a-Terpinene	<LOQ	<	200		508	500	µg/g	***102%***	70 - 130	
p-Cymene	<LOQ	<	200		490	500	µg/g	***98%***	70 - 130	
D-Limonene	<LOQ	<	200		496	500	µg/g	***99%***	70 - 130	
Eucalyptol	<LOQ	<	200		476	500	µg/g	***95%***	70 - 130	
b-cis-Ocimene	<LOQ	<	67		173	167	µg/g	***104%***	70 - 130	
b-trans-Ocimene	<LOQ	<	133		332	333	µg/g	***100%***	70 - 130	
g-Terpinene	<LOQ	<	200		507	500	µg/g	***101%***	70 - 130	
Sabinene_Hydrate	<LOQ	<	200		528	500	µg/g	***106%***	70 - 130	
Terpinolene	<LOQ	<	200		510	500	µg/g	***102%***	70 - 130	
D-Fenchone	<LOQ	<	200		522	500	µg/g	***104%***	70 - 130	
Linalool	<LOQ	<	200		534	500	µg/g	***107%***	70 - 130	
Fenchol	<LOQ	<	200		533	500	µg/g	***107%***	70 - 130	
Camphor	<LOQ	<	200		527	500	µg/g	***105%***	70 - 130	
Isopulego	<LOQ	<	200		555	500	µg/g	***111%***	70 - 130	
Isoborneol	<LOQ	<	200		534	500	µg/g	***107%***	70 - 130	
Borneol	<LOQ	<	200		545	500	µg/g	***109%***	70 - 130	
DL-Menthol	<LOQ	<	200		542	500	µg/g	***108%***	70 - 130	
Terpineol	<LOQ	<	200		549	500	µg/g	***110%***	70 - 130	
Nerol	<LOQ	<	200		509	500	µg/g	***102%***	70 - 130	
Pulegone	<LOQ	<	200		564	500	µg/g	***113%***	70 - 130	
Gereniol	<LOQ	<	200		538	500	µg/g	***108%***	70 - 130	
Geranyl_Acetate	<LOQ	<	200		537	500	µg/g	***107%***	70 - 130	
a-Cedrene	<LOQ	<	200		558	500	µg/g	***112%***	70 - 130	
b-Caryophyllene	<LOQ	<	200		565	500	µg/g	***113%***	70 - 130	
a-Humulene	<LOQ	<	200		557	500	µg/g	***111%***	70 - 130	
Valenene	<LOQ	<	200		545	500	µg/g	***109%***	70 - 130	
cis-Nerolidol	<LOQ	<	200		580	500	µg/g	***116%***	70 - 130	
a-Farnesene	<LOQ	<	200		592	500	µg/g	***118%***	70 - 130	
trans-Nerolidol	<LOQ	<	200		576	500	µg/g	***115%***	70 - 130	
Caryophyllene_Oxide	<LOQ	<	200		569	500	µg/g	***114%***	70 - 130	
Guaiol	<LOQ	<	200		582	500	µg/g	***116%***	70 - 130	
Cedrol	<LOQ	<	200		571	500	µg/g	***114%***	70 - 130	
a-Bisabolol	<LOQ	<	200		565	500	µg/g	***113%***	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: 23-014491/D008.R000
Report Date: 01/04/2024
ORELAP#: OR100028
Purchase Order: 2761898
Received: 12/11/23 16:24

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

Terpenes Quality Control Results

Method Reference: EPA 5035 **Batch ID:** 2400070

Sample/Sample Duplicate **Sample ID: 23-015055-0001**

Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	22300	22200	195	µg/g	0%	< 20	
Camphene	1190	1180	195	µg/g	1%	< 20	
Sabinene	<LOQ	<LOQ	195	µg/g	0%	< 20	
b-Pinene	13400	13300	195	µg/g	1%	< 20	
b-Myrcene	105000	103000	195	µg/g	2%	< 20	
a-phelllandrene	1710	1690	195	µg/g	1%	< 20	
d-3-Carene	1190	1170	195	µg/g	2%	< 20	
a-Terpinene	1930	1930	195	µg/g	0%	< 20	
p-Cymene	333	330	195	µg/g	1%	< 20	
D-Limonene	84000	83100	195	µg/g	1%	< 20	
Eucalyptol	1320	1320	195	µg/g	0%	< 20	
b-cis-Ocimene	1030	1020	65.1	µg/g	1%	< 20	
b-trans-Ocimene	13700	13700	130	µg/g	0%	< 20	
g-Terpinene	1320	1330	195	µg/g	1%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	195	µg/g	0%	< 20	
Terpinolene	35500	35300	195	µg/g	1%	< 20	
D-Fenchone	445	433	195	µg/g	3%	< 20	
Linalool	10500	10500	195	µg/g	0%	< 20	
Fenchol	3510	3490	195	µg/g	1%	< 20	
Camphor	<LOQ	<LOQ	195	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	195	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	195	µg/g	0%	< 20	
Borneol	569	582	195	µg/g	2%	< 20	
DL-Menthol	<LOQ	<LOQ	195	µg/g	0%	< 20	
Terpineol	2060	2040	195	µg/g	1%	< 20	
Nerol	<LOQ	<LOQ	195	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	195	µg/g	0%	< 20	
Gereniol	<LOQ	<LOQ	195	µg/g	0%	< 20	
Geranyl_Acetate	<LOQ	<LOQ	195	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	195	µg/g	0%	< 20	
b-Caryophyllene	37500	37200	195	µg/g	1%	< 20	
a-Humulene	14900	14800	195	µg/g	1%	< 20	
Valenene	2480	2480	195	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	195	µg/g	0%	< 20	
a-Farnesene	<LOQ	<LOQ	195	µg/g	0%	< 20	
trans-Nerolidol	711	712	195	µg/g	0%	< 20	
Caryophyllene_Oxide	1260	1250	195	µg/g	1%	< 20	
Guaiol	1390	1370	195	µg/g	1%	< 20	
Cedrol	<LOQ	<LOQ	195	µg/g	0%	< 20	
a-Bisabolol	1630	1590	195	µg/g	2%	< 20	

Definitions

RPD Relative Percent Difference

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

Report Number:	23-014491/D008.R000
Report Date:	01/04/2024
ORELAP#:	OR100028
Purchase Order:	2761898
Received:	12/11/23 16:24

Columbia LABORATORIES
A Tentamus Company

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

Report Number:	23-014491/D008.R000
Report Date:	01/04/2024
ORELAP#:	OR100028
Purchase Order:	2761898
Received:	12/11/23 16:24

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.