

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU TN.O.FS50	BATCH # FH85	LOQ: Limit Of Quantitation LOD: Limit Of Detection
PRODUCT NAME Full Spectrum CBD Tincture	SERVING SIZE 1 mL (0.93g)	1 g = 10 ⁻³ kg = 10 ³ mg = 10 ⁶ µg 1 mg/kg = 1 ppm = 1000 ppb
LABORATORY: Columbia Laboratories	OREGON ACCREDITATION: OR100028	

POTENCY	PER SERVING	PER GRAM	Percent
Cannabidiol (CBD)	55.20 mg/serving	59.3 mg/g	5.93 %
Total THC (d9-THC, THCA)	1.69 mg/serving	2.04 mg/g	0.20 %
Cannabigerol (CBG)	1.93 mg/serving	2.30 mg/g	0.23 %
Cannabinol (CBN)	0.10 mg/serving	0.06 mg/g	0.01 %
Cannabichromene (CBC)	4.18 mg/serving	4.61 mg/g	0.46 %
Tetrahydrocannabinolic Acid (THCA)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
Delta-9-THC (d9-THC)	1.69 mg/serving	2.04 mg/g	0.20 %
Delta-8-THC (d8-THC)	<LOQ mg/serving	<LOQ mg/g	<LOQ %

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

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

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

MICROBIAL	PASS/FAIL
Yeast & Mold	Pass
Coliform	Pass

TERPENES	% OF SAMPLE
Farnesene	<LOQ %
β-Caryophyllene	29.29 %
α-Bisabolol	13.24 %
Guaiol	11.72 %
Humulene	11.42 %
Caryophyllene Oxide	23.41 %



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



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



Report Number: 23-012497/D004.R000
Report Date: 11/06/2023
ORELAP#: OR100028
Purchase Order: 2683095
Received: 10/20/23 15:43

Customer: Etz Hayim Holdings
Product identity: FORM-TN.O.FS50-FH85
Client/Metric ID: .
Laboratory ID: 23-012497-0001

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status	CBD-Total per Serving Size	55.2 mg/1g
CBC per 1g	4.18		mg/1g			
CBD per 1g	55.2		mg/1g			
CBDV per 1g	0.678		mg/1g		THC-Total per Serving Size	1.69 mg/1g
CBE per 1g	1.11		mg/1g			
CBG per 1g	1.93		mg/1g			
CBL per 1g	0.465		mg/1g			
CBN per 1g	0.0968		mg/1g			
CBT per 1g	1.61		mg/1g			
Δ ⁹ -THC per 1g	1.69		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
β-Caryophyllene	0.0867	29.29%	(-)-caryophyllene oxide	0.0693	23.41%
α-Bisabolol	0.0392	13.24%	(-)-Guaiol	0.0347	11.72%
Humulene	0.0338	11.42%	β-Myrcene	0.0322	10.88%
Total Terpenes	0.296	100.00%			

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.



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Purchase Order: 2683095
Received: 10/20/23 15:43

Customer: Etz Hayim Holdings
16427 NE Airport Way
PORTLAND 97230
United States of America (USA)
Product identity: FORM-TN.O.FS50-FH85
Client/Metric ID: .
Sample Date:
Laboratory ID: 23-012497-0001
Evidence of Cooling: No
Temp: 18.1
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: 2312177	Analyze: 10/24/23 11:03:00 P	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	4.18		mg/1g	0.0324	
CBC-A per 1g	< LOQ		mg/1g	0.0324	
CBC-Total per 1g	4.18		mg/1g	0.0609	
CBD per 1g	55.2		mg/1g	0.324	
CBD-A per 1g	< LOQ		mg/1g	0.0324	
CBD-Total per 1g	55.2		mg/1g	0.353	
CBDV per 1g	0.678		mg/1g	0.0324	
CBDV-A per 1g	< LOQ		mg/1g	0.0324	
CBDV-Total per 1g	0.678		mg/1g	0.0606	
CBE per 1g	1.11		mg/1g	0.0324	
CBG per 1g	1.93		mg/1g	0.0324	
CBG-A per 1g	< LOQ		mg/1g	0.0324	
CBG-Total per 1g	1.93		mg/1g	0.0606	
CBL per 1g	0.465		mg/1g	0.0324	
CBL-A per 1g	< LOQ		mg/1g	0.0324	
CBL-Total per 1g	0.465		mg/1g	0.0609	
CBN per 1g	0.0968		mg/1g	0.0324	
CBT per 1g	1.61		mg/1g	0.0324	
Δ8-THCV per 1g	< LOQ		mg/1g	0.0324	
Δ10-THC-9R per 1g	< LOQ		mg/1g	0.0324	
Δ10-THC-9S per 1g	< LOQ		mg/1g	0.0324	
Δ10-THC-Total per 1g	< LOQ		mg/1g	0.0649	
Δ8-THC per 1g	< LOQ		mg/1g	0.0324	
Δ9-THC per 1g	1.69		mg/1g	0.0324	
delta-9-THCP per 1g	< LOQ		mg/1g	0.0324	
exo-THC per 1g	< LOQ		mg/1g	0.0324	
THC-A per 1g	< LOQ		mg/1g	0.0324	
THC-Total per 1g	1.69		mg/1g	0.0609	
THCV per 1g	< LOQ		mg/1g	0.0324	
THCV-A per 1g	< LOQ		mg/1g	0.0324	



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Potency per 1g		Method: J AOAC 2015 V98-6 (mod) ^b	Units mg/se	Batch: 2312177	Analyze: 10/24/23 11:03:00 P
Analyte	Result	Limits	Units	LOQ	Notes
THCV-Total per 1g	< LOQ		mg/1g	0.0609	
Total Cannabinoids per 1g	67.0		mg/1g		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E. coli	< LOQ		cfu/g	10	2312340	11/02/23 AOAC 991.14 (Petrifilm) ^b		
Total Coliforms	< LOQ		cfu/g	10	2312340	11/02/23 AOAC 991.14 (Petrifilm) ^b		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2312341	11/02/23 AOAC 2014.05 (RAPID) ^b		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2312341	11/02/23 AOAC 2014.05 (RAPID) ^b		

Solvents		Method: Residual Solvents by GC/MS ^b				Units µg/g	Batch 2312430	Analyze 11/02/23 12:11 PM			
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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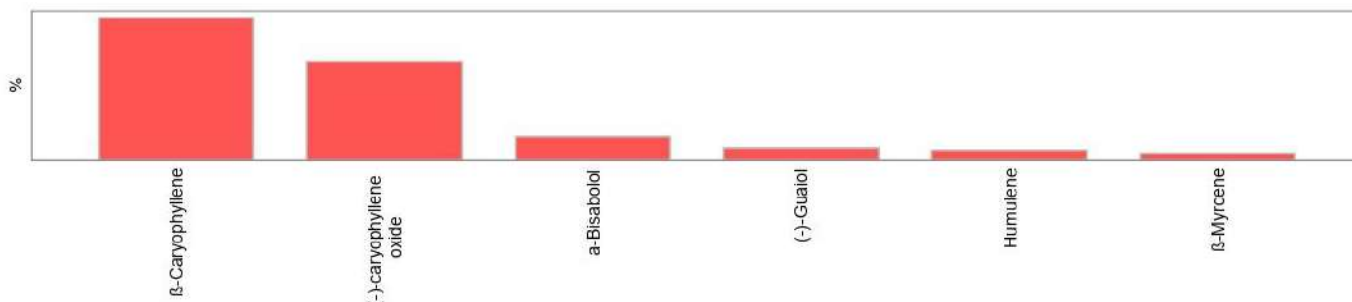


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Pesticides						Method: AOAC 2007.01 & EN 15662 (mod) ^b						Units mg/kg Batch 2312435						Analyze 11/02/23 02:19 PM					
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin [‡]	< LOQ	0.50	0.250	pass		Acephate [‡]	< LOQ	0.40	0.200	pass		Acetamiprid [‡]	< LOQ	0.20	0.100	pass		Azoxystrobin [‡]	< LOQ	0.20	0.100	pass	
Acequinocyl [‡]	< LOQ	2.0	1.00	pass		Acetamiprid [‡]	< LOQ	0.20	0.100	pass		Azoxystrobin [‡]	< LOQ	0.20	0.100	pass		Bifenthrin [‡]	< LOQ	0.20	0.100	pass	
Aldicarb [‡]	< LOQ	0.40	0.200	pass		Azoxystrobin [‡]	< LOQ	0.20	0.100	pass		Bifenthrin [‡]	< LOQ	0.20	0.100	pass		Carbaryl [‡]	< LOQ	0.20	0.100	pass	
Bifenazate [‡]	< LOQ	0.20	0.100	pass		Bifenthrin [‡]	< LOQ	0.20	0.100	pass		Carbaryl [‡]	< LOQ	0.20	0.100	pass		Chlorantraniliprole [‡]	< LOQ	0.20	0.100	pass	
Boscalid [‡]	< LOQ	0.40	0.200	pass		Carbaryl [‡]	< LOQ	0.20	0.100	pass		Chlorantraniliprole [‡]	< LOQ	0.20	0.100	pass		Chlorpyrifos [‡]	< LOQ	0.20	0.100	pass	
Carbofuran [‡]	< LOQ	0.20	0.100	pass		Chlorantraniliprole [‡]	< LOQ	0.20	0.100	pass		Chlorpyrifos [‡]	< LOQ	0.20	0.100	pass		Cyfluthrin [‡]	< LOQ	1.0	0.500	pass	
Chlorfenapyr [‡]	< LOQ	1.0	0.500	pass		Chlorpyrifos [‡]	< LOQ	0.20	0.100	pass		Cyfluthrin [‡]	< LOQ	1.0	0.500	pass		Daminozide [‡]	< LOQ	1.0	0.500	pass	
Clofentezine [‡]	< LOQ	0.20	0.100	pass		Cyfluthrin [‡]	< LOQ	1.0	0.500	pass		Daminozide [‡]	< LOQ	1.0	0.500	pass		Dichlorvos [‡]	< LOQ	1.0	0.500	pass	
Cypermethrin [‡]	< LOQ	1.0	0.500	pass		Daminozide [‡]	< LOQ	1.0	0.500	pass		Dichlorvos [‡]	< LOQ	1.0	0.500	pass		Ethoprophos [‡]	< LOQ	0.20	0.100	pass	
Diazinon [‡]	< LOQ	0.20	0.100	pass		Dichlorvos [‡]	< LOQ	1.0	0.500	pass		Ethoprophos [‡]	< LOQ	0.20	0.100	pass		Etoazole [‡]	< LOQ	0.20	0.100	pass	
Dimethoate [‡]	< LOQ	0.20	0.100	pass		Ethoprophos [‡]	< LOQ	0.20	0.100	pass		Etoazole [‡]	< LOQ	0.20	0.100	pass		Fenpyroximate [‡]	< LOQ	0.40	0.200	pass	
Etofenprox [‡]	< LOQ	0.40	0.200	pass		Etoazole [‡]	< LOQ	0.20	0.100	pass		Fenpyroximate [‡]	< LOQ	0.40	0.200	pass		Flonicamid [‡]	< LOQ	1.0	0.400	pass	
Fenoxycarb [‡]	< LOQ	0.20	0.100	pass		Fenpyroximate [‡]	< LOQ	0.40	0.200	pass		Flonicamid [‡]	< LOQ	1.0	0.400	pass		Hexythiazox [‡]	< LOQ	1.0	0.400	pass	
Fipronil [‡]	< LOQ	0.40	0.200	pass		Flonicamid [‡]	< LOQ	1.0	0.400	pass		Hexythiazox [‡]	< LOQ	1.0	0.400	pass		Imidacloprid [‡]	< LOQ	0.40	0.200	pass	
Fludioxonil [‡]	< LOQ	0.40	0.200	pass		Hexythiazox [‡]	< LOQ	1.0	0.400	pass		Imidacloprid [‡]	< LOQ	0.40	0.200	pass		Malathion [‡]	< LOQ	0.20	0.100	pass	
Imazalil [‡]	< LOQ	0.20	0.100	pass		Imidacloprid [‡]	< LOQ	0.40	0.200	pass		Malathion [‡]	< LOQ	0.20	0.100	pass		Methiocarb [‡]	< LOQ	0.20	0.100	pass	
Kresoxim-methyl [‡]	< LOQ	0.40	0.200	pass		Malathion [‡]	< LOQ	0.20	0.100	pass		Methiocarb [‡]	< LOQ	0.20	0.100	pass		MGK-264 [‡]	< LOQ	0.20	0.100	pass	
Metalaxy [‡]	< LOQ	0.20	0.100	pass		Methiocarb [‡]	< LOQ	0.20	0.100	pass		MGK-264 [‡]	< LOQ	0.20	0.100	pass		Naled [‡]	< LOQ	0.50	0.250	pass	
Methomyl [‡]	< LOQ	0.40	0.200	pass		MGK-264 [‡]	< LOQ	0.20	0.100	pass		Naled [‡]	< LOQ	0.50	0.250	pass		Paclobutrazole [‡]	< LOQ	0.40	0.200	pass	
Myclobutanil [‡]	< LOQ	0.20	0.100	pass		Naled [‡]	< LOQ	0.50	0.250	pass		Paclobutrazole [‡]	< LOQ	0.40	0.200	pass		Permethrin [‡]	< LOQ	0.20	0.100	pass	
Oxamy [‡]	< LOQ	1.0	0.500	pass		Paclobutrazole [‡]	< LOQ	0.40	0.200	pass		Permethrin [‡]	< LOQ	0.20	0.100	pass		Piperonyl butoxide [‡]	< LOQ	2.0	1.00	pass	
Parathion-Methyl [‡]	< LOQ	0.20	0.100	pass		Permethrin [‡]	< LOQ	0.20	0.100	pass		Piperonyl butoxide [‡]	< LOQ	2.0	1.00	pass		Propiconazole [‡]	< LOQ	0.40	0.200	pass	
Phosmet [‡]	< LOQ	0.20	0.100	pass		Piperonyl butoxide [‡]	< LOQ	2.0	1.00	pass		Propiconazole [‡]	< LOQ	0.40	0.200	pass		Pyrethrin I (total) [‡]	< LOQ	1.0	0.500	pass	
Prallethrin [‡]	< LOQ	0.20	0.100	pass		Propiconazole [‡]	< LOQ	0.40	0.200	pass		Pyrethrin I (total) [‡]	< LOQ	1.0	0.500	pass		Spinosad [‡]	< LOQ	0.20	0.100	pass	
Propoxur [‡]	< LOQ	0.20	0.100	pass		Pyrethrin I (total) [‡]	< LOQ	1.0	0.500	pass		Spinosad [‡]	< LOQ	0.20	0.100	pass		Spirotetramat [‡]	< LOQ	0.20	0.100	pass	
Pyridaben [‡]	< LOQ	0.20	0.100	pass		Spinosad [‡]	< LOQ	0.20	0.100	pass		Spirotetramat [‡]	< LOQ	0.20	0.100	pass		Tebuconazole [‡]	< LOQ	0.40	0.200	pass	
Spiromesifen [‡]	< LOQ	0.20	0.100	pass		Spirotetramat [‡]	< LOQ	0.20	0.100	pass		Tebuconazole [‡]	< LOQ	0.40	0.200	pass		Thiamethoxam [‡]	< LOQ	0.20	0.100	pass	
Spiroxamine [‡]	< LOQ	0.40	0.200	pass		Tebuconazole [‡]	< LOQ	0.40	0.200	pass		Thiamethoxam [‡]	< LOQ	0.20	0.100	pass							
Thiacloprid [‡]	< LOQ	0.20	0.100	pass		Thiamethoxam [‡]	< LOQ	0.20	0.100	pass													
Trifloxystrobin [‡]	< LOQ	0.20	0.100	pass																			



Terpenes	Method: J AOAC 2015 V98-6				Units %	Batch 2312403	Analyze 10/31/23	03:59 PM	
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
β-Caryophyllene	0.0867	0.019	29.2905%		(-)-caryophyllene oxide	0.0693	0.019	23.4122%	
a-Bisabolol	0.0392	0.019	13.2432%		(-)-Guaial	0.0347	0.019	11.7230%	
Humulene	0.0338	0.019	11.4189%		β-Myrcene	0.0322	0.019	10.8784%	
(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%		(-)-Isopulegol	< LOQ	0.019	0.00%	
valencene	< LOQ	0.019	0.00%		Geraniol	< LOQ	0.019	0.00%	
(±)-trans-Nerolidol	< LOQ	0.019	0.00%		Camphene	< LOQ	0.019	0.00%	
gamma-Terpinene	< LOQ	0.019	0.00%		(±)-Camphor	< LOQ	0.019	0.00%	
Menthol	< LOQ	0.019	0.00%		Isobomeol	< LOQ	0.019	0.00%	
trans-β-Ocimene	< LOQ	0.012	0.00%		(+)-Bomeol	< LOQ	0.019	0.00%	
Sabinene	< LOQ	0.019	0.00%		(±)-cis-Nerolidol	< LOQ	0.019	0.00%	
(-)-a-Terpineol	< LOQ	0.019	0.00%		a-pinene	< LOQ	0.019	0.00%	
(-)-β-Pinene	< LOQ	0.019	0.00%		Geranyl acetate	< LOQ	0.019	0.00%	
(+)-Cedrol	< LOQ	0.019	0.00%		(+)-Pulegone	< LOQ	0.019	0.00%	
a-cedrene	< LOQ	0.019	0.00%		a-phellandrene	< LOQ	0.019	0.00%	
a-Terpinene	< LOQ	0.019	0.00%		cis-β-Ocimene	< LOQ	0.006	0.00%	
d-3-Carene	< LOQ	0.019	0.00%		farnesene	< LOQ	0.019	0.00%	
nerol	< LOQ	0.019	0.00%		Sabinene hydrate	< LOQ	0.019	0.00%	
Total Terpenes	0.296								



Metals									
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method		Status	Notes
Arsenic [#]	< LOQ	0.200	mg/kg	0.0835	2312377	10/31/23	AOAC 2013.06 (mod.) [§]	pass	
Cadmium [#]	< LOQ	0.200	mg/kg	0.0835	2312377	10/31/23	AOAC 2013.06 (mod.) [§]	pass	
Lead [#]	< LOQ	0.500	mg/kg	0.0835	2312377	10/31/23	AOAC 2013.06 (mod.) [§]	pass	
Mercury [#]	< LOQ	0.100	mg/kg	0.0418	2312377	10/31/23	AOAC 2013.06 (mod.) [§]	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.

▷ = 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									
J AOAC 2015 V98-6									
Batch ID: Z312177									
Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDA	2	0.0309	0.0323	%	95.7	80.0 - 120	Acceptable		
CBDA	2	0.0336	0.0337	%	99.8	80.0 - 120	Acceptable		
CBE	2	0.0342	0.0358	%	95.5	80.0 - 120	Acceptable		
CBDA	1	0.0312	0.0322	%	96.8	90.0 - 110	Acceptable		
CBGA	1	0.0312	0.0329	%	94.9	80.0 - 120	Acceptable		
CBG	1	0.0356	0.0368	%	96.9	80.0 - 120	Acceptable		
CBG	1	0.0319	0.0313	%	102	90.0 - 110	Acceptable		
THCV	2	0.0323	0.0345	%	93.7	80.0 - 120	Acceptable		
d8THCV	2	0.0288	0.0283	%	102	80.0 - 120	Acceptable		
THCVA	2	0.0304	0.0312	%	97.5	80.0 - 120	Acceptable		
CBN	1	0.0312	0.0329	%	95.0	80.0 - 120	Acceptable		
exo-THC	2	0.0309	0.0315	%	98.2	80.0 - 120	Acceptable		
d9THC	1	0.0343	0.0365	%	93.9	90.0 - 110	Acceptable		
d8THC	1	0.0333	0.0340	%	97.9	90.0 - 110	Acceptable		
9S-d10THC	1	0.0320	0.0337	%	94.8	80.0 - 120	Acceptable		
CBL	2	0.0307	0.0332	%	92.6	80.0 - 120	Acceptable		
9R-d10THC	1	0.0318	0.0335	%	94.5	80.0 - 120	Acceptable		
CBG	2	0.0338	0.0342	%	98.9	80.0 - 120	Acceptable		
THCA	1	0.0322	0.0337	%	95.7	90.0 - 110	Acceptable		
CBGA	2	0.0313	0.0338	%	92.5	80.0 - 120	Acceptable		
CBLA	2	0.0333	0.0342	%	97.3	80.0 - 120	Acceptable		
d9THCP	2	0.0313	0.0334	%	93.8	80.0 - 120	Acceptable		
CBT	2	0.0356	0.0343	%	104	80.0 - 120	Acceptable		
Method Blank									
Analyte		Result	LOQ	Units		Limits	Evaluation	Notes	
CBDA		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBDA		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBE		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBDA		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBGA		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBG		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBG		<LOQ	0.00323	%		< 0.00323	Acceptable		
THCV		<LOQ	0.00323	%		< 0.00323	Acceptable		
d8THCV		<LOQ	0.00323	%		< 0.00323	Acceptable		
THCVA		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBN		<LOQ	0.00323	%		< 0.00323	Acceptable		
exo-THC		<LOQ	0.00323	%		< 0.00323	Acceptable		
d9THC		<LOQ	0.00323	%		< 0.00323	Acceptable		
d8THC		<LOQ	0.00323	%		< 0.00323	Acceptable		
9S-d10THC		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBL		<LOQ	0.00323	%		< 0.00323	Acceptable		
9R-d10THC		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBG		<LOQ	0.00323	%		< 0.00323	Acceptable		
THCA		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBGA		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBLA		<LOQ	0.00323	%		< 0.00323	Acceptable		
d9THCP		<LOQ	0.00323	%		< 0.00323	Acceptable		
CBT		<LOQ	0.00323	%		< 0.00323	Acceptable		

Abbreviations

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

Units of Measure:

% - Percent



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



Report Number: 23-012497/D004.R000
Report Date: 11/06/2023
ORELAP#: OR100028
Purchase Order: 2683095
Received: 10/20/23 15:43

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

Laboratory Quality Control Results								
JAOAC 2015 V98-6 Batch ID: 2312177								
Sample ID: 23-012497-0001								
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
CBDV	0.0674	0.0678	0.00314	%	6.579	< 20	Acceptable	
CBE	0.110	0.111	0.00314	%	0.488	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
CBDG	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
CBD	0.189	0.193	0.00314	%	1.74	< 20	Acceptable	
CBD	5.43	5.52	0.00314	%	1.65	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
CBN	0.00954	0.00968	0.00314	%	1.50	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
d9THC	0.167	0.169	0.00314	%	1.21	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
CBL	0.0521	0.0465	0.00314	%	11.3	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
CBC	0.409	0.418	0.00314	%	2.27	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00314	%	NA	< 20	Acceptable	
CBT	0.158	0.161	0.00314	%	1.91	< 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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Report Number: 23-012497/D004.R000
Report Date: 11/06/2023
ORELAP#: OR100028
Purchase Order: 2683095
Received: 10/20/23 15:43

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

Terpenes Quality Control Results

Method Reference: EPA5035				Batch ID: 2312403					
Method Blank				Laboratory Control Sample					
Analyte	Result	LQ	Notes	Result	LCS	Units	LCS% Rec	Limits	Notes
a-pinene	<LOQ	< 200		437	500	µg/g	87%	70 - 130	
Camphene	<LOQ	< 200		442	500	µg/g	88%	70 - 130	
Sabinene	<LOQ	< 200		438	500	µg/g	88%	70 - 130	
b-Phene	<LOQ	< 200		436	500	µg/g	87%	70 - 130	
b-Myrcene	<LOQ	< 200		442	500	µg/g	88%	70 - 130	
a-phellandrene	<LOQ	< 200		449	500	µg/g	90%	70 - 130	
d-3-Carene	<LOQ	< 200		450	500	µg/g	90%	70 - 130	
a-Terpinene	<LOQ	< 200		433	500	µg/g	87%	70 - 130	
p-Oymene	<LOQ	< 200		442	500	µg/g	88%	70 - 130	
D-Limonene	<LOQ	< 200		432	500	µg/g	86%	70 - 130	
Eucalyptol	<LOQ	< 200		441	500	µg/g	88%	70 - 130	
b-cis-Ocimene	<LOQ	< 67		149	167	µg/g	90%	70 - 130	
b-trans-Ocimene	<LOQ	< 133		290	333	µg/g	87%	70 - 130	
g-Terpinene	<LOQ	< 200		435	500	µg/g	87%	70 - 130	
Sabinene Hydrate	<LOQ	< 200		444	500	µg/g	89%	70 - 130	
Terpinolene	<LOQ	< 200		437	500	µg/g	87%	70 - 130	
D-Fenchone	<LOQ	< 200		446	500	µg/g	89%	70 - 130	
Linalool	<LOQ	< 200		472	500	µg/g	94%	70 - 130	
Fenchol	<LOQ	< 200		430	500	µg/g	86%	70 - 130	
Camphor	<LOQ	< 200		441	500	µg/g	88%	70 - 130	
Isopulego	<LOQ	< 200		460	500	µg/g	92%	70 - 130	
Isoborneol	<LOQ	< 200		441	500	µg/g	88%	70 - 130	
Borneol	<LOQ	< 200		414	500	µg/g	83%	70 - 130	
DL-Menthhol	<LOQ	< 200		437	500	µg/g	87%	70 - 130	
Terpineol	<LOQ	< 200		449	500	µg/g	90%	70 - 130	
Nerol	<LOQ	< 200		416	500	µg/g	83%	70 - 130	
Pulegone	<LOQ	< 200		446	500	µg/g	89%	70 - 130	
Geraniol	<LOQ	< 200		410	500	µg/g	82%	70 - 130	
Geranyl Acetate	<LOQ	< 200		449	500	µg/g	90%	70 - 130	
a-Cedrene	<LOQ	< 200		459	500	µg/g	92%	70 - 130	
b-Caryophyllene	<LOQ	< 200		460	500	µg/g	92%	70 - 130	
a-Humulene	<LOQ	< 200		443	500	µg/g	89%	70 - 130	
Valenene	<LOQ	< 200		448	500	µg/g	90%	70 - 130	
cis-Nerolidol	<LOQ	< 200		463	500	µg/g	93%	70 - 130	
a-Farnesene	<LOQ	< 200		495	500	µg/g	99%	70 - 130	
trans-Nerolidol	<LOQ	< 200		451	500	µg/g	90%	70 - 130	
Caryophyllene Oxide	<LOQ	< 200		456	500	µg/g	91%	70 - 130	
Guaiol	<LOQ	< 200		455	500	µg/g	91%	70 - 130	
Cedrol	<LOQ	< 200		457	500	µg/g	91%	70 - 130	
a-Bisabolol	<LOQ	< 200		452	500	µg/g	90%	70 - 130	

Definitions

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



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Report Number: 23-012497/D004.R000
Report Date: 11/06/2023
ORELAP#: OR100028
Purchase Order: 2683095
Received: 10/20/23 15:43

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

Terpenes Quality Control Results

Method Reference: EPA5035			Batch ID: 2312403				
Sample/ Sample Duplicate		Sample ID: 23-012701-0001					
Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	3050	2570	192	µg/g	17%	< 20	
Camphene	225	195	192	µg/g	14%	< 20	
Sabinene	<LOQ	<LOQ	192	µg/g	0%	< 20	
b-Phene	860	727	192	µg/g	17%	< 20	
b-Myrcene	6400	5460	192	µg/g	16%	< 20	
a-phellandrene	<LOQ	<LOQ	192	µg/g	0%	< 20	
d-3-Carene	<LOQ	<LOQ	192	µg/g	0%	< 20	
a-Terpinene	<LOQ	<LOQ	192	µg/g	0%	< 20	
p-Oymene	<LOQ	<LOQ	192	µg/g	0%	< 20	
D-Limonene	1140	981	192	µg/g	15%	< 20	
Eucalyptol	275	247	192	µg/g	11%	< 20	
b-cis-Öimene	70	<LOQ	639	µg/g	0%	< 20	
b-trans-Öimene	538	473	128	µg/g	13%	< 20	
g-Terpinene	<LOQ	<LOQ	192	µg/g	0%	< 20	
Sabinene Hydrate	<LOQ	<LOQ	192	µg/g	0%	< 20	
Terpinolene	881	782	192	µg/g	12%	< 20	
D-Fenchone	<LOQ	<LOQ	192	µg/g	0%	< 20	
Linalool	652	585	192	µg/g	11%	< 20	
Fenchol	253	232	192	µg/g	9%	< 20	
Camphor	<LOQ	<LOQ	192	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	192	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	192	µg/g	0%	< 20	
Borneol	<LOQ	<LOQ	192	µg/g	0%	< 20	
DL-Menthol	<LOQ	<LOQ	192	µg/g	0%	< 20	
Terpineol	<LOQ	<LOQ	192	µg/g	0%	< 20	
Nerol	<LOQ	<LOQ	192	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	192	µg/g	0%	< 20	
Geraniol	<LOQ	<LOQ	192	µg/g	0%	< 20	
Geranyl Acetate	<LOQ	<LOQ	192	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	192	µg/g	0%	< 20	
b-Caryophyllene	8860	8440	192	µg/g	5%	< 20	
a-Humulene	4430	4260	192	µg/g	4%	< 20	
Valenene	649	635	192	µg/g	2%	< 20	
cis-Nerolidol	<LOQ	<LOQ	192	µg/g	0%	< 20	
a-Farnesene	<LOQ	<LOQ	192	µg/g	0%	< 20	
trans-Nerolidol	957	900	192	µg/g	6%	< 20	
Caryophyllene Oxide	2720	2290	192	µg/g	17%	< 20	
Guaiol	<LOQ	<LOQ	192	µg/g	0%	< 20	
Cedrol	<LOQ	<LOQ	192	µg/g	0%	< 20	
a-Bisabolol	813	723	192	µg/g	12%	< 20	

Definitions

RPD

Relative Percent Difference



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Report Number: 23-012497/D004.R000
Report Date: 11/06/2023
ORELAP#: OR100028
Purchase Order: 2683095
Received: 10/20/23 15:43

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

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2312430			
Method Blank				Laboratory Control Sample			
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec. Limits Notes
Propane	ND	< 200		511	584	µg/g	67.5 60 - 120
Isobutane	ND	< 200		794	787	µg/g	103.5 60 - 120
Butane	ND	< 200		740	782	µg/g	64.6 60 - 120
2,2-Dimethylpropane	ND	< 200		821	938	µg/g	66.1 60 - 120
Methanol	ND	< 200		1650	1670	µg/g	68.8 60 - 120
Ethylene Oxide	ND	< 30		58.2	57.1	µg/g	101.9 60 - 120
2-Methylbutane	ND	< 200		1500	1680	µg/g	89.3 60 - 120
Pentane	ND	< 200		1500	1670	µg/g	89.8 60 - 120
Ethanol	ND	< 200		1600	1680	µg/g	96.4 70 - 130
Ethyl Ether	ND	< 200		1550	1670	µg/g	82.8 60 - 120
2,2-Dimethylbutane	ND	< 30		174	169	µg/g	62.1 60 - 120
Acetone	ND	< 200		1590	1670	µg/g	85.2 60 - 120
2-Propanol	ND	< 200		1540	1630	µg/g	94.3 60 - 120
Ethyl Formate	ND	< 500		1160	1600	µg/g	72.5 70 - 130
Acetonitrile	ND	< 100		488	492	µg/g	95.1 60 - 120
Methyl Acetate	ND	< 500		1380	1600	µg/g	86.3 70 - 130
2,3-Dimethylbutane	ND	< 30		185	180	µg/g	102.8 60 - 120
Dichloromethane	ND	< 60		460	488	µg/g	64.3 60 - 120
2-Methylpentane	ND	< 30		149	182	µg/g	61.9 60 - 120
MTBE	ND	< 500		1420	1610	µg/g	88.2 70 - 130
3-Methylpentane	ND	< 30		171	177	µg/g	96.6 60 - 120
Hexane	ND	< 30		157	177	µg/g	88.7 60 - 120
1-Propanol	ND	< 500		1430	1600	µg/g	89.4 70 - 130
Methylethylketone	ND	< 500		1340	1610	µg/g	83.2 70 - 130
Ethyl acetate	ND	< 200		1520	1630	µg/g	93.3 60 - 120
2-Butanol	ND	< 200		1490	1630	µg/g	91.4 60 - 120
Tetrahydrofuran	ND	< 100		431	488	µg/g	89.5 60 - 120
Cyclohexane	ND	< 200		1450	1610	µg/g	90.1 60 - 120
2-methyl-1-propanol	ND	< 500		1440	1610	µg/g	89.4 70 - 130
Benzene	ND	< 1		4.50	4.70	µg/g	95.8 60 - 120
Isopropyl Acetate	ND	< 200		1530	1650	µg/g	92.7 60 - 120
Heptane	ND	< 200		1450	1630	µg/g	89.0 60 - 120
1-Butanol	ND	< 500		1440	1600	µg/g	90.0 70 - 130
Propyl Acetate	ND	< 500		1330	1600	µg/g	83.1 70 - 130
1,4-Dioxane	ND	< 100		490	523	µg/g	93.7 60 - 120
2-Ethoxyethanol	ND	< 30		155	178	µg/g	86.0 60 - 120
Methyl isobutyl ketone	ND	< 500		1430	1600	µg/g	89.4 70 - 130
3-Methyl-1-butanol	ND	< 500		1210	1600	µg/g	75.6 70 - 130
Ethylene Glycol	ND	< 200		421	508	µg/g	84.4 60 - 120
Toluene	ND	< 100		440	498	µg/g	88.7 60 - 120
Isobutyl Acetate	ND	< 500		1250	1610	µg/g	77.6 70 - 130
1-Pentanol	ND	< 500		1170	1600	µg/g	73.1 70 - 130
Butyl Acetate	ND	< 500		1210	1610	µg/g	75.2 70 - 130
Ethylbenzene	ND	< 200		812	978	µg/g	63.0 60 - 120
m,p-Xylene	ND	< 200		798	994	µg/g	80.1 60 - 120
o-Xylene	ND	< 200		815	982	µg/g	83.0 60 - 120
Cumene	ND	< 30		134	171	µg/g	78.4 60 - 120
Anisole	ND	< 500		1190	1600	µg/g	74.4 70 - 130
DMSO	ND	< 500		1310	1620	µg/g	80.9 70 - 130
1,2-dimethoxyethane	ND	< 50		150	188	µg/g	80.6 70 - 130
Triethylamine	ND	< 500		1340	1600	µg/g	83.8 70 - 130
N,N-dimethylformamide	ND	< 150		350	480	µg/g	72.9 70 - 130
N,N-dimethylacetamide	ND	< 150		390	483	µg/g	82.0 70 - 130
Pyridine	ND	< 50		128	168	µg/g	76.2 70 - 130
Sulfone	ND	< 50		90.4	161	µg/g	56.1 70 - 130 Q6
1,2-Dichloroethane	ND	< 1		0.94	1	µg/g	64.0 70 - 130
Chloroform	ND	< 1		0.76	1	µg/g	76.0 70 - 130
Trichloroethylene	ND	< 1		0.796	1	µg/g	79.9 70 - 130
1,1-Dichloroethane	ND	< 1		0.866	1	µg/g	85.5 70 - 130



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Report Number: 23-012497/D004.R000
Report Date: 11/06/2023
ORELAP#: OR100028
Purchase Order: 2683095
Received: 10/20/23 15:43

Revision: 2 Document ID: 7087
Legacy ID: CFL-E33E effective:

QC- Sample Duplicate

Sample ID: 23-012497-0001

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	
MIBK	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	
Methyl ethyl ketone	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	
Methyl isobutyl ketone	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	
Tetraethylamine	ND	ND	500 µg/g	0.0	< 20	Acceptable	
N,N-dimethylformamide	ND	ND	150 µg/g	0.0	< 20	Acceptable	
N,N-dimethylacetamide	ND	ND	150 µg/g	0.0	< 20	Acceptable	
Pyridine	ND	ND	50 µg/g	0.0	< 20	Acceptable	
Sulfolane	ND	ND	50 µg/g	0.0	< 20	Acceptable	
1,2-Dichloroethane	ND	ND	1 µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1 µg/g	0.0	< 20	Acceptable	
Trichloroethylene	ND	ND	1 µg/g	0.0	< 20	Acceptable	
1,1-Dichloroethane	ND	ND	1 µg/g	0.0	< 20	Acceptable	

Abbreviations

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

Units of Measure:

µg/g - Microgram per gram or ppm



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Report Date: 11/06/2023
ORELAP#: OR100028
Purchase Order: 2683095
Received: 10/20/23 15:43

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

Laboratory Pesticide Quality Control Results

AQAC 2007.1 & EN 15662		Units: mg/Kg		Batch ID: 2312435				
Method Blank			Laboratory Control Sample					
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Re	Limits	Notes
Abamectin	0.00	< 0.25		0.92	1.00	92.2	50.0 150	
Acaphate	0.00	< 0.20		0.63	0.80	78.3	60.0 120	
Acequinoyl	0.03	< 1.00		2.79	4.00	69.9	40.0 160	
Acetamiprid	0.05	< 0.10		0.34	0.40	86.2	60.0 120	
Aldicarb	0.00	< 0.20		0.67	0.80	84.6	60.0 120	
Azoxystrobin	0.00	< 0.10		0.33	0.40	84.3	60.0 120	
Bifenazale	0.00	< 0.10		0.30	0.40	90.0	60.0 120	
Bifenthrin	0.01	< 0.10		0.32	0.40	81.6	50.0 150	
Boscalid	0.00	< 0.20		0.66	0.80	84.6	60.0 120	
Carbaryl	0.00	< 0.10		0.33	0.40	83.3	60.0 120	
Carbofuran	0.00	< 0.10		0.30	0.40	87.5	60.0 120	
Chlorantraniliprole	0.00	< 0.10		0.35	0.40	87.7	60.0 120	
Chlorfenapyr	0.00	< 0.50		1.68	2.00	84.3	60.0 120	
Chlorpyrifos	0.00	< 0.10		0.34	0.40	85.6	60.0 120	
Clofentezine	0.00	< 0.10		0.32	0.40	80.5	60.0 120	
Cyfluthrin	0.00	< 0.50		1.66	2.00	83.1	50.0 150	
Cypermethrin	0.00	< 0.50		1.64	2.00	82.7	50.0 150	
Daminozide	0.00	< 0.50		0.63	2.00	31.4	60.0 120	Q7
Diazinon	0.00	< 0.10		0.33	0.40	80.9	60.0 120	
Dichlorvos	0.00	< 0.50		1.70	2.00	86.0	60.0 120	
Dimethoate	0.00	< 0.10		0.35	0.40	81.3	60.0 120	
Ethoprophos	0.00	< 0.10		0.30	0.40	87.5	60.0 120	
Efenprox	0.00	< 0.20		0.64	0.80	81.7	50.0 150	
Etoxazole	0.00	< 0.10		0.33	0.40	84.8	60.0 120	
Fenoxycarb	0.00	< 0.10		0.34	0.40	87.2	60.0 120	
Fenpyroximate	0.00	< 0.20		0.64	0.80	83.0	60.0 120	
Fipronil	0.00	< 0.20		0.62	0.80	82.8	60.0 120	
Flonicamid	0.00	< 0.25		0.80	1.00	81.0	60.0 120	
Fludioxonil	0.00	< 0.20		0.66	0.80	84.5	50.0 150	
Hexythiazox	0.00	< 0.25		0.80	1.00	86.0	60.0 120	
Imazalil	0.00	< 0.10		0.34	0.40	93.6	60.0 120	
Imidacloprid	0.00	< 0.20		0.68	0.80	82.2	60.0 120	
Kiesoxim-methyl	0.00	< 0.20		0.69	0.80	86.3	60.0 120	
Malathion	0.00	< 0.10		0.30	0.40	89.9	60.0 120	
Metabixyl	0.00	< 0.10		0.34	0.40	85.5	60.0 120	
Methiocarb	0.00	< 0.10		0.32	0.40	81.7	60.0 120	
Methomyl	0.00	< 0.20		0.64	0.80	79.2	60.0 120	
MKG-264	0.00	< 0.10		0.34	0.40	83.4	50.0 150	
Mydobutani	0.00	< 0.10		0.30	0.40	87.5	60.0 120	
Naled	0.00	< 0.25		0.84	1.00	84.3	50.0 150	
Oxamyl	0.00	< 0.50		1.57	2.00	78.9	60.0 120	
Pedacutrazole	0.00	< 0.20		0.69	0.80	87.1	60.0 120	
Permethrin-Methyl	0.00	< 0.10		0.32	0.40	97.9	50.0 150	
Permethrin	0.00	< 0.10		0.36	0.40	90.3	50.0 150	
Phosmet	0.00	< 0.10		0.32	0.40	82.9	50.0 150	
Piperonyl butoxide	0.00	< 0.50		1.70	2.00	85.1	60.0 120	
Prallethrin	0.00	< 0.10		0.34	0.40	86.9	60.0 120	
Propiconazole	0.00	< 0.20		0.74	0.80	91.8	60.0 120	
Propoxur	0.00	< 0.10		0.30	0.40	87.5	60.0 120	
Pyrethrin (Summe)	0.00	< 0.10		0.43	0.40	84.5	60.0 120	
Pyridaben	0.00	< 0.10		0.34	0.40	86.8	50.0 150	
Spinosad	0.00	< 0.10		0.34	0.38	89.1	50.0 150	
Spiromesifen	0.00	< 0.10		0.34	0.40	85.1	60.0 120	
Spirotetramat	0.00	< 0.10		0.34	0.40	93.6	60.0 120	
Spiromame	0.00	< 0.20		0.64	0.80	86.8	60.0 120	
Tebuconazole	0.00	< 0.20		0.70	0.80	90.0	60.0 120	
Thiadoprid	0.00	< 0.10		0.33	0.40	84.6	60.0 120	
Thiamethoxam	0.00	< 0.10		0.34	0.40	80.9	60.0 120	
Trifloxystrobin	0.00	< 0.10		0.33	0.40	83.9	60.0 120	

Q7



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

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg				Batch ID 2312435			
Matrix Spike/Matrix Spike Duplicate Recoveries									
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Re	MSD % Re	Notes
Abamectin	0.000	0.645	0.598	1.000	9.2%	< 30	64.5%	58.8%	50 - 150
Acenaphth	0.052	0.657	0.641	0.800	2.6%	< 30	75.0%	73.6%	50 - 150
Acetamiprid	0.000	1.737	1.492	4.000	15.2%	< 30	43.4%	37.3%	50 - 150
Acetamiprid	0.000	0.364	0.348	0.400	4.5%	< 30	91.1%	87.1%	50 - 150
Aldicarb	0.000	0.648	0.646	0.800	0.6%	< 30	81.2%	80.7%	50 - 150
Azoxystrobin	0.009	0.310	0.299	0.400	3.7%	< 30	75.2%	72.5%	50 - 150
Bifenazate	0.000	0.310	0.317	0.400	2.3%	< 30	77.9%	79.3%	50 - 150
Bifenthrin	0.011	0.157	0.155	0.400	1.7%	< 30	36.8%	36.0%	50 - 150
Boscalid	0.000	0.602	0.612	0.800	1.7%	< 30	75.2%	76.5%	50 - 150
Carbaryl	0.002	0.308	0.306	0.400	0.7%	< 30	76.9%	75.9%	50 - 150
Carbendazim	0.005	0.324	0.315	0.400	2.7%	< 30	79.8%	77.6%	50 - 150
Chlorantraniliprole	0.000	0.308	0.276	0.400	10.8%	< 30	77.0%	69.1%	50 - 150
Chlorfenvinphos	0.000	1.470	1.448	2.000	1.4%	< 30	73.9%	72.5%	50 - 150
Chlorpyrifos	0.000	0.251	0.259	0.400	3.1%	< 30	62.7%	64.7%	50 - 150
Clofentezine	0.000	0.245	0.256	0.400	4.4%	< 30	61.2%	63.9%	50 - 150
Cyfluthrin	0.000	0.907	0.904	2.000	0.4%	< 30	45.4%	45.2%	30 - 150
Cypermethrin	0.000	1.023	0.986	2.000	5.7%	< 30	51.2%	48.3%	50 - 150
Daminozide	0.000	0.623	0.573	2.000	8.4%	< 30	31.2%	28.6%	30 - 150
Diazinon	0.000	0.283	0.284	0.400	0.1%	< 30	70.9%	70.9%	50 - 150
Disulfoton	0.032	1.567	1.542	2.000	1.6%	< 30	76.8%	75.5%	50 - 150
Dimethoate	0.007	0.323	0.308	0.400	4.7%	< 30	79.0%	75.4%	50 - 150
Ethionphos	0.001	0.314	0.317	0.400	1.0%	< 30	78.1%	78.9%	50 - 150
Etofenprox	0.001	0.375	0.363	0.800	3.4%	< 30	46.8%	45.2%	50 - 150
Etoxazole	0.000	0.234	0.242	0.400	3.5%	< 30	58.9%	60.6%	50 - 150
Fenoxycarb	0.000	0.292	0.291	0.400	0.5%	< 30	73.1%	72.7%	50 - 150
Fenpyroximate	0.016	0.542	0.531	0.800	2.1%	< 30	65.7%	64.3%	50 - 150
Fipronil	0.000	0.414	0.373	0.800	10.4%	< 30	51.8%	46.6%	50 - 150
Flonicamid	0.000	0.870	0.803	1.000	8.0%	< 30	87.0%	80.3%	50 - 150
Fludioxonil	0.000	0.778	0.807	0.800	3.6%	< 30	97.3%	100.8%	50 - 150
Hexythiazox	0.000	0.324	0.314	1.000	3.3%	< 30	32.4%	31.4%	50 - 150
Imazalil	0.005	0.329	0.335	0.400	1.7%	< 30	80.9%	82.3%	50 - 150
Imidacloprid	0.021	0.682	0.635	0.800	7.4%	< 30	82.9%	76.6%	50 - 150
Kiesoxim-methyl	0.012	0.584	0.548	0.800	6.4%	< 30	71.9%	67.1%	50 - 150
Malathion	0.015	0.304	0.314	0.400	3.5%	< 30	72.2%	74.8%	50 - 150
Metolachlor	0.007	0.318	0.307	0.400	3.7%	< 30	77.6%	74.8%	50 - 150
Methidathion	0.003	0.290	0.289	0.400	7.6%	< 30	71.8%	68.6%	50 - 150
Methomyl	0.000	0.580	0.653	0.800	11.9%	< 30	72.9%	81.6%	50 - 150
MCK-264	0.000	0.251	0.248	0.400	1.2%	< 30	62.8%	61.9%	50 - 150
Mydobutanol	0.000	0.329	0.306	0.400	7.1%	< 30	82.1%	76.5%	50 - 150
Naled	0.000	0.775	0.740	1.000	4.3%	< 30	77.5%	74.3%	50 - 150
Oxamyl	0.000	1.763	1.695	2.000	3.9%	< 30	88.2%	84.8%	50 - 150
Pedacutrazole	0.000	0.614	0.577	0.800	6.2%	< 30	76.9%	72.2%	50 - 150
Permethrin-Methyl	0.000	0.289	0.287	0.400	0.6%	< 30	72.2%	71.7%	30 - 150
Permethrin	0.000	0.250	0.251	0.400	0.3%	< 30	62.9%	62.7%	50 - 150
Phosmet	0.000	0.308	0.305	0.400	0.9%	< 30	77.0%	76.3%	50 - 150
Piperonyl butoxide	0.009	1.233	1.235	2.000	0.3%	< 30	61.2%	61.4%	50 - 150
Prallethrin	0.001	0.204	0.206	0.400	1.3%	< 30	50.8%	51.3%	50 - 150
Propiconazole	0.000	0.539	0.539	0.800	0.0%	< 30	67.4%	67.4%	50 - 150
Propoxur	0.003	0.328	0.307	0.400	6.5%	< 30	81.1%	76.0%	50 - 150
Pyrethrin (Summe)	0.000	0.323	0.325	0.400	1.2%	< 30	66.0%	66.8%	50 - 150
Pyridaben	0.000	0.179	0.174	0.400	2.6%	< 30	44.7%	43.5%	50 - 150
Spinosad	0.000	0.248	0.243	0.388	1.9%	< 30	63.9%	62.7%	50 - 150
Spiromesifen	0.003	0.228	0.220	0.400	3.5%	< 30	56.1%	54.1%	50 - 150
Spirotetramat	0.000	0.389	0.353	0.400	4.3%	< 30	92.1%	88.3%	50 - 150
Spiromame	0.000	0.657	0.639	0.800	2.8%	< 30	82.1%	79.8%	50 - 150
Tebuconazole	0.000	0.607	0.602	0.800	0.9%	< 30	75.9%	75.3%	50 - 150
Thiophanid	0.000	0.337	0.320	0.400	5.1%	< 30	84.3%	80.1%	50 - 150
Thiamethoxam	0.000	0.333	0.313	0.400	6.1%	< 30	83.2%	79.3%	50 - 150
Trifloxystrobin	0.000	0.254	0.280	0.400	2.5%	< 30	63.4%	65.0%	50 - 150



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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	Quantitation 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.