Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

Customer: Oscity Biosciences
Product identity: Oscity Sleep Gummies w/ CBN (EGS03143)
Project Number: 073123
Client/Metrc ID: .
Laboratory ID: 23-009224-0001

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status
CBD per 1g	6.07		mg/1g	
CBG per 1g	0.0349		mg/1g	
CBN per 1g	0.494		mg/1g	
Δ9-THC per 1g	0.127		mg/1g	

CBD-Total per Serving Size 6.07 mg/1g

THC-Total per Serving Size 0.127 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:

Less than LOQ for all analytes.

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: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

Customer: Oscity Biosciences
United States of America (USA)
Product identity: Oscity Sleep Gummies w/ CBN (EGS03143)
Project Number: 073123
Client/Metrc ID: .
Sample Date:
Laboratory ID: 23-009224-0001
Evidence of Cooling: No
Temp: 22.7
Relinquished by: client
Serving Size #1: 1 g

Sample Results

Potency per 1g **Method:** J AOAC 2015 V98-6 (mod)þ **Units** mg/se **Batch:** 2309794 **Analyze:** 8/7/23 10:00:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBD per 1g	6.07		mg/1g	0.0321	
CBD-A per 1g	< LOQ		mg/1g	0.0321	
CBD-Total per 1g	6.07		mg/1g	0.0602	
CBG per 1g	0.0349		mg/1g	0.0321	
CBG-A per 1g	< LOQ		mg/1g	0.0321	
CBG-Total per 1g	< LOQ		mg/1g	0.0599	
CBN per 1g	0.494		mg/1g	0.0321	
Δ10-THC-9R per 1g	< LOQ		mg/1g	0.0321	
Δ10-THC-9S per 1g	< LOQ		mg/1g	0.0321	
Δ10-THC-Total per 1g	< LOQ		mg/1g	0.0642	
Δ8-THC per 1g	< LOQ		mg/1g	0.0321	
Δ9-THC per 1g	0.127		mg/1g	0.0321	
THC-A per 1g	< LOQ		mg/1g	0.0321	
THC-Total per 1g	0.127		mg/1g	0.0602	

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Salmonella spp. by PCR¥	Negative		/g		2309744	08/06/23	AOAC 2020.02þ		
EHEC including STEC¥	Negative		/g		2309745	08/06/23	AOAC RI 121806þ		
A. flavus¥	Negative		/1g		2309743	08/07/23	Aspergillus in Cannabisþ		
A. fumigatus¥	Negative		/1g		2309743	08/07/23	Aspergillus in Cannabisþ		
A. niger	Negative		/1g		2309743	08/07/23	Aspergillus in Cannabis		
A. terreus¥	Negative		/1g		2309743	08/07/23	Aspergillus in Cannabisþ		

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

Solvents **Method:** Residual Solvents by GC/MS[þ] **Units** µg/g **Batch** 2309854 **Analyze** 08/09/23 01:51 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,4-Dioxane	< LOQ		100			2-Butanol	< LOQ		200		
2-Ethoxyethanol	< LOQ		30.0			2-Methylbutane (Isopentane)	< LOQ		200		
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ		200		
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		200			Acetonitrile	< LOQ		100		
Benzene	< LOQ		1.00			Butanes (sum)	< LOQ		400		
Cyclohexane	< LOQ		200			Ethyl acetate	< LOQ		200		
Ethyl benzene	< LOQ		200			Ethyl ether	< LOQ		200		
Ethylene glycol	< LOQ		200			Ethylene oxide	< LOQ		20.0		
Hexanes (sum)	< LOQ		150			Isopropyl acetate	< LOQ		200		
Isopropylbenzene (Cumene)	< LOQ		30.0			m,p-Xylene	< LOQ		200		
Methanol	< LOQ		200			Methylene chloride	< LOQ		60.0		
Methylpropane (Isobutane)	< LOQ		200			n-Butane	< LOQ		200		
n-Heptane	< LOQ		200			n-Hexane	< LOQ		30.0		
n-Pentane	< LOQ		200			o-Xylene	< LOQ		200		
Pentanes (sum)	< LOQ		600			Propane	< LOQ		200		
Tetrahydrofuran	< LOQ		100			Toluene	< LOQ		100		
Total Xylenes	< LOQ		400			Total Xylenes and Ethyl benzene	< LOQ		600		

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

Pesticides **Method:** AOAC 2007.01 & EN 15662 (mod)þ **Units** mg/kg **Batch** 2309815 **Analyze** 08/08/23 12:28 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin¥	< LOQ		0.250			Acephate¥	< LOQ		0.200		
Acequinocyl¥	< LOQ		1.00			Acetamiprid¥	< LOQ		0.100		
Aldicarb¥	< LOQ		0.200			Azoxystrobin¥	< LOQ		0.100		
Bifenazate¥	< LOQ		0.100			Bifenthrin¥	< LOQ		0.100		
Boscalid¥	< LOQ		0.200			Carbaryl¥	< LOQ		0.100		
Carbofuran¥	< LOQ		0.100			Chlorantraniliprole¥	< LOQ		0.100		
Chlorfenapyr¥	< LOQ		0.500			Chlorpyrifos¥	< LOQ		0.100		
Clofentezine¥	< LOQ		0.100			Cyfluthrin¥	< LOQ		0.500		
Cypermethrin¥	< LOQ		0.500			Daminozide¥	< LOQ		0.500		
Diazinon¥	< LOQ		0.100			Dichlorvos¥	< LOQ		0.500		
Dimethoate¥	< LOQ		0.100			Ethoprophos¥	< LOQ		0.100		
Etofenprox¥	< LOQ		0.200			Etoxazole¥	< LOQ		0.100		
Fenoxycarb¥	< LOQ		0.100			Fenpyroximate¥	< LOQ		0.200		
Fipronil¥	< LOQ		0.200			Flonicamid¥	< LOQ		0.400		
Fludioxonil¥	< LOQ		0.200			Hexythiazox¥	< LOQ		0.400		
Imazalil¥	< LOQ		0.100			Imidacloprid¥	< LOQ		0.200		
Kresoxim-methyl¥	< LOQ		0.200			Malathion¥	< LOQ		0.100		
Metalaxyl¥	< LOQ		0.100			Methiocarb¥	< LOQ		0.100		
Methomyl¥	< LOQ		0.200			MGK-264¥	< LOQ		0.100		
Myclobutanil¥	< LOQ		0.100			Naled¥	< LOQ		0.250		
Oxamyl¥	< LOQ		0.500			Paclobutrazole¥	< LOQ		0.200		
Parathion-Methyl¥	< LOQ		0.100			Permethrin¥	< LOQ		0.100		
Phosmet¥	< LOQ		0.100			Piperonyl butoxide¥	< LOQ		1.00		
Prallethrin¥	< LOQ		0.100			Propiconazole¥	< LOQ		0.200		
Propoxur¥	< LOQ		0.100			Pyrethrin I (total)¥	< LOQ		0.500		
Pyridaben¥	< LOQ		0.100			Spinosad¥	< LOQ		0.100		
Spiromesifen¥	< LOQ		0.100			Spirotetramat¥	< LOQ		0.100		
Spiroxamine¥	< LOQ		0.200			Tebuconazole¥	< LOQ		0.200		
Thiacloprid¥	< LOQ		0.100			Thiamethoxam¥	< LOQ		0.100		
Trifloxystrobin¥	< LOQ		0.100								

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

Terpenes

Method: J AOAC 2015 V98-6 **Units** % **Batch** 2309876 **Analyze** 08/09/23 02:39 PM

Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
Geraniol	< LOQ	0.019	0.00%		valencene	< LOQ	0.019	0.00%	
nerol	< LOQ	0.019	0.00%		(±)-trans-Nerolidol	< LOQ	0.019	0.00%	
(±)-cis-Nerolidol	< LOQ	0.019	0.00%		Sabinene hydrate	< LOQ	0.019	0.00%	
(R)-(+)-Limonene	< LOQ	0.019	0.00%		a-Terpinene	< LOQ	0.019	0.00%	
(+)-Pulegone	< LOQ	0.019	0.00%		Eucalyptol	< LOQ	0.019	0.00%	
gamma-Terpinene	< LOQ	0.019	0.00%		Terpinolene	< LOQ	0.019	0.00%	
p-Cymene	< LOQ	0.019	0.00%		(±)-fenchone	< LOQ	0.019	0.00%	
Linalool	< LOQ	0.019	0.00%		(-)-a-Terpineol	< LOQ	0.019	0.00%	
(-)-caryophyllene oxide	< LOQ	0.019	0.00%		(-)-Guaiol	< LOQ	0.019	0.00%	
(-)-Isopulegol	< LOQ	0.019	0.00%		(-)-ß-Pinene	< LOQ	0.019	0.00%	
(+)-Borneol	< LOQ	0.019	0.00%		(+)-Cedrol	< LOQ	0.019	0.00%	
(+)-fenchol	< LOQ	0.019	0.00%		(±)-Camphor	< LOQ	0.019	0.00%	
a-Bisabolol	< 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%	
Camphene	< LOQ	0.019	0.00%		cis-ß-Ocimene	< LOQ	0.006	0.00%	
d-3-Carene	< LOQ	0.019	0.00%		farnesene	< LOQ	0.019	0.00%	
Geranyl acetate	< LOQ	0.019	0.00%		Humulene	< LOQ	0.019	0.00%	
Isoborneol	< LOQ	0.019	0.00%		Menthol	< LOQ	0.019	0.00%	
Sabinene	< LOQ	0.019	0.00%		ß-Caryophyllene	< LOQ	0.019	0.00%	
ß-Myrcene	< LOQ	0.019	0.00%		trans-ß-Ocimene	< LOQ	0.012	0.00%	
Total Terpenes	**< LOQ**								

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Arsenic¥	< LOQ		mg/kg	0.0190	2309906	08/10/23	AOAC 2013.06 (mod.)þ		
Cadmium¥	< LOQ		mg/kg	0.0190	2309906	08/10/23	AOAC 2013.06 (mod.)þ		
Lead¥	< LOQ		mg/kg	0.0190	2309906	08/10/23	AOAC 2013.06 (mod.)þ		
Mercury¥	< LOQ		mg/kg	0.00951	2309906	08/10/23	AOAC 2013.06 (mod.)þ		

Mycotoxins

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Aflatoxin B2¥	< LOQ		µg/kg	5.00	2309887	08/10/23	AOAC 2007.01 & EN 15662 (mod)þ		
Aflatoxin B1¥	< LOQ		µg/kg	5.00	2309887	08/10/23	AOAC 2007.01 & EN 15662 (mod)þ		
Aflatoxin G1¥	< LOQ		µg/kg	5.00	2309887	08/10/23	AOAC 2007.01 & EN 15662 (mod)þ		
Aflatoxin G2¥	< LOQ		µg/kg	5.00	2309887	08/10/23	AOAC 2007.01 & EN 15662 (mod)þ		
Ochratoxin A¥	< LOQ		µg/kg	5.00	2309887	08/10/23	AOAC 2007.01 & EN 15662 (mod)þ		
Total Aflatoxins¥	0.000		µg/kg	20.0		08/11/23	AOAC 2007.01 & EN 15662 (mod)þ		

Columbia LABORATORIES
A Tentamus Company

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

Report Number:	23-009224/D002.R000
Report Date:	08/11/2023
ORELAP#:	OR100028
Purchase Order:	
Received:	08/04/23 09:42

Abbreviations

Limits: Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220, CCR title 16-division 42. BCC-section 5723

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

ᵇ = ISO/IEC 17025:2017 accredited method.
¥ = TNI accredited analyte.

Units of Measure

g = g
µg/g = Microgram per gram
µg/kg = Micrograms per kilogram = parts per billion (ppb)
mg/kg = Milligram per kilogram = parts per million (ppm)
mg/1g = Milligram per 1g
/1g = Per 1 gram
/g = Per gram
% = 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: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

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

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2309794**

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	2	0.0314	0.0311	%	101	80.0 - 120	Acceptable	
CBDV	2	0.0310	0.0307	%	101	80.0 - 120	Acceptable	
CBE	2	0.0350	0.0349	%	100	80.0 - 120	Acceptable	
CBDA	1	0.0330	0.0336	%	98.1	90.0 - 110	Acceptable	
CBGA	1	0.0351	0.0336	%	105	80.0 - 120	Acceptable	
CBG	1	0.0343	0.0344	%	99.5	80.0 - 120	Acceptable	
CBD	1	0.0351	0.0352	%	99.7	90.0 - 110	Acceptable	
THCV	2	0.0225	0.0222	%	101	80.0 - 120	Acceptable	
d8THCV	2	0.0272	0.0272	%	100	80.0 - 120	Acceptable	
THCVA	2	0.0312	0.0310	%	101	80.0 - 120	Acceptable	
CBN	1	0.0356	0.0351	%	102	80.0 - 120	Acceptable	
exo-THC	2	0.0312	0.0311	%	100	80.0 - 120	Acceptable	
d9THC	1	0.0355	0.0345	%	103	90.0 - 110	Acceptable	
d8THC	1	0.0325	0.0325	%	99.9	90.0 - 110	Acceptable	
9S-d10THC	1	0.0356	0.0354	%	101	80.0 - 120	Acceptable	
CBL	2	0.0315	0.0311	%	101	80.0 - 120	Acceptable	
9R-d10THC	1	0.0325	0.0323	%	101	80.0 - 120	Acceptable	
CBC	2	0.0315	0.0319	%	98.7	80.0 - 120	Acceptable	
THCA	1	0.0333	0.0331	%	101	90.0 - 110	Acceptable	
CBCA	2	0.0321	0.0325	%	98.7	80.0 - 120	Acceptable	
CBLA	2	0.0498	0.0500	%	99.6	80.0 - 120	Acceptable	
d9THCP	2	0.0316	0.0323	%	97.8	80.0 - 120	Acceptable	
CBT	2	0.0306	0.0314	%	97.5	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBDV	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBE	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBDA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBGA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBG	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBD	<LOQ	0.00322	%	< 0.00322	Acceptable	
THCV	<LOQ	0.00322	%	< 0.00322	Acceptable	
d8THCV	<LOQ	0.00322	%	< 0.00322	Acceptable	
THCVA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBN	<LOQ	0.00322	%	< 0.00322	Acceptable	
exo-THC	<LOQ	0.00322	%	< 0.00322	Acceptable	
d9THC	<LOQ	0.00322	%	< 0.00322	Acceptable	
d8THC	<LOQ	0.00322	%	< 0.00322	Acceptable	
9S-d10THC	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBL	<LOQ	0.00322	%	< 0.00322	Acceptable	
9R-d10THC	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBC	<LOQ	0.00322	%	< 0.00322	Acceptable	
THCA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBCA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBLA	<LOQ	0.00322	%	< 0.00322	Acceptable	
d9THCP	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBT	<LOQ	0.00322	%	< 0.00322	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: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

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

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2309794**

Sample Duplicate Sample ID: **23-009164-0001**

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBE	0.00406	0.00423	0.00315	%	4.18	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBG	0.0121	0.0122	0.00315	%	1.23	< 20	Acceptable	
CBD	0.635	0.645	0.00315	%	1.61	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBN	0.126	0.128	0.00315	%	1.58	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.00315	%	NA	< 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: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

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:** 2309815

Method Blank				Laboratory Control Sample					
Analyte	**Blank Result**	**Blank Limits**	**Notes**	**LCS Result**	**LCS Spike**	**LCS % Rec**	**Limits**		**Notes**
Abamectin	0.000	< 0.250		0.993	1.000	99.3	50.0	150	
Acephate	0.000	< 0.200		0.559	0.800	69.9	60.0	120	
Acequinocyl	0.000	< 1.000		3.845	4.000	96.1	40.0	160	
Acetamiprid	0.000	< 0.100		0.385	0.400	96.2	60.0	120	
Aldicarb	0.000	< 0.200		0.768	0.800	96.0	60.0	120	
Azoxystrobin	0.002	< 0.100		0.362	0.400	90.6	60.0	120	
Bifenazate	0.000	< 0.100		0.376	0.400	94.1	60.0	120	
Bifenthrin	0.000	< 0.100		0.391	0.400	97.7	50.0	150	
Boscalid	0.000	< 0.200		0.742	0.800	92.7	60.0	120	
Carbaryl	0.000	< 0.100		0.380	0.400	95.0	60.0	120	
Carbofuran	0.001	< 0.100		0.385	0.400	96.1	60.0	120	
Chlorantraniliprole	0.001	< 0.100		0.389	0.400	97.2	60.0	120	
Chlorfenapyr	0.000	< 0.500		1.924	2.000	96.2	60.0	120	
Chlorpyrifos	0.004	< 0.100		0.357	0.400	89.3	60.0	120	
Clofentezine	0.005	< 0.100		0.345	0.400	86.3	60.0	120	
Cyfluthrin	0.000	< 0.500		1.678	2.000	83.9	50.0	150	
Cypermethrin	0.000	< 0.500		1.898	2.000	94.9	50.0	150	
Daminozide	0.022	< 0.500		0.798	2.000	***39.9***	60.0	120	**Q6**
Diazinon	0.000	< 0.100		0.395	0.400	98.7	60.0	120	
Dichlorvos	0.000	< 0.500		1.772	2.000	88.6	60.0	120	
Dimethoate	0.000	< 0.100		0.408	0.400	102.0	60.0	120	
Ethoprophos	0.000	< 0.100		0.373	0.400	93.2	60.0	120	
Etofenprox	0.000	< 0.200		0.752	0.800	94.0	50.0	150	
Etoxazole	0.000	< 0.100		0.385	0.400	96.4	60.0	120	
Fenoxycarb	0.000	< 0.100		0.382	0.400	95.5	60.0	120	
Fenpyroximate	0.012	< 0.200		0.749	0.800	93.6	60.0	120	
Fipronil	0.000	< 0.200		0.762	0.800	95.3	60.0	120	
Flonicamid	0.000	< 0.250		1.011	1.000	101.1	60.0	120	
Fludioxonil	0.000	< 0.200		0.738	0.800	92.3	50.0	150	
Hexythiazox	0.000	< 0.250		0.967	1.000	96.7	60.0	120	
Imazalil	0.001	< 0.100		0.392	0.400	98.0	60.0	120	
Imidacloprid	0.028	< 0.200		0.835	0.800	104.4	60.0	120	
Kresoxim-methyl	0.000	< 0.200		0.722	0.800	90.3	60.0	120	
Malathion	0.000	< 0.100		0.381	0.400	95.3	60.0	120	
Metalaxyl	0.002	< 0.100		0.373	0.400	93.3	60.0	120	
Methiocarb	0.011	< 0.100		0.388	0.400	96.9	60.0	120	
Methomyl	0.000	< 0.200		0.783	0.800	97.9	60.0	120	
MGK-264	0.000	< 0.100		0.384	0.400	96.0	50.0	150	
Myclobutanil	0.012	< 0.100		0.399	0.400	99.8	60.0	120	
Naled	0.000	< 0.250		0.943	1.000	94.3	50.0	150	
Oxamyl	0.000	< 0.500		1.967	2.000	98.3	60.0	120	
Paclobutrazole	0.000	< 0.200		0.777	0.800	97.2	60.0	120	
Parathion-Methyl	0.000	< 0.100		0.396	0.400	99.0	50.0	150	
Permethrin	0.000	< 0.100		0.381	0.400	95.2	50.0	150	
Phosmet	0.000	< 0.100		0.379	0.400	94.8	50.0	150	
Piperonyl butoxide	0.000	< 0.500		1.887	2.000	94.4	60.0	120	
Prallethrin	0.013	< 0.100		0.396	0.400	99.1	60.0	120	
Propiconazole	0.022	< 0.200		0.765	0.800	95.6	60.0	120	
Propoxur	0.000	< 0.100		0.377	0.400	94.1	60.0	120	
Pyrethrin (Summe)	0.001	< 0.100		0.473	0.488	96.8	60.0	120	
Pyridaben	0.000	< 0.100		0.377	0.400	94.3	50.0	150	
Spinosad	0.000	< 0.100		0.368	0.388	94.8	50.0	150	
Spiromesifen	0.000	< 0.100		0.384	0.400	96.0	60.0	120	
Spirotetramat	0.000	< 0.100		0.378	0.400	94.6	60.0	120	
Spiroxamine	0.000	< 0.200		0.766	0.800	95.8	60.0	120	
Tebuconazole	0.012	< 0.200		0.746	0.800	93.2	60.0	120	
Thiacloprid	0.000	< 0.100		0.401	0.400	100.3	60.0	120	
Thiamethoxam	0.000	< 0.100		0.397	0.400	99.3	60.0	120	
Trifloxystrobin	0.000	< 0.100		0.382	0.400	95.6	60.0	120	

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

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:** 2309815

Matrix Spike/Matrix Spike Duplicate Recoveries **Sample ID: 23-009216-0001**

Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.000	0.908	0.956	1.000	5.2%	< 30	90.8%	95.6%	50 - 150	
Acephate	0.000	0.573	0.598	0.800	4.3%	< 30	71.6%	74.7%	50 - 150	
Acequinocyl	0.000	3.630	3.621	4.000	0.3%	< 30	90.8%	90.5%	50 - 150	
Acetamiprid	0.000	0.360	0.377	0.400	4.7%	< 30	90.0%	94.3%	50 - 150	
Aldicarb	0.000	0.752	0.743	0.800	1.1%	< 30	94.0%	92.9%	50 - 150	
Azoxystrobin	0.002	0.349	0.365	0.400	4.4%	< 30	86.8%	90.7%	50 - 150	
Bifenazate	0.000	0.347	0.382	0.400	9.5%	< 30	86.7%	95.4%	50 - 150	
Bifenthrin	0.000	0.375	0.376	0.400	0.2%	< 30	93.7%	93.9%	50 - 150	
Boscalid	0.000	0.682	0.721	0.800	5.6%	< 30	85.2%	90.2%	50 - 150	
Carbaryl	0.000	0.347	0.380	0.400	9.1%	< 30	86.8%	95.1%	50 - 150	
Carbofuran	0.000	0.356	0.372	0.400	4.6%	< 30	88.9%	93.1%	50 - 150	
Chlorantraniliprole	0.000	0.349	0.387	0.400	10.5%	< 30	87.2%	96.8%	50 - 150	
Chlorfenapyr	0.000	1.751	2.098	2.000	18.0%	< 30	87.6%	104.9%	50 - 150	
Chlorpyrifos	0.005	0.351	0.352	0.400	0.1%	< 30	86.7%	86.8%	50 - 150	
Clofentezine	0.005	0.297	0.297	0.400	0.2%	< 30	72.8%	72.9%	50 - 150	
Cyfluthrin	0.000	2.041	2.011	2.000	1.5%	< 30	102.0%	100.5%	30 - 150	
Cypermethrin	0.000	1.909	1.914	2.000	0.2%	< 30	95.4%	95.7%	50 - 150	
Daminozide	0.024	0.763	0.763	2.000	0.0%	< 30	37.0%	37.0%	30 - 150	
Diazinon	0.000	0.362	0.382	0.400	5.3%	< 30	90.4%	95.4%	50 - 150	
Dichlorvos	0.000	1.654	1.807	2.000	8.8%	< 30	82.7%	90.3%	50 - 150	
Dimethoate	0.003	0.355	0.378	0.400	6.3%	< 30	88.0%	93.8%	50 - 150	
Ethoprophos	0.000	0.348	0.363	0.400	4.0%	< 30	87.1%	90.7%	50 - 150	
Etofenprox	0.000	0.710	0.711	0.800	0.1%	< 30	88.8%	88.9%	50 - 150	
Etoxazole	0.000	0.368	0.385	0.400	4.4%	< 30	92.1%	96.2%	50 - 150	
Fenoxycarb	0.000	0.363	0.365	0.400	0.7%	< 30	90.7%	91.4%	50 - 150	
Fenpyroximate	0.013	0.770	0.751	0.800	2.5%	< 30	94.7%	92.3%	50 - 150	
Fipronil	0.000	0.731	0.713	0.800	2.5%	< 30	91.4%	89.1%	50 - 150	
Flonicamid	0.000	0.920	1.016	1.000	10.0%	< 30	92.0%	101.6%	50 - 150	
Fludioxonil	0.000	0.733	0.743	0.800	1.4%	< 30	91.6%	92.9%	50 - 150	
Hexythiazox	0.000	0.900	0.919	1.000	2.0%	< 30	90.0%	91.9%	50 - 150	
Imazalil	0.001	0.366	0.383	0.400	4.6%	< 30	91.3%	95.6%	50 - 150	
Imidacloprid	0.000	0.693	0.789	0.800	13.0%	< 30	86.6%	98.6%	50 - 150	
Kresoxim-methyl	0.000	0.710	0.723	0.800	1.8%	< 30	88.7%	90.4%	50 - 150	
Malathion	0.000	0.368	0.380	0.400	3.3%	< 30	92.0%	95.0%	50 - 150	
Metalaxyl	0.002	0.353	0.370	0.400	5.0%	< 30	87.7%	92.1%	50 - 150	
Methiocarb	0.006	0.366	0.368	0.400	0.7%	< 30	89.9%	90.5%	50 - 150	
Methomyl	0.000	0.696	0.758	0.800	8.5%	< 30	87.0%	94.7%	50 - 150	
MGK-264	0.000	0.355	0.362	0.400	1.8%	< 30	88.8%	90.5%	50 - 150	
Myclobutanil	0.012	0.371	0.381	0.400	2.8%	< 30	89.9%	92.4%	50 - 150	
Naled	0.000	0.892	0.916	1.000	2.7%	< 30	89.2%	91.6%	50 - 150	
Oxamyl	0.000	1.740	1.903	2.000	8.9%	< 30	87.0%	95.2%	50 - 150	
Paclobutrazole	0.000	0.739	0.766	0.800	3.7%	< 30	92.3%	95.8%	50 - 150	
Parathion-Methyl	0.000	0.321	0.300	0.400	6.7%	< 30	80.3%	75.1%	30 - 150	
Permethrin	0.000	0.362	0.361	0.400	0.1%	< 30	90.4%	90.3%	50 - 150	
Phosmet	0.000	0.363	0.369	0.400	1.7%	< 30	90.7%	92.3%	50 - 150	
Piperonyl butoxide	0.000	1.778	1.770	2.000	0.4%	< 30	88.9%	88.5%	50 - 150	
Prallethrin	0.015	0.360	0.382	0.400	6.2%	< 30	86.2%	91.8%	50 - 150	
Propiconazole	0.005	0.717	0.729	0.800	1.6%	< 30	89.1%	90.5%	50 - 150	
Propoxur	0.000	0.344	0.378	0.400	9.4%	< 30	86.1%	94.6%	50 - 150	
Pyrethrin (Summe)	0.001	0.324	0.330	0.488	1.7%	< 30	66.2%	67.4%	50 - 150	
Pyridaben	0.000	0.330	0.338	0.400	2.4%	< 30	82.6%	84.6%	50 - 150	
Spinosad	0.000	0.341	0.351	0.388	2.9%	< 30	87.8%	90.4%	50 - 150	
Spiromesifen	0.000	0.348	0.359	0.400	3.1%	< 30	87.0%	89.8%	50 - 150	
Spirotetramat	0.000	0.363	0.368	0.400	1.6%	< 30	90.6%	92.1%	50 - 150	
Spiroxamine	0.000	0.725	0.732	0.800	0.9%	< 30	90.6%	91.5%	50 - 150	
Tebuconazole	0.000	0.720	0.787	0.800	8.9%	< 30	90.0%	98.4%	50 - 150	
Thiacloprid	0.000	0.363	0.386	0.400	6.3%	< 30	90.7%	96.6%	50 - 150	
Thiamethoxam	0.000	0.369	0.420	0.400	12.9%	< 30	92.2%	105.0%	50 - 150	
Trifloxystrobin	0.000	0.352	0.365	0.400	3.5%	< 30	88.1%	91.2%	50 - 150	

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

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

Laboratory Quality Control Results

Residual Solvents **Batch ID:** 2309854

	Method Blank					Laboratory Control Sample								
Analyte	Result		LOQ	Notes	Result	Spike	Units	% Rec	Limits			Notes
Propane	ND	<	200		451	584	µg/g	77.2	60	-	120	
Isobutane	ND	<	200		601	767	µg/g	78.4	60	-	120	
Butane	ND	<	200		574	782	µg/g	73.4	60	-	120	
2,2-Dimethylpropane	ND	<	200		696	939	µg/g	74.1	60	-	120	
Methanol	ND	<	200		1690	1640	µg/g	103.0	60	-	120	
Ethylene Oxide	ND	<	30		49.8	57.1	µg/g	87.2	60	-	120	
2-Methylbutane	ND	<	200		1390	1600	µg/g	86.9	60	-	120	
Pentane	ND	<	200		1440	1620	µg/g	88.9	60	-	120	
Ethanol	ND	<	200		1690	1610	µg/g	105.0	70	-	130	
Ethyl Ether	ND	<	200		1490	1610	µg/g	92.5	60	-	120	
2,2-Dimethylbutane	ND	<	30		162	168	µg/g	96.4	60	-	120	
Acetone	ND	<	200		1540	1620	µg/g	95.1	60	-	120	
2-Propanol	ND	<	200		1790	1600	µg/g	111.9	60	-	120	
Ethyl Formate	ND	<	500		1310	1600	µg/g	81.9	70	-	130	
Acetonitrile	ND	<	100		433	484	µg/g	89.5	60	-	120	
Methyl Acetate	ND	<	500		1520	1610	µg/g	94.4	70	-	130	
2,3-Dimethylbutane	ND	<	30		150	162	µg/g	92.6	60	-	120	
Dichloromethane	ND	<	60		465	483	µg/g	96.3	60	-	120	
2-Methylpentane	ND	<	30		171	174	µg/g	98.3	60	-	120	
MTBE	ND	<	500		1580	1610	µg/g	98.1	70	-	130	
3-Methylpentane	ND	<	30		168	168	µg/g	100.0	60	-	120	
Hexane	ND	<	30		159	168	µg/g	94.6	60	-	120	
1-Propanol	ND	<	500		1670	1600	µg/g	104.4	70	-	130	
Methylethylketone	ND	<	500		1570	1620	µg/g	96.9	70	-	130	
Ethyl acetate	ND	<	200		1580	1600	µg/g	98.8	60	-	120	
2-Butanol	ND	<	200		1800	1600	µg/g	112.5	60	-	120	
Tetrahydrofuran	ND	<	100		491	514	µg/g	95.5	60	-	120	
Cyclohexane	ND	<	200		1570	1600	µg/g	98.1	60	-	120	
2-methyl-1-propanol	ND	<	500		1840	1610	µg/g	114.3	70	-	130	
Benzene	ND	<	1		4.14	5.12	µg/g	80.9	60	-	120	
Isopropyl Acetate	ND	<	200		1610	1620	µg/g	99.4	60	-	120	
Heptane	ND	<	200		1500	1610	µg/g	93.2	60	-	120	
1-Butanol	ND	<	500		1780	1600	µg/g	111.3	70	-	130	
Propyl Acetate	ND	<	500		1560	1600	µg/g	97.5	70	-	130	
1,4-Dioxane	ND	<	100		488	493	µg/g	99.0	60	-	120	
2-Ethoxyethanol	ND	<	30		180	163	µg/g	110.4	60	-	120	
Methylisobutylketone	ND	<	500		1590	1600	µg/g	99.4	70	-	130	
3-Methyl-1-butanol	ND	<	500		1750	1610	µg/g	108.7	70	-	130	
Ethylene Glycol	ND	<	200		232	483	µg/g	48.0	60	-	120	Q6
Toluene	ND	<	100		482	493	µg/g	97.8	60	-	120	
Isobutyl Acetate	ND	<	500		1570	1600	µg/g	98.1	70	-	130	
1-Pentanol	ND	<	500		1770	1600	µg/g	110.6	70	-	130	
Butyl Acetate	ND	<	500		1580	1600	µg/g	98.8	70	-	130	
Ethylbenzene	ND	<	200		976	969	µg/g	100.7	60	-	120	
m,p-Xylene	ND	<	200		972	968	µg/g	100.4	60	-	120	
o-Xylene	ND	<	200		995	976	µg/g	101.9	60	-	120	
Cumene	ND	<	30		165	162	µg/g	101.9	60	-	120	
Anisole	ND	<	500		1560	1610	µg/g	96.9	70	-	130	
DMSO	ND	<	500		1240	1610	µg/g	77.0	70	-	130	
1,2-dimethoxyethane	ND	<	50		156	164	µg/g	95.1	70	-	130	
Triethylamine	ND	<	500		1400	1600	µg/g	87.5	70	-	130	
N,N-dimethylformamide	ND	<	150		464	484	µg/g	95.9	70	-	130	
N,N-dimethylacetamide	ND	<	150		462	489	µg/g	94.5	70	-	130	
Pyridine	ND	<	50		153	172	µg/g	89.0	70	-	130	
Sulfolane	ND	<	50		148	163	µg/g	90.8	70	-	130	
1,2-Dichloroethane	ND	<	1		1.02	1	µg/g	102.0	70	-	130	
Chloroform	ND	<	1		1.11	1	µg/g	111.0	70	-	130	
Trichloroethylene	ND	<	1		1.17	1	µg/g	117.0	70	-	130	
1,1-Dichloroethane	ND	<	1		1.06	1	µg/g	106.0	70	-	130	

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

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

QC - Sample Duplicate **Sample ID: 23-009140-0001**

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
Q6 - Quality control outside QC limits. Data acceptable based on remaining QC.

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: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

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

Terpenes Quality Control Results

Method Reference: EPA 5035 **Batch ID:** 2309876

Method Blank					Laboratory Control Sample					
Analyte	**Result**	**LOQ**		**Notes**	**Result**	**LCS**	**Units**	**LCS % Rec**	**Limits**	**Notes**
a-pinene	<LOQ	<	200		453	500	µg/g	***91%***	70 - 130	
Camphene	<LOQ	<	200		454	500	µg/g	***91%***	70 - 130	
Sabinene	<LOQ	<	200		445	500	µg/g	***89%***	70 - 130	
b-Pinene	<LOQ	<	200		450	500	µg/g	***90%***	70 - 130	
b-Myrcene	<LOQ	<	200		463	500	µg/g	***93%***	70 - 130	
a-phelllandrene	<LOQ	<	200		463	500	µg/g	***93%***	70 - 130	
d-3-Carene	<LOQ	<	200		456	500	µg/g	***91%***	70 - 130	
a-Terpinene	<LOQ	<	200		457	500	µg/g	***91%***	70 - 130	
p-Cymene	<LOQ	<	200		453	500	µg/g	***91%***	70 - 130	
D-Limonene	<LOQ	<	200		458	500	µg/g	***92%***	70 - 130	
Eucalyptol	<LOQ	<	200		450	500	µg/g	***90%***	70 - 130	
b-cis-Ocimene	<LOQ	<	67		151	167	µg/g	***91%***	70 - 130	
b-trans-Ocimene	<LOQ	<	133		309	333	µg/g	***93%***	70 - 130	
g-Terpinene	<LOQ	<	200		454	500	µg/g	***91%***	70 - 130	
Sabinene_Hydrate	<LOQ	<	200		467	500	µg/g	***93%***	70 - 130	
Terpinolene	<LOQ	<	200		479	500	µg/g	***96%***	70 - 130	
D-Fenchone	<LOQ	<	200		457	500	µg/g	***91%***	70 - 130	
Linalool	<LOQ	<	200		496	500	µg/g	***99%***	70 - 130	
Fenchol	<LOQ	<	200		480	500	µg/g	***96%***	70 - 130	
Camphor	<LOQ	<	200		461	500	µg/g	***92%***	70 - 130	
Isopulego	<LOQ	<	200		491	500	µg/g	***98%***	70 - 130	
Isoborneol	<LOQ	<	200		490	500	µg/g	***98%***	70 - 130	
Borneol	<LOQ	<	200		473	500	µg/g	***95%***	70 - 130	
DL-Menthol	<LOQ	<	200		470	500	µg/g	***94%***	70 - 130	
Terpineol	<LOQ	<	200		482	500	µg/g	***96%***	70 - 130	
Nerol	<LOQ	<	200		447	500	µg/g	***89%***	70 - 130	
Pulegone	<LOQ	<	200		491	500	µg/g	***98%***	70 - 130	
Gereniol	<LOQ	<	200		498	500	µg/g	***100%***	70 - 130	
Geranyl_Acetate	<LOQ	<	200		473	500	µg/g	***95%***	70 - 130	
a-Cedrene	<LOQ	<	200		474	500	µg/g	***95%***	70 - 130	
b-Caryophyllene	<LOQ	<	200		477	500	µg/g	***95%***	70 - 130	
a-Humulene	<LOQ	<	200		475	500	µg/g	***95%***	70 - 130	
Valenene	<LOQ	<	200		444	500	µg/g	***89%***	70 - 130	
cis-Nerolidol	<LOQ	<	200		496	500	µg/g	***99%***	70 - 130	
a-Farnesene	<LOQ	<	200		516	500	µg/g	***103%***	70 - 130	
trans-Nerolidol	<LOQ	<	200		492	500	µg/g	***98%***	70 - 130	
Caryophyllene_Oxide	<LOQ	<	200		486	500	µg/g	***97%***	70 - 130	
Guaiol	<LOQ	<	200		477	500	µg/g	***95%***	70 - 130	
Cedrol	<LOQ	<	200		495	500	µg/g	***99%***	70 - 130	
a-Bisabolol	<LOQ	<	200		490	500	µg/g	***98%***	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: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

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

Terpenes Quality Control Results

Method Reference: EPA 5035 **Batch ID:** 2309876

Sample/Sample Duplicate **Sample ID: 23-009224-0001**

Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	<LOQ	<LOQ	193	µg/g	0%	< 20	
Camphene	<LOQ	<LOQ	193	µg/g	0%	< 20	
Sabinene	<LOQ	<LOQ	193	µg/g	0%	< 20	
b-Pinene	<LOQ	<LOQ	193	µg/g	0%	< 20	
b-Myrcene	<LOQ	<LOQ	193	µg/g	0%	< 20	
a-phelllandrene	<LOQ	<LOQ	193	µg/g	0%	< 20	
d-3-Carene	<LOQ	<LOQ	193	µg/g	0%	< 20	
a-Terpinene	<LOQ	<LOQ	193	µg/g	0%	< 20	
p-Cymene	<LOQ	<LOQ	193	µg/g	0%	< 20	
D-Limonene	<LOQ	<LOQ	193	µg/g	0%	< 20	
Eucalyptol	<LOQ	<LOQ	193	µg/g	0%	< 20	
b-cis-Ocimene	<LOQ	<LOQ	64.4	µg/g	0%	< 20	
b-trans-Ocimene	<LOQ	<LOQ	129	µg/g	0%	< 20	
g-Terpinene	<LOQ	<LOQ	193	µg/g	0%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	193	µg/g	0%	< 20	
Terpinolene	<LOQ	<LOQ	193	µg/g	0%	< 20	
D-Fenchone	<LOQ	<LOQ	193	µg/g	0%	< 20	
Linalool	<LOQ	<LOQ	193	µg/g	0%	< 20	
Fenchol	<LOQ	<LOQ	193	µg/g	0%	< 20	
Camphor	<LOQ	<LOQ	193	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	193	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	193	µg/g	0%	< 20	
Borneol	<LOQ	<LOQ	193	µg/g	0%	< 20	
DL-Menthol	<LOQ	<LOQ	193	µg/g	0%	< 20	
Terpineol	<LOQ	<LOQ	193	µg/g	0%	< 20	
Nerol	<LOQ	<LOQ	193	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	193	µg/g	0%	< 20	
Gereniol	<LOQ	<LOQ	193	µg/g	0%	< 20	
Geranyl_Acetate	<LOQ	<LOQ	193	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	193	µg/g	0%	< 20	
b-Caryophyllene	<LOQ	<LOQ	193	µg/g	0%	< 20	
a-Humulene	<LOQ	<LOQ	193	µg/g	0%	< 20	
Valenene	<LOQ	<LOQ	193	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	193	µg/g	0%	< 20	
a-Farnesene	<LOQ	<LOQ	193	µg/g	0%	< 20	
trans-Nerolidol	<LOQ	<LOQ	193	µg/g	0%	< 20	
Caryophyllene_Oxide	<LOQ	<LOQ	193	µg/g	0%	< 20	
Guaiol	<LOQ	<LOQ	193	µg/g	0%	< 20	
Cedrol	<LOQ	<LOQ	193	µg/g	0%	< 20	
a-Bisabolol	<LOQ	<LOQ	193	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:	23-009224/D002.R000
Report Date:	08/11/2023
ORELAP#:	OR100028
Purchase Order:	
Received:	08/04/23 09:42

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-009224/D002.R000
Report Date: 08/11/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/04/23 09:42

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.