

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU		TN.FS.SAL20		BATCH #		EA08(A)		LOQ: Limit Of Quantitation	
PRODUCT NAME		CBD Pet Oil Tincture - Joint		SERVING SIZE		1 mL		LOD: Limit Of Detection	
LABORATORY:		Columbia Laboratories		OREGON ACCREDITATION:		OR100028		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)		20.1	mg/serving	22.1	mg/g	2.21	%		
Total THC (d9-THC, THCA)		0.816	mg/serving	0.897	mg/g	0.09	%		
Cannabigerol (CBG)		0.421	mg/serving	0.463	mg/g	0.046	%		
Cannabinol (CBN)		<LOQ	mg/serving	<LOQ	mg/g	<LOQ	%		
Cannabichromene (CBC)		0.84	mg/serving	0.923	mg/g	0.092	%		
Tetrahydrocannabinolic Acid (THCA)		<LOQ	mg/serving	<LOQ	mg/g	<LOQ	%		
Delta-9-THC (d9-THC)		0.816	mg/serving	0.897	mg/g	0.09	%		
Delta-8-THC (d8-THC)		<LOQ	mg/serving	<LOQ	mg/g	<LOQ	%		
HEAVY METALS		PER SERVING		PER GRAM		REGULATORY ACTION LEVEL			
Arsenic		<LOQ	µg/serving	<LOQ	µg/g	10	µg/day ^[1]		
Cadmium		<LOQ	µg/serving	<LOQ	µg/g	4.1	µg/day ^[1]		
Lead		<LOQ	µg/serving	<LOQ	µg/g	3.5	µg/day ^[2]		
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				50,000 mg/day			
Heptane		<LOQ				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		0.0436	%						
α-Bisabolol		0.0258	%						
Guaiol		<LOQ	%						
Humulene		<LOQ	%						
Caryophyllene Oxide		<LOQ	%						



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

2. US Food and Drug Administration. (2019). Lead in Food, Foodwares, and Dietary Supplements. Washington DC: FDA. US Food and Drug Administration. (2019). Lead in Food, Foodwares, and Dietary Supplements. Washington DC: FDA.



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



Report Number: 22-001432/D002.R000
Report Date: 02/11/2022
ORELAP#: OR100028
Purchase Order:
Received: 02/07/22 14:50

Customer: Etz Hayim Holdings
Product identity: EA08(A).TN.FS.SAL20
Client/Metric ID: .
Laboratory ID: 22-001432-0001

Summary

Potency:

Analyte per 1ml	Result	Limits	Units	Status	
CBC per 1ml†	0 840		mg/1ml		CBD Total per 1ml 20.1 mg/1ml
CBD per 1ml	20 1		mg/1ml		
CBDV per 1ml†	0 118		mg/1ml		THC-Total per 1ml 0.816 mg/1ml
CBG per 1ml†	0 421		mg/1ml		
CBT per 1ml†	0 410		mg/1ml		(Reported in milligrams per serving)
Δ9 THC per 1ml	0 816		mg/1ml		



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Report Number: 22-001432/D002.R000
Report Date: 02/11/2022
ORELAP#: OR100028
Purchase Order:
Received: 02/07/22 14:50

Customer: Etz Hayim Holdings
16427 NE Airport Way
PORTLAND 97230
United States of America (USA)
Product identity: EA08(A).TN.FS.SAL20
Client/Metric ID: .
Sample Date:
Laboratory ID: 22-001432-0001
Evidence of Cooling: No
Temp: 20.5 °C
Relinquished by: Client
Serving Size #1: 0.91 g
Density: 0.9100 g/ml

Sample Results

Potency per 1ml		Method J AOAC 2015 V98-6 (mod)Units mg/se			Batch: 2201127	Analyze: 2/9/22 5:29:00 AM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC per 1ml [†]	0.840		mg/1ml	0.0297		
CBC-A per 1ml [†]	< LOQ		mg/1ml	0.0297		
CBC-Total per 1ml [†]	0.840		mg/1ml	0.0557		
CBD per 1ml	20.1		mg/1ml	0.297		
CBD-A per 1ml	< LOQ		mg/1ml	0.0297		
CBD-Total per 1ml	20.1		mg/1ml	0.323		
CBDV per 1ml [†]	0.118		mg/1ml	0.0297		
CBDV-A per 1ml [†]	< LOQ		mg/1ml	0.0297		
CBDV-Total per 1ml [†]	0.118		mg/1ml	0.0554		
CBE per 1ml [†]	< LOQ		mg/1ml	0.0297		
CBG per 1ml [†]	0.421		mg/1ml	0.0297		
CBG-A per 1ml [†]	< LOQ		mg/1ml	0.0297		
CBG-Total per 1ml [†]	0.421		mg/1ml	0.0554		
CBL per 1ml [†]	< LOQ		mg/1ml	0.0297		
CBL-A per 1ml [†]	< LOQ		mg/1ml	0.0297		
CBL-Total per 1ml [†]	< LOQ		mg/1ml	0.0557		
CBN per 1ml	< LOQ		mg/1ml	0.0297		
CBT per 1ml [†]	0.410		mg/1ml	0.0297		
Δ8-THCV per 1ml [†]	< LOQ		mg/1ml	0.0297		
Δ8-THC per 1ml [†]	< LOQ		mg/1ml	0.0297		
Δ9-THC per 1ml	0.816		mg/1ml	0.0297		
exo-THC per 1ml [†]	< LOQ		mg/1ml	0.0297		
THC-A per 1ml	< LOQ		mg/1ml	0.0297		
THC-Total per 1ml	0.816		mg/1ml	0.0557		
THCV per 1ml [†]	< LOQ		mg/1ml	0.0297		
THCV-A per 1ml [†]	< LOQ		mg/1ml	0.0297		
THCV-Total per 1ml [†]	< LOQ		mg/1ml	0.0557		
Total Cannabinoids per 1ml	22.7		mg/1ml			



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These test results are representative of the individual sample selected and submitted by the client.

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.

† = Analyte not NELAP accredited.

Units of Measure

g = Gram

g/ml = Gram per milliliter

mg/1ml = Milligram per 1ml

% = Percentage of sample

% wt = $\mu\text{g/g}$ divided by 10,000

Approved Signatory

Derrick Tanner
General Manager



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503-254-1794



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12423 NE Whitaker Way Portland OR 97230 p.503-254-1794

Cannabis Chain of Custody Record

ORELAP ID: OR100028

Field ID		Date/Time Collected	Analysis Requested												Matrix	Weight	Serving size for edibles	Comments/Metric ID
			Pesticides - OR 59 compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Water Activity	Moisture	Terpenes	Micro: Yeast and Mold	Micro: E.Coli and Total Coliform	Heavy Metals	Mycotoxins	Other				
EAD8(CA)TN.F3.SAL20		2/7/22 11AM			X												Liquid TN.	LAZ.Nat Discount
EAD8(CA)TN.F3.SAL20		2/7/22 11AM	X			X		X	X	X	X							Potency 1st.

Collected By:	Relinquished By:	Date	Time	Received by:	Date	Time	Lab Use Only:
☒ Standard (5 day)							Client Alias:
☐ Rush (3-4 day) (1.5x Standard)							Order Number:
☐ Priority Rush (2 day) (2x Standard)							Proper Container
							Sample Condition
							Temperature: 20.5
							Shipped Via: Client
							Evidence of cooling: ☐ Yes ☒ No

SUBMISSION OF SAMPLES WITH TESTING REQUIREMENTS TO PIXIS WILL BE UNDERSTOOD TO BE AN AGREEMENT FOR SERVICES IN ACCORDANCE WITH THE CONDITIONS LISTED ON THE BACK OF THIS FORM

Revision: 1.02 Control#: CF023
Effective 01/31/2019 Revised 01/31/2019

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Portland, OR 97230
503-254-1794



Report Number: 22-001432/D002.R000
Report Date: 02/11/2022
ORELAP#: OR100028
Purchase Order:
Received: 02/07/22 14:50

Revision 1 Document D 7148
Legacy D Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V98-6				Batch ID 2201127					
Laboratory Control Sample									
Analyte	Result	Spike	Units	% Rec	Limits			Evaluation	Notes
CBDVA	0.00910	0.01	%	91.0	85.0	-	115	Acceptable	
CBDV	0.0104	0.01	%	104	85.0	-	115	Acceptable	
CBE	0.00959	0.01	%	95.9	85.0	-	115	Acceptable	
CBDA	0.0101	0.01	%	101	85.0	-	115	Acceptable	
CBGA	0.00919	0.01	%	91.9	85.0	-	115	Acceptable	
CBG	0.00953	0.01	%	95.3	85.0	-	115	Acceptable	
CBD	0.0104	0.01	%	104	85.0	-	115	Acceptable	
THCV	0.00928	0.01	%	92.8	85.0	-	115	Acceptable	
d8THCV	0.00984	0.01	%	98.4	85.0	-	115	Acceptable	
THCVA	0.00865	0.01	%	86.5	85.0	-	115	Acceptable	
CBN	0.0103	0.01	%	103	85.0	-	115	Acceptable	
exo-THC	0.00897	0.01	%	89.7	85.0	-	115	Acceptable	
d9THC	0.00971	0.01	%	97.1	85.0	-	115	Acceptable	
d8THC	0.00984	0.01	%	98.4	85.0	-	115	Acceptable	
CBL	0.00886	0.01	%	88.6	85.0	-	115	Acceptable	
CBC	0.00971	0.01	%	97.1	85.0	-	115	Acceptable	
THCA	0.00947	0.01	%	94.7	85.0	-	115	Acceptable	
CBCA	0.00958	0.01	%	95.8	85.0	-	115	Acceptable	
CBLA	0.00974	0.01	%	97.4	85.0	-	115	Acceptable	
CBT	0.0103	0.01	%	103	85.0	-	115	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes	
CBDVA	<LOQ	0.003	%	< 0.003	Acceptable		
CBDV	<LOQ	0.003	%	< 0.003	Acceptable		
CBE	<LOQ	0.003	%	< 0.003	Acceptable		
CBDA	<LOQ	0.003	%	< 0.003	Acceptable		
CBGA	<LOQ	0.003	%	< 0.003	Acceptable		
CBG	<LOQ	0.003	%	< 0.003	Acceptable		
CBD	<LOQ	0.003	%	< 0.003	Acceptable		
THCV	<LOQ	0.003	%	< 0.003	Acceptable		
d8THCV	<LOQ	0.003	%	< 0.003	Acceptable		
THCVA	<LOQ	0.003	%	< 0.003	Acceptable		
CBN	<LOQ	0.003	%	< 0.003	Acceptable		
exo-THC	<LOQ	0.003	%	< 0.003	Acceptable		
d9THC	<LOQ	0.003	%	< 0.003	Acceptable		
d8THC	<LOQ	0.003	%	< 0.003	Acceptable		
CBL	<LOQ	0.003	%	< 0.003	Acceptable		
CBC	<LOQ	0.003	%	< 0.003	Acceptable		
THCA	<LOQ	0.003	%	< 0.003	Acceptable		
CBCA	<LOQ	0.003	%	< 0.003	Acceptable		
CBLA	<LOQ	0.003	%	< 0.003	Acceptable		
CBT	<LOQ	0.003	%	< 0.003	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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Received: 02/07/22 14:50

Revision 1 Document D 7148
Legacy D Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V98-6								
Batch ID 2201127								
Sample Duplicate								
Sample D 22-001423-0001								
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD	0.0292	0.0187	0.003	%	43.9	< 20	Outlier	Q4
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.003	%	NA	< 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: 22-001432/D002.R000
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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.



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



Report Number: 22-001432/D004.R000
Report Date: 02/21/2022
ORELAP#: OR100028
Purchase Order:
Received: 02/07/22 14:50

Customer: Etz Hayim Holdings
Product identity: EA08(A).TN.FS.SAL20
Client/Metric ID: .
Laboratory ID: 22-001432-0002

Summary

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 [†]	0.0436	62.82%	α -Bisabolol [†]	0.0258	37.18%
Total Terpenes[†]	0.0694	100.00%			

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.



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503-254-1794



Report Number: 22-001432/D004.R000
Report Date: 02/21/2022
ORELAP#: OR100028
Purchase Order:
Received: 02/07/22 14:50

Customer: Etz Hayim Holdings
16427 NE Airport Way
PORTLAND 97230
United States of America (USA)
Product identity: EA08(A).TN.FS.SAL20
Client/Metric ID: .
Sample Date:
Laboratory ID: 22-001432-0002
Evidence of Cooling: No
Temp: 20.5 °C
Relinquished by: Client

Sample Results

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2201228	02/14/22	AOAC 991.14 (Petrifilm)	X	
Total Coliforms	< LOQ		cfu/g	10	2201228	02/14/22	AOAC 991.14 (Petrifilm)	X	
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2201229	02/15/22	AOAC 2014.05 (RAPID)	X, I	
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2201229	02/15/22	AOAC 2014.05 (RAPID)	X, I	

Solvents						Method Residual Solvents by GC/MS						Units µg/g				Batch 2201349				Analyze 02/16/22 11:01 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-Dimethyl butane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< LOQ		200														
2,3-Dimethyl butane	< 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 ⁱ	< 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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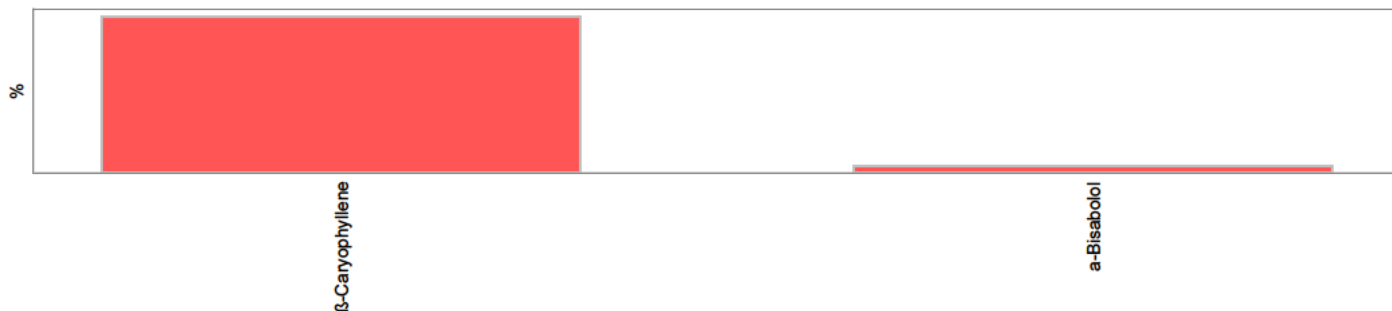


Report Number: 22-001432/D004.R000
Report Date: 02/21/2022
ORELAP#: OR100028
Purchase Order:
Received: 02/07/22 14:50

Pesticides					Method AOAC 2007.01 & EN 15662 (mod)	Units mg/kg	Batch 2201285	Analyze 02/15/22 08:20 AM					
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes		
Abamectin	< LOQ	0.50	0.250	pass		Acephate	< LOQ	0.40	0.250	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	0.200	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	0.200	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									



Terpenes				Method J AOAC 2015 V98-6	Units %	Batch 2201353	Analyze 02/15/22 09:29 PM		
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
β-Caryophyllene [†]	0.0436	0.019	62.8242%		α-Bisabolol [†]	0.0258	0.019	37.1758%	
Humulene [†]	< LOQ	0.019	0.00%		(-)-caryophyllene oxide [†]	< LOQ	0.019	0.00%	
Geraniol [†]	< LOQ	0.019	0.00%		nerol [†]	< LOQ	0.019	0.00%	
(-)-α-Terpineol [†]	< LOQ	0.019	0.00%		γ-Terpinene [†]	< LOQ	0.019	0.00%	
Geranyl acetate [†]	< LOQ	0.019	0.00%		α-Terpinene [†]	< LOQ	0.019	0.00%	
p-Cymene [†]	< LOQ	0.019	0.00%		(-)-Guaiol [†]	< LOQ	0.019	0.00%	
Linalool [†]	< LOQ	0.019	0.00%		cis-β-Ocimene [†]	< LOQ	0.006	0.00%	
(R)-(+)-Limonene [†]	< LOQ	0.019	0.00%		(-)-β-Pinene [†]	< LOQ	0.019	0.00%	
(+)-Pulegone [†]	< LOQ	0.019	0.00%		valencene [†]	< LOQ	0.019	0.00%	
(+)-Cedrol [†]	< LOQ	0.019	0.00%		Menthol [†]	< LOQ	0.019	0.00%	
(±)-cis-Nerolidol [†]	< LOQ	0.019	0.00%		(±)-trans-Nerolidol [†]	< LOQ	0.019	0.00%	
Eucalyptol [†]	< LOQ	0.019	0.00%		(-)-Isopulegol [†]	< LOQ	0.019	0.00%	
(+)-Borneol [†]	< LOQ	0.019	0.00%		(+)-fenchol [†]	< LOQ	0.019	0.00%	
(±)-Camphor [†]	< LOQ	0.019	0.00%		(±)-fenchone [†]	< LOQ	0.019	0.00%	
α-cedrene [†]	< LOQ	0.019	0.00%		α-phellandrene [†]	< LOQ	0.019	0.00%	
α-pinene [†]	< LOQ	0.019	0.00%		Camphene [†]	< LOQ	0.019	0.00%	
d-3-Carene [†]	< LOQ	0.019	0.00%		farnesene [†]	< LOQ	0.019	0.00%	
Isoborneol [†]	< LOQ	0.019	0.00%		Sabinene [†]	< LOQ	0.019	0.00%	
Sabinene hydrate [†]	< LOQ	0.019	0.00%		β-Myrcene [†]	< LOQ	0.019	0.00%	
Terpinolene [†]	< LOQ	0.019	0.00%		trans-β-Ocimene [†]	< LOQ	0.012	0.00%	
Total Terpenes	0.0694								



Metals									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
Arsenic	< LOQ	0.200	mg/kg	0.0954	2201429	02/17/22	AOAC 2013.06 (mod.)	pass	X
Cadmium	< LOQ	0.200	mg/kg	0.0954	2201429	02/17/22	AOAC 2013.06 (mod.)	pass	X
Lead	< LOQ	0.500	mg/kg	0.0954	2201429	02/17/22	AOAC 2013.06 (mod.)	pass	X
Mercury	< LOQ	0.100	mg/kg	0.0477	2201429	02/17/22	AOAC 2013.06 (mod.)	pass	X



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These test results are representative of the individual sample selected and submitted by the client.

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.

† = Analyte not NELAP accredited.

Units of Measure

cfu/g = Colony forming units per gram

µg/g = Microgram per gram

mg/kg = Milligram per kilogram = parts per million (ppm)

% = Percentage of sample

% wt = µg/g divided by 10,000

Glossary of Qualifiers

I: Insufficient sample received to meet method requirements.

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner
General Manager



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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 2201285				
Method Blank			Laboratory Control Sample					
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spke	LCS% Re	Limits	Notes
Abamectin	0.000	< 0.250		0.971	1.000	97.1	81.1 - 121	
Acephate	0.000	< 0.250		1.048	1.000	104.8	68.1 - 122	
Acequinocyl	0.000	< 1.000		3.970	4.000	99.2	82.3 - 117	
Acetamiprid	0.000	< 0.100		0.395	0.400	98.7	67.4 - 125	
Aldicarb	0.000	< 0.200		0.776	0.800	97.0	73.2 - 122	
Azoxystrobin	0.000	< 0.100		0.371	0.400	92.8	75.7 - 121	
Bifenazate	0.000	< 0.100		0.255	0.400	63.9	80.2 - 149	Q6
Bifenthrin	0.000	< 0.100		0.389	0.400	97.1	74.3 - 119	
Boscalid	0.000	< 0.200		0.748	0.800	93.5	73.1 - 128	
Carbaryl	0.000	< 0.100		0.392	0.400	98.1	79.3 - 119	
Carbofuran	0.000	< 0.100		0.390	0.400	97.5	78.3 - 118	
Chlorantraniliprole	0.000	< 0.100		0.400	0.400	100.0	83.7 - 117	
Chlorfenapyr	0.000	< 0.500		2.246	2.000	112.3	71.0 - 132	
Chlorpyrifos	0.000	< 0.100		0.389	0.400	97.1	71.2 - 117	
Clofentezine	0.000	< 0.100		0.395	0.400	99.1	80.9 - 113	
Cyfluthrin	0.000	< 0.500		1.964	2.000	98.2	69.0 - 126	
Cypermethrin	0.000	< 0.500		1.989	2.000	99.5	81.5 - 114	
Daminozide	0.022	< 0.500		1.684	2.000	84.2	76.7 - 142	
Diazinon	0.000	< 0.100		0.384	0.400	95.9	78.5 - 119	
Dichlorvos	0.000	< 0.500		1.934	2.000	96.7	81.1 - 110	
Dimethoate	0.000	< 0.100		0.394	0.400	98.4	81.4 - 116	
Ethoprophos	0.000	< 0.100		0.400	0.400	100.1	78.8 - 117	
Etofenprox	0.000	< 0.200		0.774	0.800	96.7	71.3 - 132	
Etoxazole	0.000	< 0.100		0.395	0.400	99.1	78.9 - 123	
Fenoxycarb	0.000	< 0.100		0.400	0.400	100.0	82.0 - 116	
Fenpyroximate	0.000	< 0.200		0.784	0.800	97.9	81.1 - 116	
Flpronil	0.000	< 0.200		0.785	0.800	98.3	83.8 - 123	
Flonicamid	0.000	< 0.250		0.977	1.000	97.7	67.9 - 126	
Fludioxonil	0.000	< 0.200		0.807	0.800	100.9	73.0 - 124	
Hexythiazox	0.000	< 0.250		0.976	1.000	97.6	75.0 - 122	
Imazalil	0.000	< 0.100		0.390	0.400	87.5	73.5 - 130	
Imidacloprid	0.000	< 0.200		0.772	0.800	96.5	74.7 - 122	
Kiesoxim-methyl	0.000	< 0.200		0.800	0.800	100.0	75.4 - 123	
Malathion	0.000	< 0.100		0.398	0.400	98.2	72.9 - 129	
Metaxalyl	0.000	< 0.100		0.392	0.400	98.0	80.2 - 116	
Methiocarb	0.000	< 0.100		0.384	0.400	96.0	81.1 - 118	
Methomyl	0.000	< 0.200		0.767	0.800	95.8	67.1 - 125	
MCK-264	0.000	< 0.100		0.398	0.400	99.4	76.5 - 120	
Mydobutanil	0.000	< 0.100		0.379	0.400	94.8	75.2 - 123	
Naled	0.000	< 0.250		0.949	1.000	94.9	83.4 - 112	
Oxamyl	0.000	< 0.500		2.038	2.000	101.9	72.5 - 120	
Padobutrazole	0.000	< 0.200		0.790	0.800	98.7	81.1 - 117	
Parathion-Methyl	0.000	< 0.200		0.918	0.800	114.7	76.4 - 129	
Permethrin	0.000	< 0.100		0.397	0.400	99.3	72.9 - 119	
Phosmet	0.000	< 0.100		0.398	0.400	98.2	78.3 - 121	
Piperonyl butoxide	0.000	< 0.500		1.931	2.000	96.6	70.7 - 131	
Prallethrin	0.000	< 0.100		0.397	0.400	99.3	76.9 - 120	
Propiconazole	0.000	< 0.200		0.788	0.800	98.5	81.4 - 118	
Propoxur	0.000	< 0.100		0.389	0.400	97.1	79.7 - 115	
Pyrethrin (Summe)	0.000	< 0.100		0.408	0.413	97.5	73.2 - 136	
Pyridaben	0.000	< 0.100		0.402	0.400	100.5	75.0 - 123	
Spinosad	0.000	< 0.100		0.394	0.388	101.4	73.7 - 137	
Spiromesfen	0.000	< 0.100		0.413	0.400	103.2	76.9 - 128	
Spirotetramat	0.000	< 0.100		0.402	0.400	100.5	81.4 - 118	
Spiroxamine	0.000	< 0.200		0.744	0.800	93.0	78.9 - 114	
Tebuconazole	0.000	< 0.200		0.798	0.800	99.7	80.7 - 119	
Thiadoprid	0.000	< 0.100		0.389	0.400	97.3	80.1 - 118	
Thiamethoxam	0.000	< 0.100		0.380	0.400	90.1	68.9 - 128	
Trifloxystrobin	0.000	< 0.100		0.398	0.400	98.1	78.2 - 118	



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Received: 02/07/22 14:50

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

Laboratory Pesticide Quality Control Results

AQAC2007.1 & EN 15662				Units: mg/Kg			Batch ID 2201285			
Matrix Spike/Matrix Spike Duplicate Recoveries				Sample ID 220015380001						
Analyte	Result	MSR Res	MSD Res	Spike	RPD%	Limit	MS% Re	MSD % Re	Limits	Notes
Abamectin	0.000	0.759	0.728	1.000	4.1%	< 30	75.9%	72.8%	50 - 150	
Acephate	0.045	0.943	0.942	1.000	0.1%	< 30	89.8%	89.7%	50 - 150	
Acequinocyl	0.000	1.777	2.647	4.000	39.3%	< 30	44.4%	66.2%	50 - 150	R Q
Acetamiprid	0.000	0.313	0.331	0.400	5.6%	< 30	78.2%	82.7%	50 - 150	
Aldicarb	0.000	0.729	0.750	0.800	2.8%	< 30	91.1%	93.8%	50 - 150	
Azoxystrobin	0.000	0.218	0.216	0.400	1.0%	< 30	54.5%	54.0%	50 - 150	
Bifenazate	0.036	0.240	0.289	0.400	13.0%	< 30	50.9%	58.1%	50 - 150	
Bifenthrin	0.083	0.271	0.295	0.400	12.4%	< 30	47.0%	53.2%	50 - 150	Q
Boscalid	0.000	0.480	0.454	0.800	5.4%	< 30	59.9%	56.8%	50 - 150	
Carbaryl	0.000	0.235	0.244	0.400	3.8%	< 30	58.8%	61.1%	50 - 150	
Carbofuran	0.015	0.227	0.235	0.400	3.8%	< 30	52.8%	54.8%	50 - 150	
Chlorantraniliprole	0.000	0.395	0.428	0.400	7.8%	< 30	98.3%	106.9%	50 - 150	
Chlorfenapyr	0.000	0.435	0.545	2.000	22.3%	< 30	21.8%	27.2%	50 - 150	Q
Chlorpyrifos	0.349	0.802	0.760	0.400	9.8%	< 30	113.2%	102.6%	50 - 150	
Clofentezine	0.000	0.205	0.213	0.400	3.1%	< 30	51.6%	53.2%	50 - 150	
Cyfluthrin	0.000	0.605	0.739	2.000	19.8%	< 30	30.3%	37.0%	30 - 150	
Cypermethrin	0.000	0.660	0.721	2.000	8.9%	< 30	33.0%	36.1%	50 - 150	Q
Daminozide	0.394	1.937	1.862	2.000	5.0%	< 30	77.1%	73.4%	30 - 150	
Diazinon	0.000	0.218	0.218	0.400	0.0%	< 30	54.5%	54.5%	50 - 150	
Dichlorvos	0.000	1.131	1.137	2.000	0.5%	< 30	56.8%	56.8%	50 - 150	
Dimethoate	0.000	0.404	0.414	0.400	2.5%	< 30	100.9%	103.4%	50 - 150	
Ethionophos	0.013	0.265	0.291	0.400	9.8%	< 30	62.9%	69.4%	50 - 150	
Etofenprox	0.000	0.432	0.444	0.800	2.9%	< 30	53.9%	55.5%	50 - 150	
Etoxazole	0.000	0.241	0.234	0.400	3.2%	< 30	60.3%	58.4%	50 - 150	
Fenoxycarb	0.000	0.253	0.244	0.400	3.4%	< 30	63.2%	61.1%	50 - 150	
Fenpyroximate	0.000	0.377	0.417	0.800	10.1%	< 30	47.1%	52.1%	50 - 150	Q
Flpronil	0.000	0.294	0.339	0.800	14.3%	< 30	36.7%	42.3%	50 - 150	Q
Flonicamid	0.000	0.773	0.810	1.000	4.7%	< 30	77.3%	81.0%	50 - 150	
Fludioxonil	0.000	0.997	1.104	0.800	10.1%	< 30	124.6%	137.9%	50 - 150	
Hexythiazox	0.000	0.328	0.333	1.000	1.6%	< 30	32.8%	33.3%	50 - 150	Q
Imazalil	0.000	0.288	0.325	0.400	12.0%	< 30	72.1%	81.3%	50 - 150	
Imidacloprid	0.000	0.759	0.855	0.800	11.9%	< 30	94.9%	106.9%	50 - 150	
Kiesoxim-methyl	0.000	0.552	0.501	0.800	9.8%	< 30	69.0%	62.8%	50 - 150	
Malathion	0.002	0.255	0.255	0.400	0.4%	< 30	63.4%	63.0%	50 - 150	
Metaxalyl	0.011	0.349	0.357	0.400	2.3%	< 30	84.8%	86.5%	50 - 150	
Methiocarb	0.006	0.283	0.295	0.400	4.4%	< 30	69.3%	72.4%	50 - 150	
Methomyl	0.000	0.788	0.735	0.800	7.0%	< 30	98.3%	91.9%	50 - 150	
MCK-264	0.000	0.099	0.104	0.400	5.2%	< 30	24.8%	26.1%	50 - 150	Q
Mydobutanol	0.000	0.185	0.188	0.400	1.2%	< 30	46.4%	47.0%	50 - 150	Q
Naled	0.000	0.479	0.502	1.000	4.7%	< 30	47.9%	50.2%	50 - 150	Q
Oxaryl	0.000	2.034	1.857	2.000	9.1%	< 30	101.7%	92.9%	50 - 150	
Padobutrazole	0.000	0.471	0.482	0.800	2.3%	< 30	58.8%	60.2%	50 - 150	
Parathion-Methyl	0.000	0.213	0.239	0.800	11.7%	< 30	26.6%	29.9%	30 - 150	R Q
Permethrin	0.000	0.174	0.171	0.400	2.0%	< 30	43.5%	42.7%	50 - 150	Q
Phosmet	0.000	0.219	0.205	0.400	6.6%	< 30	54.8%	51.3%	50 - 150	
Piperonyl butoxide	0.000	1.173	1.212	2.000	3.3%	< 30	58.8%	60.6%	50 - 150	
Prallethrin	0.396	0.803	0.791	0.400	3.2%	< 30	101.9%	98.7%	50 - 150	
Propiconazole	0.137	0.942	0.909	0.800	4.2%	< 30	100.6%	96.5%	50 - 150	
Propoxur	0.027	0.270	0.278	0.400	3.4%	< 30	60.8%	62.9%	50 - 150	
Pyrethrin (Summe)	0.000	0.318	0.283	0.413	19.0%	< 30	76.9%	63.8%	50 - 150	
Pyridaben	0.000	0.214	0.235	0.400	9.8%	< 30	53.4%	58.9%	50 - 150	
Spinosad	0.000	0.284	0.299	0.388	4.9%	< 30	73.3%	77.0%	50 - 150	
Spiromesifen	0.000	0.279	0.279	0.400	0.1%	< 30	69.8%	69.7%	50 - 150	
Spirotetramat	0.000	0.487	0.430	0.400	12.4%	< 30	121.8%	107.5%	50 - 150	
Spiroxamine	0.000	0.719	0.684	0.800	5.0%	< 30	89.9%	85.5%	50 - 150	
Tebuconazole	0.006	0.534	0.509	0.800	4.9%	< 30	66.0%	62.8%	50 - 150	
Thiadoprid	0.000	0.331	0.348	0.400	5.1%	< 30	82.7%	87.0%	50 - 150	
Thiamethoxam	0.000	0.425	0.325	0.400	26.5%	< 30	106.4%	81.5%	50 - 150	
Trifloxystrobin	0.001	0.205	0.198	0.400	3.3%	< 30	51.0%	49.3%	50 - 150	Q



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Received: 02/07/22 14:50

Revision Document ID
Legacy ID Effective

Laboratory Quality Control Results									
Residual Solvents				Batch ID 2201349					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	%Rec	Limits	Notes
Propane	ND	< 200		577	572	µg/g	100.5	70 - 130	
Isobutane	ND	< 200		702	733	µg/g	96.0	70 - 130	
Butane	ND	< 200		714	733	µg/g	97.3	70 - 130	
2,2-Dimethylpropane	ND	< 200		969	938	µg/g	103.5	70 - 130	
Methanol	ND	< 200		1370	1610	µg/g	85.1	70 - 130	
Ethylene Oxide	ND	< 30		53.9	56.2	µg/g	95.9	70 - 130	
2-Methylbutane	ND	< 200		1369	1630	µg/g	83.4	70 - 130	
Pentane	ND	< 200		1340	1610	µg/g	83.2	70 - 130	
Ethanol	ND	< 200		1270	1630	µg/g	77.9	70 - 130	
Ethyl Ether	ND	< 200		1320	1610	µg/g	82.0	70 - 130	
2,2-Dimethylbutane	ND	< 30		137	169	µg/g	83.0	70 - 130	
Acetone	ND	< 200		1470	1610	µg/g	91.3	70 - 130	
2-Propanol	ND	< 200		1310	1610	µg/g	81.4	70 - 130	
Ethyl Formate	ND	< 500		1340	1620	µg/g	82.7	70 - 130	
Acetonitrile	ND	< 100		404	498	µg/g	81.1	70 - 130	
Methyl Acetate	ND	< 500		1580	1610	µg/g	87.3	70 - 130	
2,3-Dimethylbutane	ND	< 30		139	162	µg/g	85.6	70 - 130	
Dichloromethane	ND	< 60		409	498	µg/g	81.3	70 - 130	
2-Methylpentane	ND	< 30		144	167	µg/g	86.2	70 - 130	
MTBE	ND	< 500		1370	1610	µg/g	85.1	70 - 130	
3-Methylpentane	ND	< 30		137	179	µg/g	76.5	70 - 130	
Hexane	ND	< 30		127	164	µg/g	77.4	70 - 130	
1-Propanol	ND	< 500		1370	1620	µg/g	84.6	70 - 130	
Methylethylketone	ND	< 500		1510	1770	µg/g	85.3	70 - 130	
Ethyl acetate	ND	< 200		1370	1620	µg/g	84.6	70 - 130	
2-Butanol	ND	< 200		1340	1600	µg/g	83.8	70 - 130	
Tetrahydrofuran	ND	< 100		409	500	µg/g	81.8	70 - 130	
Cyclohexane	ND	< 200		1470	1610	µg/g	91.3	70 - 130	
2-methyl-1-propanol	ND	< 500		1310	1610	µg/g	81.4	70 - 130	
Benzene	ND	< 1		5.54	5.62	µg/g	98.6	70 - 130	
Isopropyl Acetate	ND	< 200		1520	1610	µg/g	94.4	70 - 130	
Heptane	ND	< 200		1470	1610	µg/g	91.3	70 - 130	
1-Butanol	ND	< 500		1380	1620	µg/g	85.2	70 - 130	
Propyl Acetate	ND	< 500		1520	1620	µg/g	93.8	70 - 130	
1,4-Dioxane	ND	< 100		453	502	µg/g	90.2	70 - 130	
2-Ethoxyethanol	ND	< 30		153	164	µg/g	93.3	70 - 130	
Methyl isobutylketone	ND	< 500		1520	1620	µg/g	93.8	70 - 130	
3-Methyl-1-butanol	ND	< 500		1400	1620	µg/g	86.4	70 - 130	
Ethylene Glycol	ND	< 200		480	502	µg/g	95.6	70 - 130	
Toluene	ND	< 200		442	488	µg/g	90.6	70 - 130	
Isobutyl Acetate	ND	< 500		1690	1700	µg/g	99.4	70 - 130	
1-Pentanol	ND	< 500		1250	1630	µg/g	76.7	70 - 130	
Butyl Acetate	ND	< 500		1660	1660	µg/g	100.0	70 - 130	
Ethyl benzene	ND	< 200		919	969	µg/g	94.8	70 - 130	
m,p-Xylene	ND	< 200		908	990	µg/g	91.5	70 - 130	
o-Xylene	ND	< 200		923	973	µg/g	94.9	70 - 130	
Cumene	ND	< 30		173	179	µg/g	95.5	70 - 130	
Anisole	ND	< 500		1410	1650	µg/g	85.5	70 - 130	
DMSO	ND	< 500		1310	1630	µg/g	80.4	70 - 130	
1,2-dimethoxyethane	ND	< 50		180	183	µg/g	98.4	70 - 130	
Triethylamine	ND	< 500		1520	1620	µg/g	93.8	70 - 130	
N,N-dimethylformamide	ND	< 150		410	499	µg/g	82.4	70 - 130	
N,N-dimethylacetamide	ND	< 150		413	502	µg/g	82.3	70 - 130	
Pyridine	ND	< 50		174	188	µg/g	93.5	70 - 130	
1,2-Dichloroethane	ND	< 1		1.22	1	µg/g	122.0	70 - 130	
Chloroform	ND	< 1		1.17	1	µg/g	117.0	70 - 130	
Trichloroethylene	ND	< 1		1.19	1	µg/g	119.0	70 - 130	



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Report Number: 22-001432/D004.R000
Report Date: 02/21/2022
ORELAP#: OR100028
Purchase Order:
Received: 02/07/22 14:50

Revision: Document ID
Legacy ID: Effective

QC - Sample Duplicate			Sample ID 22-001592-0001				
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	
MTE	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	200 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	
Ethyl benzene	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	
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	

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 Number: 22-001432/D004.R000
Report Date: 02/21/2022
ORELAP#: OR100028
Purchase Order:
Received: 02/07/22 14:50

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

Terpenes Quality Control Results

Method Reference: EPA 5035				Batch ID: 2201353					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	LCS	Units	LCS % Rec	Limits	Notes
a-pinene	<LOQ	< 200		438	500	µg/g	88%	70 - 130	
Camphene	<LOQ	< 200		458	500	µg/g	92%	70 - 130	
Sabinene	<LOQ	< 200		474	500	µg/g	95%	70 - 130	
b-Pinene	<LOQ	< 200		497	500	µg/g	99%	70 - 130	
b-Myrcene	<LOQ	< 200		485	500	µg/g	97%	70 - 130	
a-phellandrene	<LOQ	< 200		461	500	µg/g	92%	70 - 130	
d-3-Carene	<LOQ	< 200		462	500	µg/g	92%	70 - 130	
a-Terpinene	<LOQ	< 200		471	500	µg/g	94%	70 - 130	
p-Cymene	<LOQ	< 200		459	500	µg/g	92%	70 - 130	
D-Limonene	<LOQ	< 200		431	500	µg/g	86%	70 - 130	
Eucalyptol	<LOQ	< 200		438	500	µg/g	88%	70 - 130	
b-cis-Ocimene	<LOQ	< 67		151	167	µg/g	91%	70 - 130	
b-trans-Ocimene	<LOQ	< 133		307	333	µg/g	92%	70 - 130	
g-Terpinene	<LOQ	< 200		489	500	µg/g	98%	70 - 130	
Sabinene Hydrate	<LOQ	< 200		408	500	µg/g	82%	70 - 130	
Terpinolene	<LOQ	< 200		430	500	µg/g	86%	70 - 130	
D-Fenchone	<LOQ	< 200		409	500	µg/g	82%	70 - 130	
Linalool	<LOQ	< 200		477	500	µg/g	95%	70 - 130	
Fenchol	<LOQ	< 200		416	500	µg/g	83%	70 - 130	
Camphor	<LOQ	< 200		433	500	µg/g	87%	70 - 130	
Isopulego	<LOQ	< 200		454	500	µg/g	91%	70 - 130	
Isoborneol	<LOQ	< 200		476	500	µg/g	95%	70 - 130	
Borneol	<LOQ	< 200		434	500	µg/g	87%	70 - 130	
DL-Menthol	<LOQ	< 200		461	500	µg/g	92%	70 - 130	
Terpineol	<LOQ	< 200		374	500	µg/g	75%	70 - 130	
Nerol	<LOQ	< 200		422	500	µg/g	84%	70 - 130	
Pulegone	<LOQ	< 200		420	500	µg/g	84%	70 - 130	
Geraniol	<LOQ	< 200		421	500	µg/g	84%	70 - 130	
Geranyl Acetate	<LOQ	< 200		462	500	µg/g	92%	70 - 130	
a-Cedrene	<LOQ	< 200		416	500	µg/g	83%	70 - 130	
b-Caryophyllene	<LOQ	< 200		459	500	µg/g	92%	70 - 130	
a-Humulene	<LOQ	< 200		421	500	µg/g	84%	70 - 130	
Valenene	<LOQ	< 200		439	500	µg/g	88%	70 - 130	
cis-Nerolidol	<LOQ	< 200		493	500	µg/g	99%	70 - 130	
a-Farnesene	<LOQ	< 200		439	500	µg/g	88%	70 - 130	
trans-Nerolidol	<LOQ	< 200		434	500	µg/g	87%	70 - 130	
Caryophyllene_Oxide	<LOQ	< 200		578	500	µg/g	116%	70 - 130	
Quaiol	<LOQ	< 200		456	500	µg/g	91%	70 - 130	
Cedrol	<LOQ	< 200		466	500	µg/g	93%	70 - 130	
a-Bisabolol	<LOQ	< 200		510	500	µg/g	102%	70 - 130	

Definitions

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



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Report Number: 22-001432/D004.R000
Report Date: 02/21/2022
ORELAP#: OR100028
Purchase Order:
Received: 02/07/22 14:50

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

Terpenes Quality Control Results

Method Reference: EPA 5035			Batch ID: 2201353				
Sample/Sample Duplicate		Sample ID: 22-001632-0002					
Analyte	Result	Org. Result	LOQ	Units	%RPD	L MIT	Notes
a-pinene	1270	1240	186	µg/g	2%	< 20	
Camphene	258	251	186	µg/g	3%	< 20	
Sabinene	<LOQ	<LOQ	186	µg/g	0%	< 20	
b-Pinene	835	806	186	µg/g	4%	< 20	
b-Myrcene	9300	9010	186	µg/g	3%	< 20	
a-phellandrene	<LOQ	<LOQ	186	µg/g	0%	< 20	
d-3-Carene	<LOQ	<LOQ	186	µg/g	0%	< 20	
a-Terpinene	<LOQ	<LOQ	186	µg/g	0%	< 20	
p-Cymene	<LOQ	<LOQ	186	µg/g	0%	< 20	
D-Limonene	7100	6880	186	µg/g	3%	< 20	
Eucalyptol	<LOQ	<LOQ	186	µg/g	0%	< 20	
b-cis-Occimene	<LOQ	<LOQ	62.0	µg/g	0%	< 20	
b-trans-Occimene	<LOQ	<LOQ	124	µg/g	0%	< 20	
g-Terpinene	<LOQ	<LOQ	186	µg/g	0%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	186	µg/g	0%	< 20	
Terpinolene	<LOQ	<LOQ	186	µg/g	0%	< 20	
D-Fenchone	<LOQ	189	186	µg/g	0%	< 20	
Linalool	3440	3360	186	µg/g	2%	< 20	
Fenchol	773	768	186	µg/g	1%	< 20	
Camphor	<LOQ	<LOQ	186	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	186	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	186	µg/g	0%	< 20	
Borneol	229	250	186	µg/g	9%	< 20	
DL-Menthol	<LOQ	<LOQ	186	µg/g	0%	< 20	
Terpineol	651	636	186	µg/g	2%	< 20	
Nerol	<LOQ	<LOQ	186	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	186	µg/g	0%	< 20	
Geraniol	<LOQ	<LOQ	186	µg/g	0%	< 20	
Geranyl_Acetate	<LOQ	<LOQ	186	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	186	µg/g	0%	< 20	
b-Caryophyllene	37000	36600	186	µg/g	1%	< 20	
a-Humulene	12800	12700	186	µg/g	1%	< 20	
Valenene	<LOQ	<LOQ	186	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	186	µg/g	0%	< 20	
a-Farnesene	25600	25300	186	µg/g	1%	< 20	
trans-Nerolidol	923	911	186	µg/g	1%	< 20	
Caryophyllene_Oxide	690	675	186	µg/g	2%	< 20	
Guaiol	3890	3840	186	µg/g	1%	< 20	
Cedrol	<LOQ	<LOQ	186	µg/g	0%	< 20	
a-Bisabolol	10500	10400	186	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	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.