Lazarus Naturals

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU TN.O.CBGCBD.FS50 **BATCH #** FH74

PRODUCT NAME Full Spectrum CBD CBG Tincture **SERVING SIZE** 1 mL (~0.934g)

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)	**26.90 mg/serving**	28.80 mg/g	2.88 %
Total THC (d9-THC, THCA)	**1.00 mg/serving**	1.07 mg/g	0.11 %
Cannabigerol (CBG)	**27.65 mg/serving**	29.60 mg/g	2.96 %
Cannabinol (CBN)	**0.05 mg/serving**	0.05 mg/g	0.01 %
Cannabichromene (CBC)	**2.28 mg/serving**	2.44 mg/g	0.24 %
Tetrahydrocannabinolic Acid (THCA)	**<LOQ mg/serving**	<LOQ mg/g	<LOQ %
Delta-9-THC (d9-THC)	**1.00 mg/serving**	1.07 mg/g	0.11 %
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
Water Activity	Pass

TERPENES	% OF SAMPLE
Farnesene	<LOQ %
ß-Caryophyllene	33.46 %
a-Bisabolol	11.28 %
Guaiol	18.10 %
Humulene	13.02 %
Caryophyllene Oxide	24.36 %

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:	23-009990/D004.R000
Report Date:	09/09/2023
ORELAP#:	OR100028
Purchase Order:	2606808
Received:	08/22/23 16:37

Customer:	Etz Hayim Holdings
Product identity:	FORM-TN.O.CBGCBD.FS50-FH74
Client/Metrc ID:	.
Laboratory ID:	23-009990-0001

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status
CBC per 1g	2.44		mg/1g	
CBD per 1g	28.8		mg/1g	
CBDV per 1g	0.337		mg/1g	
CBE per 1g	0.450		mg/1g	
CBG per 1g	29.6		mg/1g	
CBL per 1g	0.217		mg/1g	
CBN per 1g	0.0519		mg/1g	
CBT per 1g	1.06		mg/1g	
Δ9-THC per 1g	1.07		mg/1g	

CBD-Total per Serving Size 28.8 mg/1g

THC-Total per Serving Size 1.07 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	0.0599	33.46%	(-)-caryophyllene oxide	0.0436	24.36%
(-)-Guaiol	0.0324	18.10%	Humulene	0.0233	13.02%
a-Bisabolol	0.0202	11.28%	**Total Terpenes**	**0.179**	**100.00%**

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.

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Report Date:	09/09/2023
ORELAP#:	OR100028
Purchase Order:	2606808
Received:	08/22/23 16:37

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

Product identity: FORM-TN.O.CBGCBD.FS50-FH74
Client/Metrc ID: .
Sample Date:
Laboratory ID: 23-009990-0001
Evidence of Cooling: No
Temp: 22.3 °C
Serving Size #1: 1 g

Sample Results

Potency per 1g **Method:** J AOAC 2015 V98-6 (mod)[b] **Units** mg/se **Batch:** 2310408 **Analyze:** 8/26/23 1:39:00 AM

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	2.44		mg/1g	0.0328	
CBC-A per 1g	< LOQ		mg/1g	0.0328	
CBC-Total per 1g	2.44		mg/1g	0.0616	
CBD per 1g	28.8		mg/1g	0.328	
CBD-A per 1g	< LOQ		mg/1g	0.0328	
CBD-Total per 1g	28.8		mg/1g	0.357	
CBDV per 1g	0.337		mg/1g	0.0328	
CBDV-A per 1g	< LOQ		mg/1g	0.0328	
CBDV-Total per 1g	0.337		mg/1g	0.0612	
CBE per 1g	0.450		mg/1g	0.0328	
CBG per 1g	29.6		mg/1g	0.328	
CBG-A per 1g	< LOQ		mg/1g	0.0328	
CBG-Total per 1g	29.6		mg/1g	0.357	
CBL per 1g	0.217		mg/1g	0.0328	
CBL-A per 1g	< LOQ		mg/1g	0.0328	
CBL-Total per 1g	0.217		mg/1g	0.0616	
CBN per 1g	0.0519		mg/1g	0.0328	
CBT per 1g	1.06		mg/1g	0.0328	
Δ8-THCV per 1g	< LOQ		mg/1g	0.0328	
Δ10-THC-9R per 1g	< LOQ		mg/1g	0.0328	
Δ10-THC-9S per 1g	< LOQ		mg/1g	0.0328	
Δ10-THC-Total per 1g	< LOQ		mg/1g	0.0656	
Δ8-THC per 1g	< LOQ		mg/1g	0.0328	
Δ9-THC per 1g	1.07		mg/1g	0.0328	
delta-9-THCP per 1g	< LOQ		mg/1g	0.0328	
exo-THC per 1g	< LOQ		mg/1g	0.0328	
THC-A per 1g	< LOQ		mg/1g	0.0328	
THC-Total per 1g	1.07		mg/1g	0.0616	
THCV per 1g	< LOQ		mg/1g	0.0328	
THCV-A per 1g	< LOQ		mg/1g	0.0328	
THCV-Total per 1g	< LOQ		mg/1g	0.0616	

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Report Date: 09/09/2023
ORELAP#: OR100028
Purchase Order: 2606808
Received: 08/22/23 16:37

Potency per 1g

Method: J AOAC 2015 V98-6 (mod)þ **Units** mg/se **Batch:** 2310408 **Analyze:** 8/26/23 1:39:00 AM

Analyte	Result	Limits	Units	LOQ	Notes
Total Cannabinoids per 1g	64.0		mg/1g		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2310543	09/03/23	AOAC 991.14 (Petrifilm)þ		
Total Coliforms	< LOQ		cfu/g	10	2310543	09/03/23	AOAC 991.14 (Petrifilm)þ		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2310544	09/03/23	AOAC 2014.05 (RAPID)þ		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2310544	09/03/23	AOAC 2014.05 (RAPID)þ		

Solvents

Method: Residual Solvents by GC/MSþ **Units** µg/g **Batch** 2310644 **Analyze** 09/06/23 10:31 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							

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Purchase Order: 2606808
Received: 08/22/23 16:37

Pesticides **Method:** AOAC 2007.01 & EN 15662 (mod)þ **Units** mg/kg **Batch** 2310619 **Analyze** 09/05/23 01:24 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin¥	< LOQ	0.50	0.250	pass		Acephate¥	< LOQ	0.40	0.200	pass	
Acequinocyl¥	< LOQ	2.0	1.00	pass		Acetamiprid¥	< LOQ	0.20	0.100	pass	
Aldicarb¥	< LOQ	0.40	0.200	pass		Azoxystrobin¥	< LOQ	0.20	0.100	pass	
Bifenazate¥	< LOQ	0.20	0.100	pass		Bifenthrin¥	< LOQ	0.20	0.100	pass	
Boscalid¥	< LOQ	0.40	0.200	pass		Carbaryl¥	< LOQ	0.20	0.100	pass	
Carbofuran¥	< LOQ	0.20	0.100	pass		Chlorantraniliprole¥	< LOQ	0.20	0.100	pass	
Chlorfenapyr¥	< LOQ	1.0	0.500	pass		Chlorpyrifos¥	< 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							

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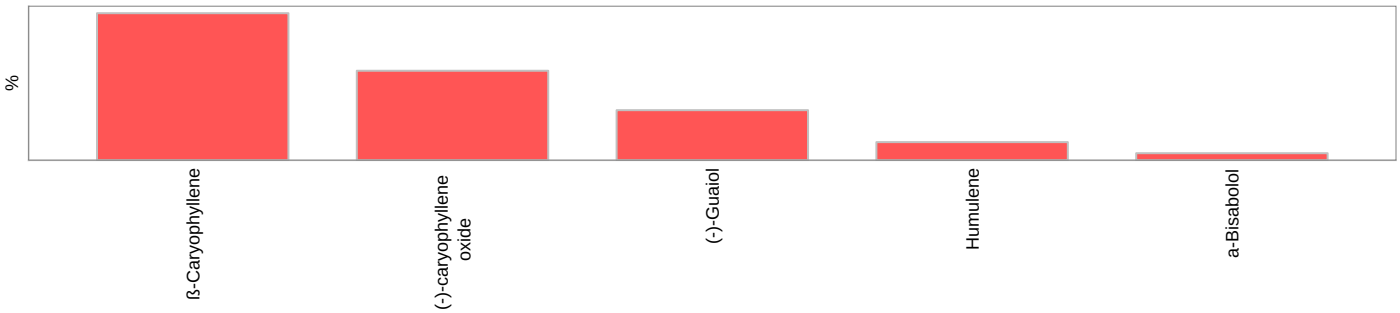
ORELAP#:	OR100028
Purchase Order:	2606808
Received:	08/22/23 16:37

Terpenes

Method: J AOAC 2015 V98-6 **Units** % **Batch** 2310728 **Analyze** 09/08/23 05:39 AM

Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
ß-Caryophyllene	0.0599	0.019	33.4637%		(-)-caryophyllene oxide	0.0436	0.019	24.3575%	
(-)-Guaiol	0.0324	0.019	18.1006%		Humulene	0.0233	0.019	13.0168%	
a-Bisabolol	0.0202	0.019	11.2849%		farnesene	< LOQ	0.019	0.00%	
valencene	< LOQ	0.019	0.00%		ß-Myrcene	< LOQ	0.019	0.00%	
(+)-Cedrol	< LOQ	0.019	0.00%		Geraniol	< LOQ	0.019	0.00%	
(-)-ß-Pinene	< LOQ	0.019	0.00%		a-Terpinene	< LOQ	0.019	0.00%	
Terpinolene	< LOQ	0.019	0.00%		(R)-(+)-Limonene	< LOQ	0.019	0.00%	
(±)-trans-Nerolidol	< LOQ	0.019	0.00%		Eucalyptol	< LOQ	0.019	0.00%	
Linalool	< LOQ	0.019	0.00%		(±)-fenchone	< LOQ	0.019	0.00%	
nerol	< LOQ	0.019	0.00%		p-Cymene	< LOQ	0.019	0.00%	
(+)-Pulegone	< LOQ	0.019	0.00%		(±)-cis-Nerolidol	< LOQ	0.019	0.00%	
(±)-Camphor	< LOQ	0.019	0.00%		(+)-fenchol	< LOQ	0.019	0.00%	
Isoborneol	< LOQ	0.019	0.00%		(+)-Borneol	< LOQ	0.019	0.00%	
Geranyl acetate	< LOQ	0.019	0.00%		(-)-a-Terpineol	< LOQ	0.019	0.00%	
(-)-Isopulegol	< 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%		gamma-Terpinene	< LOQ	0.019	0.00%	
Menthol	< LOQ	0.019	0.00%		Sabinene	< LOQ	0.019	0.00%	
Sabinene hydrate	< LOQ	0.019	0.00%		trans-ß-Ocimene	< LOQ	0.013	0.00%	
Total Terpenes	**0.179**								



Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Arsenic¥	< LOQ	0.200	mg/kg	0.0652	2310661	09/06/23	AOAC 2013.06 (mod.)þ	pass	
Cadmium¥	< LOQ	0.200	mg/kg	0.0652	2310661	09/06/23	AOAC 2013.06 (mod.)þ	pass	
Lead¥	< LOQ	0.500	mg/kg	0.0652	2310661	09/06/23	AOAC 2013.06 (mod.)þ	pass	
Mercury¥	< LOQ	0.100	mg/kg	0.0326	2310661	09/06/23	AOAC 2013.06 (mod.)þ	pass	

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Abbreviations

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

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

ᵇ = 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

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

Laboratory Quality Control Results

JAOAC2015 V986 — Batch ID: 2310408

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	2	0.0310	0.0309	%	100	80.0 - 120	Acceptable	
CBDV	2	0.0315	0.0313	%	101	80.0 - 120	Acceptable	
CBE	2	0.0327	0.0329	%	99.1	80.0 - 120	Acceptable	
CBDA	1	0.0334	0.0338	%	98.7	90.0 - 110	Acceptable	
CBGA	1	0.0342	0.0343	%	99.8	80.0 - 120	Acceptable	
CBG	1	0.0361	0.0363	%	99.4	80.0 - 120	Acceptable	
CBD	1	0.0349	0.0351	%	99.4	90.0 - 110	Acceptable	
THCV	2	0.0201	0.0200	%	101	80.0 - 120	Acceptable	
d8THCV	2	0.0275	0.0276	%	99.7	80.0 - 120	Acceptable	
THCVA	2	0.0307	0.0307	%	100	80.0 - 120	Acceptable	
CBN	1	0.0344	0.0343	%	100	80.0 - 120	Acceptable	
exo-THC	2	0.0301	0.0302	%	99.6	80.0 - 120	Acceptable	
d9THC	1	0.0358	0.0355	%	101	90.0 - 110	Acceptable	
d8THC	1	0.0367	0.0364	%	101	90.0 - 110	Acceptable	
9S-d10THC	1	0.0357	0.0354	%	101	80.0 - 120	Acceptable	
CBL	2	0.0320	0.0311	%	103	80.0 - 120	Acceptable	
9R-d10THC	1	0.0113	0.0115	%	98.0	80.0 - 120	Acceptable	
CBC	2	0.0332	0.0335	%	99.1	80.0 - 120	Acceptable	
THCA	1	0.0343	0.0344	%	99.8	90.0 - 110	Acceptable	
CBCA	2	0.0320	0.0319	%	100	80.0 - 120	Acceptable	
CBLA	2	0.0650	0.0647	%	101	80.0 - 120	Acceptable	
d9THCP	2	0.0311	0.0316	%	98.3	80.0 - 120	Acceptable	
CBT	2	0.0312	0.0308	%	101	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBDV	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBE	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBDA	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBGA	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBG	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBD	<LOQ	0.00330	%	< 0.00330	Acceptable	
THCV	<LOQ	0.00330	%	< 0.00330	Acceptable	
d8THCV	<LOQ	0.00330	%	< 0.00330	Acceptable	
THCVA	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBN	<LOQ	0.00330	%	< 0.00330	Acceptable	
exo-THC	<LOQ	0.00330	%	< 0.00330	Acceptable	
d9THC	<LOQ	0.00330	%	< 0.00330	Acceptable	
d8THC	<LOQ	0.00330	%	< 0.00330	Acceptable	
9S-d10THC	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBL	<LOQ	0.00330	%	< 0.00330	Acceptable	
9R-d10THC	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBC	<LOQ	0.00330	%	< 0.00330	Acceptable	
THCA	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBCA	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBLA	<LOQ	0.00330	%	< 0.00330	Acceptable	
d9THCP	<LOQ	0.00330	%	< 0.00330	Acceptable	
CBT	<LOQ	0.00330	%	< 0.00330	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: 23-009990/D004.R000
Report Date: 09/09/2023
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Laboratory Quality Control Results

JAOAC2015 V98 Batch ID: 2310408
Sample Duplicate Sample ID: 23-0099510002

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBDV	0.0300	0.0300	0.00328	%	0.0581	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBDA	0.0945	0.0941	0.00328	%	0.449	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBG	0.138	0.137	0.00328	%	0.259	< 20	Acceptable	
CBD	9.76	10.0	0.00328	%	2.59	< 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	0.00653	0.00659	0.00328	%	0.976	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
d9THC	0.229	0.229	0.00328	%	0.0408	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBL	0.0123	0.0130	0.00328	%	5.84	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00328	%	NA	< 20	Acceptable	
CBC	0.276	0.276	0.00328	%	0.0349	< 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	0.0372	0.0360	0.00328	%	3.43	< 20	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent

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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 | **Units:** mg/Kg | **Batch ID:** 2310619

Method Blank				Laboratory Control Sample					
Analyte	**Blank Result**	**Blank Limits**	**Notes**	**LCS Result**	**LCS Spike**	**LCS % Rec**	**Limits**		**Notes**
Abamectin	0.000	< 0.250		1.022	1.000	102.2	50.0	150	
Acephate	0.000	< 0.200		0.769	0.800	96.1	60.0	120	
Acequinocyl	0.000	< 1.000		3.988	4.000	99.7	40.0	160	
Acetamiprid	0.000	< 0.100		0.398	0.400	99.6	60.0	120	
Aldicarb	0.000	< 0.200		0.823	0.800	102.8	60.0	120	
Azoxystrobin	0.000	< 0.100		0.402	0.400	100.5	60.0	120	
Bifenazate	0.000	< 0.100		0.393	0.400	98.3	60.0	120	
Bifenthrin	0.000	< 0.100		0.392	0.400	98.1	50.0	150	
Boscalid	0.000	< 0.200		0.790	0.800	98.7	60.0	120	
Carbaryl	0.000	< 0.100		0.398	0.400	99.6	60.0	120	
Carbofuran	0.000	< 0.100		0.412	0.400	103.0	60.0	120	
Chlorantraniliprole	0.000	< 0.100		0.385	0.400	96.2	60.0	120	
Chlorfenapyr	0.000	< 0.500		1.546	2.000	77.3	60.0	120	
Chlorpyrifos	0.004	< 0.100		0.388	0.400	97.0	60.0	120	
Clofentezine	0.000	< 0.100		0.364	0.400	91.0	60.0	120	
Cyfluthrin	0.000	< 0.500		1.974	2.000	98.7	50.0	150	
Cypermethrin	0.000	< 0.500		1.980	2.000	99.0	50.0	150	
Daminozide	0.012	< 0.500		0.784	2.000	39.2	60.0	120	Q6
Diazinon	0.000	< 0.100		0.429	0.400	107.3	60.0	120	
Dichlorvos	0.000	< 0.500		2.034	2.000	101.7	60.0	120	
Dimethoate	0.000	< 0.100		0.405	0.400	101.3	60.0	120	
Ethoprophos	0.000	< 0.100		0.405	0.400	101.3	60.0	120	
Etofenprox	0.000	< 0.200		0.821	0.800	102.6	50.0	150	
Etoxazole	0.000	< 0.100		0.429	0.400	107.3	60.0	120	
Fenoxycarb	0.000	< 0.100		0.407	0.400	101.8	60.0	120	
Fenpyroximate	0.000	< 0.200		0.816	0.800	102.0	60.0	120	
Fipronil	0.000	< 0.200		0.796	0.800	99.5	60.0	120	
Flonicamid	0.000	< 0.250		1.000	1.000	100.0	60.0	120	
Fludioxonil	0.000	< 0.200		0.768	0.800	96.0	50.0	150	
Hexythiazox	0.000	< 0.250		1.002	1.000	100.2	60.0	120	
Imazalil	0.000	< 0.100		0.387	0.400	96.6	60.0	120	
Imidacloprid	0.000	< 0.200		0.814	0.800	101.8	60.0	120	
Kresoxim-methyl	0.000	< 0.200		0.782	0.800	97.7	60.0	120	
Malathion	0.000	< 0.100		0.400	0.400	99.9	60.0	120	
Metalaxyl	0.000	< 0.100		0.405	0.400	101.2	60.0	120	
Methiocarb	0.000	< 0.100		0.398	0.400	99.6	60.0	120	
Methomyl	0.000	< 0.200		0.797	0.800	99.6	60.0	120	
MGK-264	0.000	< 0.100		0.392	0.400	97.9	50.0	150	
Myclobutanil	0.000	< 0.100		0.390	0.400	97.6	60.0	120	
Naled	0.000	< 0.250		0.993	1.000	99.3	50.0	150	
Oxamyl	0.000	< 0.500		2.031	2.000	101.6	60.0	120	
Paclobutrazole	0.000	< 0.200		0.823	0.800	102.9	60.0	120	
Parathion-Methyl	0.002	< 0.100		0.428	0.400	107.0	50.0	150	
Permethrin	0.000	< 0.100		0.394	0.400	98.5	50.0	150	
Phosmet	0.000	< 0.100		0.400	0.400	99.9	50.0	150	
Piperonyl butoxide	0.000	< 0.500		2.174	2.000	108.7	60.0	120	
Prallethrin	0.000	< 0.100		0.391	0.400	97.8	60.0	120	
Propiconazole	0.000	< 0.200		0.774	0.800	96.8	60.0	120	
Propoxur	0.000	< 0.100		0.410	0.400	102.6	60.0	120	
Pyrethrin (Summe)	0.002	< 0.100		0.493	0.488	101.0	60.0	120	
Pyridaben	0.000	< 0.100		0.409	0.400	102.3	50.0	150	
Spinosad	0.000	< 0.100		0.408	0.388	105.1	50.0	150	
Spiromesifen	0.000	< 0.100		0.384	0.400	96.0	60.0	120	
Spirotetramat	0.000	< 0.100		0.397	0.400	99.4	60.0	120	
Spiroxamine	0.000	< 0.200		0.820	0.800	102.5	60.0	120	
Tebuconazole	0.000	< 0.200		0.812	0.800	101.6	60.0	120	
Thiacloprid	0.000	< 0.100		0.400	0.400	100.0	60.0	120	
Thiamethoxam	0.000	< 0.100		0.403	0.400	100.8	60.0	120	
Trifloxystrobin	0.000	< 0.100		0.409	0.400	102.2	60.0	120	

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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 — **Units:** mg/Kg — **Batch ID:** 2310619

Matrix Spike/Matrix Spike Duplicate Recoveries — **Sample ID:** 23-010390-0001

Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.000	1.034	1.013	1.000	2.0%	< 30	103.4%	101.3%	50 - 150	
Acephate	0.000	0.721	0.730	0.800	1.3%	< 30	90.1%	91.3%	50 - 150	
Acequinocyl	0.000	4.087	4.433	4.000	8.1%	< 30	102.2%	110.8%	50 - 150	
Acetamiprid	0.000	0.396	0.411	0.400	3.7%	< 30	99.0%	102.7%	50 - 150	
Aldicarb	0.000	0.815	0.808	0.800	0.9%	< 30	101.9%	101.0%	50 - 150	
Azoxystrobin	0.000	0.395	0.400	0.400	1.2%	< 30	98.8%	99.9%	50 - 150	
Bifenazate	0.000	0.382	0.406	0.400	6.1%	< 30	95.5%	101.5%	50 - 150	
Bifenthrin	0.000	0.389	0.378	0.400	2.8%	< 30	97.2%	94.5%	50 - 150	
Boscalid	0.000	0.763	0.817	0.800	6.8%	< 30	95.3%	102.1%	50 - 150	
Carbaryl	0.000	0.384	0.403	0.400	4.8%	< 30	95.9%	100.6%	50 - 150	
Carbofuran	0.000	0.389	0.396	0.400	1.8%	< 30	97.2%	99.0%	50 - 150	
Chlorantraniliprole	0.000	0.406	0.386	0.400	4.9%	< 30	101.4%	96.6%	50 - 150	
Chlorfenapyr	0.000	1.554	1.568	2.000	0.8%	< 30	77.7%	78.4%	50 - 150	
Chlorpyrifos	0.000	0.367	0.371	0.400	1.1%	< 30	91.8%	92.8%	50 - 150	
Clofentezine	0.000	0.332	0.339	0.400	2.2%	< 30	82.9%	84.7%	50 - 150	
Cyfluthrin	0.000	1.950	2.006	2.000	2.8%	< 30	97.5%	100.3%	30 - 150	
Cypermethrin	0.000	1.867	1.992	2.000	6.5%	< 30	93.3%	99.6%	50 - 150	
Daminozide	0.010	0.752	0.763	2.000	1.5%	< 30	37.1%	37.7%	30 - 150	
Diazinon	0.000	0.404	0.426	0.400	5.2%	< 30	101.0%	106.4%	50 - 150	
Dichlorvos	0.000	1.906	1.959	2.000	2.7%	< 30	95.3%	98.0%	50 - 150	
Dimethoate	0.000	0.397	0.407	0.400	2.5%	< 30	99.3%	101.7%	50 - 150	
Ethoprophos	0.000	0.386	0.398	0.400	3.1%	< 30	96.4%	99.5%	50 - 150	
Etofenprox	0.000	0.801	0.816	0.800	1.9%	< 30	100.1%	102.0%	50 - 150	
Etoxazole	0.000	0.452	0.453	0.400	0.2%	< 30	112.9%	113.2%	50 - 150	
Fenoxycarb	0.000	0.394	0.388	0.400	1.6%	< 30	98.6%	97.0%	50 - 150	
Fenpyroximate	0.000	0.779	0.804	0.800	3.1%	< 30	97.4%	100.5%	50 - 150	
Fipronil	0.000	0.787	0.780	0.800	0.9%	< 30	98.4%	97.5%	50 - 150	
Flonicamid	0.000	0.956	1.014	1.000	5.9%	< 30	95.6%	101.4%	50 - 150	
Fludioxonil	0.000	0.751	0.767	0.800	2.2%	< 30	93.8%	95.9%	50 - 150	
Hexythiazox	0.000	1.195	1.036	1.000	14.3%	< 30	119.5%	103.6%	50 - 150	
Imazalil	0.000	0.394	0.380	0.400	3.6%	< 30	98.4%	95.0%	50 - 150	
Imidacloprid	0.000	0.769	0.774	0.800	0.6%	< 30	96.2%	96.7%	50 - 150	
Kresoxim-methyl	0.000	0.733	0.750	0.800	2.4%	< 30	91.6%	93.8%	50 - 150	
Malathion	0.000	0.387	0.406	0.400	4.8%	< 30	96.6%	101.4%	50 - 150	
Metalaxyl	0.000	0.397	0.397	0.400	0.1%	< 30	99.2%	99.3%	50 - 150	
Methiocarb	0.000	0.404	0.394	0.400	2.7%	< 30	101.1%	98.4%	50 - 150	
Methomyl	0.000	0.780	0.833	0.800	6.6%	< 30	97.5%	104.1%	50 - 150	
MGK-264	0.000	0.370	0.410	0.400	10.2%	< 30	92.6%	102.5%	50 - 150	
Myclobutanil	0.000	0.374	0.374	0.400	0.1%	< 30	93.5%	93.6%	50 - 150	
Naled	0.000	0.987	0.931	1.000	5.8%	< 30	98.7%	93.1%	50 - 150	
Oxamyl	0.000	1.949	1.937	2.000	0.6%	< 30	97.4%	96.8%	50 - 150	
Paclobutrazole	0.000	0.843	0.827	0.800	2.0%	< 30	105.4%	103.3%	50 - 150	
Parathion-Methyl	0.000	0.433	0.400	0.400	7.9%	< 30	108.3%	100.0%	30 - 150	
Permethrin	0.000	0.359	0.390	0.400	8.2%	< 30	89.8%	97.4%	50 - 150	
Phosmet	0.000	0.385	0.420	0.400	8.7%	< 30	96.3%	105.1%	50 - 150	
Piperonyl butoxide	0.000	2.012	2.133	2.000	5.8%	< 30	100.6%	106.6%	50 - 150	
Prallethrin	0.000	0.388	0.378	0.400	2.6%	< 30	96.9%	94.5%	50 - 150	
Propiconazole	0.000	0.762	0.778	0.800	2.0%	< 30	95.3%	97.2%	50 - 150	
Propoxur	0.000	0.388	0.398	0.400	2.7%	< 30	96.9%	99.6%	50 - 150	
Pyrethrin (Summe)	0.000	0.466	0.481	0.488	3.2%	< 30	95.5%	98.6%	50 - 150	
Pyridaben	0.000	0.401	0.410	0.400	2.4%	< 30	100.1%	102.6%	50 - 150	
Spinosad	0.000	0.392	0.411	0.388	4.8%	< 30	100.9%	105.9%	50 - 150	
Spiromesifen	0.000	0.395	0.386	0.400	2.2%	< 30	98.8%	96.6%	50 - 150	
Spirotetramat	0.000	0.391	0.397	0.400	1.5%	< 30	97.7%	99.2%	50 - 150	
Spiroxamine	0.000	0.791	0.804	0.800	1.6%	< 30	98.9%	100.5%	50 - 150	
Tebuconazole	0.000	0.767	0.772	0.800	0.6%	< 30	95.9%	96.5%	50 - 150	
Thiacloprid	0.000	0.383	0.387	0.400	1.1%	< 30	95.8%	96.8%	50 - 150	
Thiamethoxam	0.000	0.380	0.416	0.400	9.0%	< 30	95.0%	104.0%	50 - 150	
Trifloxystrobin	0.000	0.397	0.416	0.400	4.7%	< 30	99.2%	104.0%	50 - 150	

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Laboratory Quality Control Results

Residual Solvents **Batch ID:** 2310644

Method Blank					Laboratory Control Sample							
Analyte	**Result**		**LOQ**	**Notes**	**Result**	**Spike**	**Units**	**% Rec**	**Limits**			**Notes**
Propane	ND	<	200		541	584	µg/g	92.6	60	-	120	
Isobutane	ND	<	200		715	767	µg/g	93.2	60	-	120	
Butane	ND	<	200		743	782	µg/g	95.0	60	-	120	
2,2-Dimethylpropane	ND	<	200		913	939	µg/g	97.2	60	-	120	
Methanol	ND	<	200		1640	1670	µg/g	98.2	60	-	120	
Ethylene Oxide	ND	<	30		58.3	57.1	µg/g	102.1	60	-	120	
2-Methylbutane	ND	<	200		1520	1680	µg/g	90.5	60	-	120	
Pentane	ND	<	200		1530	1670	µg/g	91.6	60	-	120	
Ethanol	ND	<	200		1640	1660	µg/g	98.8	70	-	130	
Ethyl Ether	ND	<	200		1570	1670	µg/g	94.0	60	-	120	
2,2-Dimethylbutane	ND	<	30		174	189	µg/g	92.1	60	-	120	
Acetone	ND	<	200		1630	1670	µg/g	97.6	60	-	120	
2-Propanol	ND	<	200		1630	1630	µg/g	100.0	60	-	120	
Ethyl Formate	ND	<	500		1520	1600	µg/g	95.0	70	-	130	
Acetonitrile	ND	<	100		478	492	µg/g	97.2	60	-	120	
Methyl Acetate	ND	<	500		1640	1600	µg/g	102.5	70	-	130	
2,3-Dimethylbutane	ND	<	30		174	180	µg/g	96.7	60	-	120	
Dichloromethane	ND	<	60		477	488	µg/g	97.7	60	-	120	
2-Methylpentane	ND	<	30		170	182	µg/g	93.4	60	-	120	
MTBE	ND	<	500		1640	1610	µg/g	101.9	70	-	130	
3-Methylpentane	ND	<	30		166	177	µg/g	93.8	60	-	120	
Hexane	ND	<	30		170	177	µg/g	96.0	60	-	120	
1-Propanol	ND	<	500		1610	1600	µg/g	100.6	70	-	130	
Methylethylketone	ND	<	500		1650	1610	µg/g	102.5	70	-	130	
Ethyl acetate	ND	<	200		1610	1630	µg/g	98.8	60	-	120	
2-Butanol	ND	<	200		1650	1630	µg/g	101.2	60	-	120	
Tetrahydrofuran	ND	<	100		491	488	µg/g	100.6	60	-	120	
Cyclohexane	ND	<	200		1580	1610	µg/g	98.1	60	-	120	
2-methyl-1-propanol	ND	<	500		1620	1610	µg/g	100.6	70	-	130	
Benzene	ND	<	1		4.99	4.79	µg/g	104.2	60	-	120	
Isopropyl Acetate	ND	<	200		1680	1650	µg/g	101.8	60	-	120	
Heptane	ND	<	200		1630	1630	µg/g	100.0	60	-	120	
1-Butanol	ND	<	500		1540	1600	µg/g	96.3	70	-	130	
Propyl Acetate	ND	<	500		1630	1600	µg/g	101.9	70	-	130	
1,4-Dioxane	ND	<	100		506	523	µg/g	96.7	60	-	120	
2-Ethoxyethanol	ND	<	30		195	179	µg/g	108.9	60	-	120	
Methylisobutylketone	ND	<	500		1630	1600	µg/g	101.9	70	-	130	
3-Methyl-1-butanol	ND	<	500		1510	1600	µg/g	94.4	70	-	130	
Ethylene Glycol	ND	<	200		283	506	µg/g	55.9	60	-	120	Q6
Toluene	ND	<	100		521	496	µg/g	105.0	60	-	120	
Isobutyl Acetate	ND	<	500		1710	1610	µg/g	106.2	70	-	130	
1-Pentanol	ND	<	500		1480	1600	µg/g	92.5	70	-	130	
Butyl Acetate	ND	<	500		1650	1610	µg/g	102.5	70	-	130	
Ethylbenzene	ND	<	200		1000	978	µg/g	102.2	60	-	120	
m,p-Xylene	ND	<	200		1040	994	µg/g	104.6	60	-	120	
o-Xylene	ND	<	200		1010	982	µg/g	102.9	60	-	120	
Cumene	ND	<	30		151	171	µg/g	88.3	60	-	120	
Anisole	ND	<	500		1670	1600	µg/g	104.4	70	-	130	
DMSO	ND	<	500		1730	1620	µg/g	106.8	70	-	130	
1,2-dimethoxyethane	ND	<	50		184	186	µg/g	98.9	70	-	130	
Triethylamine	ND	<	500		1550	1600	µg/g	96.9	70	-	130	
N,N-dimethylformamide	ND	<	150		533	480	µg/g	111.0	70	-	130	
N,N-dimethylacetamide	ND	<	150		481	483	µg/g	99.6	70	-	130	
Pyridine	ND	<	50		172	168	µg/g	102.4	70	-	130	
Sulfolane	ND	<	50		139	161	µg/g	86.3	70	-	130	
1,2-Dichloroethane	ND	<	1		1.06	1	µg/g	106.0	70	-	130	
Chloroform	ND	<	1		1.05	1	µg/g	105.0	70	-	130	
Trichloroethylene	ND	<	1		1.02	1	µg/g	102.0	70	-	130	
1,1-Dichloroethane	ND	<	1		1.02	1	µg/g	102.0	70	-	130	

Columbia LABORATORIES
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Report Number: 23-009990/D004.R000
Report Date: 09/09/2023
ORELAP#: OR100028
Purchase Order: 2606808
Received: 08/22/23 16:37

QC - Sample Duplicate **Sample ID: 23-010144-0001**

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

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Terpenes Quality Control Results

Method Reference: EPA 5035 — Batch ID: 2310728

	Method Blank				Laboratory Control Sample					
Analyte	Result		LOQ	Notes	Result	LCS	Units	LCS % Rec	Limits	Notes
a-pinene	<LOQ	<	200		422	500	µg/g	84%	70 - 130	
Camphene	<LOQ	<	200		517	500	µg/g	103%	70 - 130	
Sabinene	<LOQ	<	200		416	500	µg/g	83%	70 - 130	
b-Pinene	<LOQ	<	200		417	500	µg/g	83%	70 - 130	
b-Myrcene	<LOQ	<	200		544	500	µg/g	109%	70 - 130	
a-phelllandrene	<LOQ	<	200		555	500	µg/g	111%	70 - 130	
d-3-Carene	<LOQ	<	200		530	500	µg/g	106%	70 - 130	
a-Terpinene	<LOQ	<	200		435	500	µg/g	87%	70 - 130	
p-Cymene	<LOQ	<	200		538	500	µg/g	108%	70 - 130	
D-Limonene	<LOQ	<	200		448	500	µg/g	90%	70 - 130	
Eucalyptol	<LOQ	<	200		552	500	µg/g	110%	70 - 130	
b-cis-Ocimene	<LOQ	<	67		186	167	µg/g	111%	70 - 130	
b-trans-Ocimene	<LOQ	<	133		375	333	µg/g	113%	70 - 130	
g-Terpinene	<LOQ	<	200		450	500	µg/g	90%	70 - 130	
Sabinene_Hydrate	<LOQ	<	200		434	500	µg/g	87%	70 - 130	
Terpinolene	<LOQ	<	200		442	500	µg/g	88%	70 - 130	
D-Fenchone	<LOQ	<	200		426	500	µg/g	85%	70 - 130	
Linalool	<LOQ	<	200		642	500	µg/g	128%	70 - 130	
Fenchol	<LOQ	<	200		461	500	µg/g	92%	70 - 130	
Camphor	<LOQ	<	200		557	500	µg/g	111%	70 - 130	
Isopulego	<LOQ	<	200		591	500	µg/g	118%	70 - 130	
Isoborneol	<LOQ	<	200		592	500	µg/g	118%	70 - 130	
Borneol	<LOQ	<	200		449	500	µg/g	90%	70 - 130	
DL-Menthol	<LOQ	<	200		620	500	µg/g	124%	70 - 130	
Terpineol	<LOQ	<	200		459	500	µg/g	92%	70 - 130	
Nerol	<LOQ	<	200		564	500	µg/g	113%	70 - 130	
Pulegone	<LOQ	<	200		480	500	µg/g	96%	70 - 130	
Geraniol	<LOQ	<	200		483	500	µg/g	97%	70 - 130	
Geranyl_Acetate	<LOQ	<	200		571	500	µg/g	114%	70 - 130	
a-Cedrene	<LOQ	<	200		425	500	µg/g	85%	70 - 130	
b-Caryophyllene	<LOQ	<	200		570	500	µg/g	114%	70 - 130	
a-Humulene	<LOQ	<	200		478	500	µg/g	96%	70 - 130	
Valencene	<LOQ	<	200		543	500	µg/g	109%	70 - 130	
cis-Nerolidol	<LOQ	<	200		613	500	µg/g	123%	70 - 130	
a-Farnesene	<LOQ	<	200		640	500	µg/g	128%	70 - 130	
trans-Nerolidol	<LOQ	<	200		479	500	µg/g	96%	70 - 130	
Caryophyllene_Oxide	<LOQ	<	200		585	500	µg/g	117%	70 - 130	
Guaiol	<LOQ	<	200		468	500	µg/g	94%	70 - 130	
Cedrol	<LOQ	<	200		625	500	µg/g	125%	70 - 130	
a-Bisabolol	<LOQ	<	200		626	500	µg/g	125%	70 - 130	

Definitions

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

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TerpenesQuality Control Results

Method Reference: EPA5035 — Batch ID: 2310728

Sample/ Sample Duplicate — Sample ID: 23-009990-0001

Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
Camphene	<LOQ	<LOQ	194	µg/g	0%	< 20	
Sabinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-Pinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-Myrcene	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-phelllandrene	<LOQ	<LOQ	194	µg/g	0%	< 20	
d-3-Carene	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Terpinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
p-Cymene	<LOQ	<LOQ	194	µg/g	0%	< 20	
D-Limonene	<LOQ	<LOQ	194	µg/g	0%	< 20	
Eucalyptol	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-cis-Ocimene	<LOQ	<LOQ	64.8	µg/g	0%	< 20	
b-trans-Ocimene	<LOQ	<LOQ	130	µg/g	0%	< 20	
g-Terpinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	194	µg/g	0%	< 20	
Terpinolene	<LOQ	<LOQ	194	µg/g	0%	< 20	
D-Fenchone	<LOQ	<LOQ	194	µg/g	0%	< 20	
Linalool	<LOQ	<LOQ	194	µg/g	0%	< 20	
Fenchol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Camphor	<LOQ	<LOQ	194	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	194	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Borneol	<LOQ	<LOQ	194	µg/g	0%	< 20	
DL-Menthol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Terpineol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Nerol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	194	µg/g	0%	< 20	
Gereniol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Geranyl_Acetate	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-Caryophyllene	594	599	194	µg/g	1%	< 20	
a-Humulene	229	233	194	µg/g	2%	< 20	
Valenene	<LOQ	<LOQ	194	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Farnesene	<LOQ	<LOQ	194	µg/g	0%	< 20	
trans-Nerolidol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Caryophyllene_Oxide	432	436	194	µg/g	1%	< 20	
Guaiol	318	324	194	µg/g	2%	< 20	
Cedrol	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Bisabolol	200	202	194	µg/g	1%	< 20	

Definitions

RPD — Relative Percent Difference

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Explanation of QC Flag Comments:

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