

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU TN.ISO.BO50

BATCH # EK44

PRODUCT NAME Blood Orange Isolate CBD Tincture

SERVING SIZE 1 mL

LABORATORY: Columbia Laboratories

OREGON ACCREDITATION: OR100028

LOQ: Limit Of Quantitation

LOD: Limit Of Detection

1 g = 10⁻³ kg = 10³ mg = 10⁶

µg 1 mg/kg = 1 ppm = 1000 ppb

POTENCY	PER SERVING	PER GRAM	Percent
Cannabidiol (CBD)	51.18 mg/serving	54.80 mg/g	5.48 %
Total THC (d9-THC, THCA)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
Cannabigerol (CBG)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
Cannabinol (CBN)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
Cannabichromene (CBC)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
Tetrahydrocannabinolic Acid (THCA)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
Delta-9-THC (d9-THC)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
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



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: 22-014730/D003.R001
Report Date: 12/20/2022
ORELAP#: OR100028
Purchase Order:
Received: 12/01/22 15:33

This is an amended version of report# 22-014730/D003.R000.

Reason: Report includes additional testing.

Customer: Etz Hayim Holdings
Product identity: FORM.TN.ISO.BO50-EK44
Client/Metric ID: .
Laboratory ID: 22-014730-0001

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status	
CBD per 1g	54.8		mg/1g		CBD-Total per Serving Size 54.8 mg/1g
CBDV per 1g	0.124		mg/1g		THC-Total per Serving Size <LOQ
					(Reported in milligrams per serving)

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.



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

Product identity: FORM.TN.ISO.BO50-EK44

Client/Metric ID: .

Sample Date:

Laboratory ID: 22-014730-0001

Evidence of Cooling: No

Temp: 18.5

Relinquished by: courier

Serving Size #1: 1 g

Serving Size #1: 1 g

Sample Results

Potency per 1g		Method: J AOAC 2015 V98-6 (mod) ^b		Units mg/se Batch: 2210550		Analyze: 12/13/22 12:02:00 A
Analyte	Result	Limits	Units	LOQ	Notes	
CBC per 1g	< LOQ		mg/1g	0.0324		
CBC-A per 1g	< LOQ		mg/1g	0.0324		
CBC-Total per 1g	< LOQ		mg/1g	0.0609		
CBD per 1g	54.8		mg/1g	0.324		
CBD-A per 1g	< LOQ		mg/1g	0.0324		
CBD-Total per 1g	54.8		mg/1g	0.353		
CBDV per 1g	0.124		mg/1g	0.0324		
CBDV-A per 1g	< LOQ		mg/1g	0.0324		
CBDV-Total per 1g	0.124		mg/1g	0.0605		
CBE per 1g	< LOQ		mg/1g	0.0324		
CBG per 1g	< LOQ		mg/1g	0.0324		
CBG-A per 1g	< LOQ		mg/1g	0.0324		
CBG-Total per 1g	< LOQ		mg/1g	0.0605		
CBL per 1g	< LOQ		mg/1g	0.0324		
CBL-A per 1g	< LOQ		mg/1g	0.0324		
CBL-Total per 1g	< LOQ		mg/1g	0.0609		
CBN per 1g	< LOQ		mg/1g	0.0324		
CBT per 1g	< LOQ		mg/1g	0.0324		
Δ8-THCV per 1g	< LOQ		mg/1g	0.0324		
Δ10-THC per 1g	< LOQ		mg/1g	0.0324		
Δ8-THC per 1g	< LOQ		mg/1g	0.0324		
Δ9-THC 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	< LOQ		mg/1g	0.0609		
THCV per 1g	< LOQ		mg/1g	0.0324		
THCV-A per 1g	< LOQ		mg/1g	0.0324		
THCV-Total per 1g	< LOQ		mg/1g	0.0609		
Total Cannabinoids per 1g	54.9		mg/1g			



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2210579	12/16/22 AOAC 991.14 (Petrifilm) ^P		
Total Coliforms	< LOQ		cfu/g	10	2210579	12/16/22 AOAC 991.14 (Petrifilm) ^P		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2210580	12/17/22 AOAC 2014.05 (RAPID) ^P		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2210580	12/17/22 AOAC 2014.05 (RAPID) ^P		

Solvents Method: Residual Solvents by GC/MS^P Units µg/g Batch 2210737 Analyze 12/19/22 11:32 AM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,4-Dioxane	< LOQ	380	100	pass		2-Butanol	< LOQ	5000	200	pass	
2-Ethoxyethanol	< LOQ	160	30.0	pass		2-Methylbutane (Isopentane)	< LOQ		200		
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass	
2,2-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	< 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							



Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod) ^b						Units mg/kg		Batch 2210651		Analyze 12/15/22 02:45 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	
Bifentazate [‡]	< 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		Etoazole [‡]	< LOQ	0.20	0.100	pass	
Fenoxycarb [‡]	< LOQ	0.20	0.100	pass		Fenproximate [‡]	< 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							

Metals										
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method		Status	Notes	
Arsenic	< LOQ	0.200	mg/kg	0.0983	2210673	12/15/22	AOAC 2013.06 (mod.) ^b	pass		
Cadmium	< LOQ	0.200	mg/kg	0.0983	2210673	12/15/22	AOAC 2013.06 (mod.) ^b	pass		
Lead	< LOQ	0.500	mg/kg	0.0983	2210673	12/15/22	AOAC 2013.06 (mod.) ^b	pass		
Mercury	< LOQ	0.100	mg/kg	0.0492	2210673	12/15/22	AOAC 2013.06 (mod.) ^b	pass		



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Received: 12/01/22 15:33

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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503-254-1794



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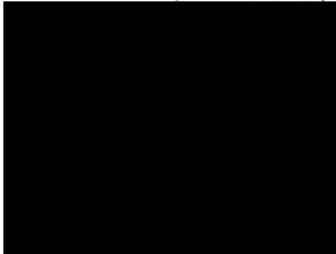


12423 NE Whitaker Way Portland OR 97230 p.503-254-1794

Cannabis Chain of Custody Record

ETZHAYIM

22-014730



Analysis Requested



Etz Hayim Holdings

Order Number: OR100028
Purchase Order Number:
Project Number:
Project Name:
 Report Instructions:
 Send to State - METRC
 Email Final Results:
 Fax Final Results
 Cash/Check/CC/Net 30
Other:

Field ID	Date/Time Collected	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	Matrix	Weight	Serving size for edibles	Comments/Metric ID
FORM-TN.ISO.BO50-EK44	12/1 1:36	X		X	X				X	X	X			Tincture		mg/g	Potency First <i>LaZot Discount</i>

Collected By:		Lab Use Only:
<input checked="" type="checkbox"/> Standard (5 day)		Client Alias:
<input type="checkbox"/> Rush (3-4 day) (1.5x Standard)		Order Number:
<input type="checkbox"/> Priority Rush (2 day) (2x Standard)		Proper Container
		Sample Condition
		Temperature: <i>18.5</i>
		Shipped Via: <i>Carrier</i>
		Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 www.pixislabs.com Page 1 of 2
Effective 01/31/2019 Revised 01/31/2019

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.
Testing in accordance with: OAR 333-007-0430



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Revision 1 Documen D 7148
Legacy D Workshee Valida ed 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2210325

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0339	0.034	%	99.2	80.0	- 120	Acceptable	
CBDV	2	0.0362	0.035	%	102	80.0	- 120	Acceptable	
CBE	2	0.0350	0.035	%	98.9	80.0	- 120	Acceptable	
CBD	1	0.0306	0.032	%	95.8	90.0	- 110	Acceptable	
CBGA	1	0.0308	0.032	%	95.7	80.0	- 120	Acceptable	
CBG	1	0.0307	0.032	%	96.5	80.0	- 120	Acceptable	
CBD	1	0.0303	0.032	%	95.0	90.0	- 110	Acceptable	
THCV	2	0.0338	0.034	%	99.4	80.0	- 120	Acceptable	
d8THCV	2	0.0360	0.036	%	99.3	80.0	- 120	Acceptable	
THCVA	2	0.0329	0.033	%	99.0	80.0	- 120	Acceptable	
CBN	1	0.0319	0.033	%	96.6	80.0	- 120	Acceptable	
exo-THC	2	0.0325	0.033	%	99.3	80.0	- 120	Acceptable	
d9THC	1	0.0331	0.034	%	97.4	90.0	- 110	Acceptable	
d8THC	1	0.0322	0.033	%	96.4	90.0	- 110	Acceptable	
CBL	2	0.0339	0.033	%	102	80.0	- 120	Acceptable	
d10THC	1	0.0297	0.031	%	96.6	80.0	- 120	Acceptable	
CBC	2	0.0343	0.035	%	98.2	80.0	- 120	Acceptable	
THCA	1	0.0307	0.032	%	96.1	90.0	- 110	Acceptable	
CBCA	2	0.0340	0.034	%	99.1	80.0	- 120	Acceptable	
CBLA	2	0.0349	0.035	%	99.0	80.0	- 120	Acceptable	
CBT	2	0.0362	0.037	%	98.9	80.0	- 120	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			
CBD	<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			
d10THC	<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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Revision 1 Documen D 7148
 Legacy D Workshee Validated 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6		Batch ID: 2210325						
Sample Duplicate		Sample ID: 22-014554-0001						
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	0.0173	0.0173	0.003	%	0.0096	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDG	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD	0.443	0.443	0.003	%	0.146	< 20	Acceptable	
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	0.0076	0.0076	0.003	%	0.473	< 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	
d10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	0.0070	0.0070	0.003	%	0.0625	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBT	0.0118	0.0120	0.003	%	1.45	< 20	Acceptable	

Abbreviations

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

Units of Measure:



Laboratory Quality Control Results

J AOAC 2015 V98-6									
Laboratory Control Sample									
Batch ID: 2210550									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0311	0.034	%	92.4	80.0	- 120	Acceptable	
CBDV	2	0.0355	0.037	%	96.7	80.0	- 120	Acceptable	
CBE	2	0.0313	0.035	%	88.1	80.0	- 120	Acceptable	
CBD	1	0.0320	0.032	%	100	90.0	- 110	Acceptable	
CBGA	1	0.0323	0.032	%	100	80.0	- 120	Acceptable	
CBG	1	0.0323	0.032	%	102	80.0	- 120	Acceptable	
CBD	1	0.0316	0.032	%	99.3	90.0	- 110	Acceptable	
THCV	2	0.0330	0.035	%	94.0	80.0	- 120	Acceptable	
δ8THCV	2	0.0329	0.036	%	92.6	80.0	- 120	Acceptable	
THCVA	2	0.0306	0.033	%	92.9	80.0	- 120	Acceptable	
CBN	1	0.0330	0.033	%	99.9	80.0	- 120	Acceptable	
exo-THC	2	0.0320	0.034	%	93.5	80.0	- 120	Acceptable	
δ9THC	1	0.0326	0.034	%	96.0	90.0	- 110	Acceptable	
δ8THC	1	0.0313	0.033	%	93.8	90.0	- 110	Acceptable	
CBL	2	0.0296	0.033	%	88.8	80.0	- 120	Acceptable	
Δ10THC	1	0.0310	0.031	%	101	80.0	- 120	Acceptable	
CBC	2	0.0348	0.036	%	95.5	80.0	- 120	Acceptable	
THCA	1	0.0322	0.032	%	101	90.0	- 110	Acceptable	
CBCA	2	0.0313	0.034	%	91.1	80.0	- 120	Acceptable	
CBLA	2	0.0322	0.035	%	92.1	80.0	- 120	Acceptable	
CBT	2	0.0386	0.036	%	106	80.0	- 120	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			
CBD	<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			
δ8THCV	<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			
δ9THC	<LOQ	0.003	%	< 0.003		Acceptable			
δ8THC	<LOQ	0.003	%	< 0.003		Acceptable			
CBL	<LOQ	0.003	%	< 0.003		Acceptable			
Δ10THC	<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



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

Report Number: 22-014730/D003.R001
Report Date: 12/20/2022
ORELAP#: OR100028
Purchase Order:
Received: 12/01/22 15:33



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

Laboratory Quality Control Results

J AOAC 2015 V98-6		Batch ID: 2210550						
Sample Duplicate		Sample ID: 22-014730-0001-01						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	0.0126	0.0124	0.003	%	1.59	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD	5.49	5.48	0.003	%	0.326	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
δ8THCV	<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	
δ9THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
δ8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
Δ10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<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:



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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg		Batch ID: 2210651				
Method Blank		Laboratory Control Sample						
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Abamectin	0.000	< 0.250		1.034	1.000	103.4	50.0 150	
Accephate	0.000	< 0.200		0.767	0.800	95.9	60.0 120	
Acetaminocyl	0.000	< 1.000		3.707	4.000	92.7	40.0 160	
Acetamidprid	0.000	< 0.100		0.397	0.400	99.3	60.0 120	
Aldicarb	0.000	< 0.200		0.786	0.800	98.3	60.0 120	
Azoxystrobin	0.000	< 0.100		0.382	0.400	95.5	60.0 120	
Bifenazate	0.000	< 0.100		0.425	0.400	106.4	60.0 120	
Bifenthrin	0.000	< 0.100		0.384	0.400	96.0	50.0 150	
Boscalid	0.000	< 0.200		0.789	0.800	98.6	60.0 120	
Carbaryl	0.000	< 0.100		0.385	0.400	96.2	60.0 120	
Carbofuran	0.000	< 0.100		0.401	0.400	100.4	60.0 120	
Chlorantraniliprole	0.000	< 0.100		0.395	0.400	98.6	60.0 120	
Chlorfenapyr	0.000	< 0.500		1.685	2.000	84.3	60.0 120	
Chlorpyrifos	0.000	< 0.100		0.588	0.400	147.0	60.0 120	Q1
Clofentazine	0.000	< 0.100		0.397	0.400	99.2	60.0 120	
Cyfluthrin	0.000	< 0.500		1.995	2.000	99.7	50.0 150	
Cypermethrin	0.000	< 0.500		1.919	2.000	96.0	50.0 150	
Daminozide	0.000	< 0.500		1.470	2.000	73.5	60.0 120	
Diazinon	0.000	< 0.100		0.424	0.400	105.9	60.0 120	
Dichlorvos	0.000	< 0.500		1.801	2.000	90.0	60.0 120	
Dimethoate	0.000	< 0.100		0.399	0.400	99.7	60.0 120	
Ethoprophos	0.000	< 0.100		0.394	0.400	98.5	60.0 120	
Etofenprox	0.000	< 0.200		0.780	0.800	97.5	50.0 150	
Etoxazole	0.000	< 0.100		0.393	0.400	98.2	60.0 120	
Fenoxycarb	0.000	< 0.100		0.390	0.400	97.6	60.0 120	
Fenpyroximate	0.000	< 0.200		0.764	0.800	95.5	60.0 120	
Fipronil	0.000	< 0.200		0.666	0.800	83.3	60.0 120	
Fonicamid	0.000	< 0.250		0.984	1.000	98.4	60.0 120	
Fludioxonil	0.000	< 0.200		0.573	0.800	71.6	50.0 150	
Hexythiazox	0.000	< 0.250		0.819	1.000	81.9	60.0 120	
Imazalil	0.000	< 0.100		0.404	0.400	101.1	60.0 120	
Imidacloprid	0.000	< 0.200		0.792	0.800	99.0	60.0 120	
Kresoxim methyl	0.000	< 0.200		0.782	0.800	97.7	60.0 120	
Malathion	0.000	< 0.100		0.391	0.400	97.6	60.0 120	
Metaxyl	0.000	< 0.100		0.391	0.400	97.6	60.0 120	
Methiocarb	0.000	< 0.100		0.390	0.400	97.4	60.0 120	
Methomyl	0.000	< 0.200		0.788	0.800	98.5	60.0 120	
MGK 264	0.000	< 0.100		0.389	0.400	97.2	50.0 150	
Myclobutanil	0.000	< 0.100		0.415	0.400	103.7	60.0 120	
Naled	0.000	< 0.250		1.004	1.000	100.4	50.0 150	
Oxamyl	0.000	< 0.500		2.061	2.000	103.0	60.0 120	
Paclbutrazole	0.000	< 0.200		0.786	0.800	98.2	60.0 120	
Parathion Methyl	0.000	< 0.100		0.374	0.400	93.5	50.0 150	
Permethrin	0.000	< 0.100		0.358	0.400	89.4	50.0 150	
Phosmet	0.000	< 0.100		0.394	0.400	98.5	50.0 150	
Piperonyl butoxide	0.000	< 0.500		1.899	2.000	94.9	60.0 120	
Prallethrin	0.000	< 0.100		0.381	0.400	95.3	60.0 120	
Propiconazole	0.000	< 0.200		0.795	0.800	99.3	60.0 120	
Propoxur	0.000	< 0.100		0.395	0.400	98.6	60.0 120	
Pyrethrin (Summe)	0.001	< 0.100		0.471	0.488	96.5	60.0 120	
Pyridaben	0.000	< 0.100		0.388	0.400	96.9	50.0 150	
Spinosad	0.000	< 0.100		0.384	0.388	99.1	50.0 150	
Spiromesifen	0.000	< 0.100		0.402	0.400	100.4	60.0 120	
Spirotetramat	0.000	< 0.100		0.395	0.400	98.9	60.0 120	
Spiroxamine	0.000	< 0.200		0.780	0.800	97.6	60.0 120	
ebuconazole	0.000	< 0.200		0.795	0.800	99.4	60.0 120	
hiacloprid	0.000	< 0.100		0.405	0.400	101.3	60.0 120	
hiamethoxam	0.000	< 0.100		0.411	0.400	102.9	60.0 120	
rifloxystrobin	0.000	< 0.100		0.386	0.400	96.4	60.0 120	



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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg				Batch ID: 2210651				
Matrix Spike/Matrix Spike Duplicate Recoveries		Sample ID: 22-015283-0001								
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.000	0.959	1.121	1.000	15.6%	< 30	95.9%	112.1%	50 150	
Accephate	0.584	1.296	1.417	0.800	15.7%	< 30	88.9%	104.1%	50 150	
Acetamiprid	0.000	2.523	2.882	4.000	13.3%	< 30	63.1%	72.1%	50 150	
Acetamiprid	0.000	0.296	0.296	0.400	0.1%	< 30	74.1%	74.0%	50 150	
Aldicarb	0.000	0.661	0.687	0.800	3.8%	< 30	82.6%	85.8%	50 150	
Azoxystrobin	0.021	0.258	0.260	0.400	0.9%	< 30	59.2%	59.8%	50 150	
Bifenazate	0.073	0.358	0.382	0.400	8.2%	< 30	71.3%	77.4%	50 150	
Bifenthrin	0.000	0.371	0.354	0.400	4.8%	< 30	92.7%	88.4%	50 150	
Boscalid	0.241	0.668	0.716	0.800	10.7%	< 30	53.3%	59.3%	50 150	
Carbaryl	0.024	0.261	0.255	0.400	2.5%	< 30	59.1%	57.7%	50 150	
Carbofuran	0.000	0.237	0.239	0.400	0.9%	< 30	59.4%	59.9%	50 150	
Chlorantraniliprole	0.000	0.279	0.296	0.400	6.0%	< 30	69.8%	74.1%	50 150	
Chlorfenapyr	0.000	1.037	1.038	2.000	0.1%	< 30	51.8%	51.9%	50 150	
Chlorpyrifos	0.000	0.701	0.561	0.400	22.2%	< 30	175.3%	140.3%	50 150	Q
Clofentezine	0.000	0.201	0.212	0.400	5.1%	< 30	50.3%	52.9%	50 150	
Cyfluthrin	0.412	1.153	1.261	2.000	13.7%	< 30	37.1%	42.5%	30 150	
Cypermethrin	0.000	0.756	0.608	2.000	21.8%	< 30	37.8%	30.4%	50 150	Q
Daminozide	0.057	0.954	1.004	2.000	5.4%	< 30	44.9%	47.4%	30 150	
Diazinon	0.000	0.106	0.115	0.400	7.9%	< 30	26.5%	28.6%	50 150	Q
Dichlorvos	0.074	1.246	1.359	2.000	9.2%	< 30	58.6%	64.2%	50 150	
Dimethoate	0.000	0.338	0.348	0.400	2.9%	< 30	84.4%	86.9%	50 150	
Ethoprophos	0.000	0.202	0.205	0.400	1.7%	< 30	50.5%	51.3%	50 150	
Etofenprox	0.000	0.442	0.454	0.800	2.7%	< 30	55.3%	56.8%	50 150	
Etoxazole	0.002	0.349	0.338	0.400	3.2%	< 30	86.8%	84.1%	50 150	
Fenoxycarb	0.000	0.210	0.215	0.400	2.4%	< 30	52.4%	53.7%	50 150	
Fenpyroximate	0.000	0.248	0.235	0.800	5.3%	< 30	31.0%	29.4%	50 150	Q
Fipronil	0.000	0.193	0.193	0.800	0.0%	< 30	24.1%	24.1%	50 150	Q
Fonicamid	0.000	0.850	0.910	1.000	6.9%	< 30	85.0%	91.0%	50 150	
Fludioxonil	0.000	0.657	0.617	0.800	6.3%	< 30	82.1%	77.1%	50 150	
Hexythiazox	0.000	0.600	0.563	1.000	6.3%	< 30	60.0%	56.3%	50 150	
Imazalil	0.001	0.291	0.293	0.400	0.7%	< 30	72.6%	73.1%	50 150	
Imidacloprid	0.000	0.680	0.665	0.800	2.2%	< 30	85.0%	83.2%	50 150	
Kresoxim methyl	0.000	0.414	0.435	0.800	5.1%	< 30	51.7%	54.4%	50 150	
Malathion	0.062	0.301	0.311	0.400	4.0%	< 30	59.7%	62.1%	50 150	
Metaxyl	0.000	0.274	0.285	0.400	3.9%	< 30	68.6%	71.3%	50 150	
Methiocarb	0.000	0.232	0.240	0.400	3.3%	< 30	58.0%	59.9%	50 150	
Methomyl	0.000	0.738	0.742	0.800	0.4%	< 30	92.3%	92.7%	50 150	
MGK 264	0.000	0.085	0.096	0.400	12.0%	< 30	21.3%	24.1%	50 150	Q
Myclobutanil	0.000	0.158	0.170	0.400	7.3%	< 30	39.6%	42.6%	50 150	Q
Naled	0.000	0.444	0.449	1.000	1.1%	< 30	44.4%	44.9%	50 150	Q
Oxamyl	0.000	1.846	1.823	2.000	1.3%	< 30	92.3%	91.1%	50 150	
Paclobutrazole	0.000	0.420	0.451	0.800	7.1%	< 30	52.6%	56.4%	50 150	
Parathion Methyl	0.000	0.106	0.071	0.400	39.4%	< 30	26.6%	17.8%	30 150	R, Q
Permethrin	0.016	0.304	0.287	0.400	6.2%	< 30	72.0%	67.7%	50 150	
Phosmet	0.000	0.220	0.234	0.400	6.1%	< 30	55.0%	58.5%	50 150	
Piperonyl butoxide	0.000	1.580	1.629	2.000	3.1%	< 30	79.0%	81.5%	50 150	
Prallethrin	0.000	0.128	0.137	0.400	6.9%	< 30	32.0%	34.2%	50 150	Q
Propiconazole	0.059	0.495	0.532	0.800	8.1%	< 30	54.5%	59.1%	50 150	
Propoxur	0.007	0.258	0.260	0.400	0.7%	< 30	62.7%	63.2%	50 150	
Pyrethrin (Summe)	0.000	0.280	0.263	0.488	6.3%	< 30	57.4%	53.9%	50 150	
Pyridaben	0.000	0.245	0.243	0.400	1.0%	< 30	61.3%	60.7%	50 150	
Spinosad	0.000	0.276	0.274	0.388	0.9%	< 30	71.2%	70.6%	50 150	
Spiromesifen	0.006	0.364	0.355	0.400	2.4%	< 30	89.5%	87.4%	50 150	
Spirotetramat	0.000	0.470	0.481	0.400	2.2%	< 30	117.5%	120.2%	50 150	
Spiroxamine	0.000	0.586	0.633	0.800	7.7%	< 30	73.2%	79.1%	50 150	
ebuconazole	0.000	0.449	0.450	0.800	0.3%	< 30	56.1%	56.2%	50 150	
hiacloprid	0.000	0.291	0.301	0.400	3.5%	< 30	72.8%	75.4%	50 150	
hiamethoxam	0.000	0.433	0.380	0.400	13.2%	< 30	108.3%	94.9%	50 150	
rifloxystrobin	0.013	0.288	0.288	0.400	0.1%	< 30	68.8%	68.7%	50 150	



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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg		Batch ID: 2210651				
Method Blank		Laboratory Control Sample						
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Abamectin	0.000	< 0.250		0.929	1.000	92.9	50.0 150	
Accephate	0.000	< 0.200		0.763	0.800	95.4	60.0 120	
Acetamiprid	0.000	< 1.000		3.379	4.000	84.5	40.0 160	
Aldicarb	0.000	< 0.100		0.383	0.400	95.9	60.0 120	
Azinphosmethyl	0.000	< 0.200		0.778	0.800	97.3	60.0 120	
Bifenthrin	0.000	< 0.100		0.386	0.400	96.5	60.0 120	
Bifenthrin	0.000	< 0.100		0.424	0.400	106.1	60.0 120	
Bifenthrin	0.000	< 0.100		0.380	0.400	94.9	50.0 150	
Boscalid	0.000	< 0.200		0.756	0.800	94.5	60.0 120	
Carbaryl	0.000	< 0.100		0.382	0.400	95.4	60.0 120	
Carbofuran	0.000	< 0.100		0.378	0.400	94.5	60.0 120	
Chlorantraniliprole	0.000	< 0.100		0.377	0.400	94.3	60.0 120	
Chlorfenapyr	0.000	< 0.500		1.733	2.000	86.7	60.0 120	
Chlorpyrifos	0.000	< 0.100		0.401	0.400	100.2	60.0 120	
Clofentazine	0.000	< 0.100		0.367	0.400	91.9	60.0 120	
Cyfluthrin	0.000	< 0.500		1.855	2.000	92.7	50.0 150	
Cypermethrin	0.000	< 0.500		1.953	2.000	97.7	50.0 150	
Daminozide	0.398	< 0.500		1.842	2.000	92.1	60.0 120	
Diazinon	0.000	< 0.100		0.413	0.400	103.3	60.0 120	
Dichlorvos	0.000	< 0.500		1.972	2.000	98.6	60.0 120	
Dimethoate	0.000	< 0.100		0.382	0.400	95.4	60.0 120	
Ethoprophos	0.000	< 0.100		0.375	0.400	93.7	60.0 120	
Etofenprox	0.000	< 0.200		0.734	0.800	91.7	50.0 150	
Etoxazole	0.000	< 0.100		0.376	0.400	94.1	60.0 120	
Fenoxycarb	0.000	< 0.100		0.368	0.400	92.1	60.0 120	
Fenpyroximate	0.000	< 0.200		0.756	0.800	94.6	60.0 120	
Fipronil	0.000	< 0.200		0.705	0.800	88.1	60.0 120	
Fonicamid	0.000	< 0.250		0.943	1.000	94.3	60.0 120	
Fludioxonil	0.000	< 0.200		0.778	0.800	97.3	50.0 150	
Hexythiazox	0.000	< 0.250		0.931	1.000	93.1	60.0 120	
Imazalil	0.000	< 0.100		0.381	0.400	95.2	60.0 120	
Imidacloprid	0.000	< 0.200		0.766	0.800	95.8	60.0 120	
Kresoxim methyl	0.000	< 0.200		0.766	0.800	95.8	60.0 120	
Malathion	0.000	< 0.100		0.378	0.400	94.5	60.0 120	
Metaxyl	0.000	< 0.100		0.384	0.400	96.0	60.0 120	
Methiocarb	0.000	< 0.100		0.387	0.400	96.8	60.0 120	
Methomyl	0.000	< 0.200		0.748	0.800	93.5	60.0 120	
MGK 264	0.000	< 0.100		0.378	0.400	94.6	50.0 150	
Myclobutanil	0.000	< 0.100		0.367	0.400	91.6	60.0 120	
Naled	0.000	< 0.250		0.945	1.000	94.5	50.0 150	
Oxamyl	0.000	< 0.500		1.919	2.000	96.0	60.0 120	
Paclbutrazole	0.000	< 0.200		0.747	0.800	93.4	60.0 120	
Parathion Methyl	0.000	< 0.100		0.445	0.400	111.2	50.0 150	
Permethrin	0.000	< 0.100		0.373	0.400	93.3	50.0 150	
Phosmet	0.000	< 0.100		0.374	0.400	93.5	50.0 150	
Piperonyl butoxide	0.000	< 0.500		1.812	2.000	90.6	60.0 120	
Prallethrin	0.000	< 0.100		0.353	0.400	88.2	60.0 120	
Propiconazole	0.000	< 0.200		0.665	0.800	83.1	60.0 120	
Propoxur	0.000	< 0.100		0.382	0.400	95.4	60.0 120	
Pyrethrin (Summe)	0.000	< 0.100		0.457	0.488	93.7	60.0 120	
Pyridaben	0.000	< 0.100		0.372	0.400	93.0	50.0 150	
Spinosad	0.000	< 0.100		0.369	0.388	95.0	50.0 150	
Spiromesifen	0.000	< 0.100		0.394	0.400	98.5	60.0 120	
Spirotetramat	0.000	< 0.100		0.386	0.400	96.6	60.0 120	
Spiroxamine	0.000	< 0.200		0.730	0.800	91.2	60.0 120	
tebuconazole	0.000	< 0.200		0.625	0.800	78.2	60.0 120	
thiacloprid	0.000	< 0.100		0.371	0.400	92.7	60.0 120	
thiamethoxam	0.000	< 0.100		0.395	0.400	98.6	60.0 120	
trifloxystrobin	0.000	< 0.100		0.382	0.400	95.5	60.0 120	



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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg				Batch ID: 2210651				
Matrix Spike/Matrix Spike Duplicate Recoveries					Sample ID: 22-015283-0001					
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.000	0.985	0.996	1.000	1.1%	< 30	98.5%	99.6%	50 150	
Accephate	0.594	1.311	1.329	0.800	2.5%	< 30	89.7%	91.9%	50 150	
Acetamiprid	0.000	2.607	2.910	4.000	11.0%	< 30	65.2%	72.8%	50 150	
Aldicarb	0.000	0.292	0.294	0.400	0.6%	< 30	73.0%	73.4%	50 150	
Azinphosmethyl	0.000	0.709	0.705	0.800	0.6%	< 30	88.6%	88.1%	50 150	
Azoxystrobin	0.018	0.263	0.254	0.400	3.8%	< 30	61.1%	58.8%	50 150	
Bifenthrin	0.064	0.363	0.389	0.400	8.4%	< 30	74.8%	81.4%	50 150	
Bifenthrin	0.000	0.367	0.350	0.400	4.7%	< 30	91.7%	87.5%	50 150	
Boscalid	0.194	0.713	0.708	0.800	0.9%	< 30	64.9%	64.3%	50 150	
Carbaryl	0.019	0.260	0.227	0.400	15.0%	< 30	60.2%	51.8%	50 150	
Carbofuran	0.000	0.232	0.228	0.400	1.6%	< 30	57.9%	57.0%	50 150	
Chlorantraniliprole	0.000	0.307	0.289	0.400	5.9%	< 30	76.7%	72.3%	50 150	
Chlorfenapyr	0.000	1.037	1.038	2.000	0.1%	< 30	51.8%	51.9%	50 150	
Chlorpyrifos	0.000	0.440	0.371	0.400	17.1%	< 30	110.1%	92.8%	50 150	
Clofentezine	0.000	0.202	0.203	0.400	0.3%	< 30	50.5%	50.7%	50 150	
Cyfluthrin	0.250	1.437	1.155	2.000	26.9%	< 30	59.3%	45.2%	30 150	
Cypermethrin	0.000	1.027	1.038	2.000	1.0%	< 30	51.4%	51.9%	50 150	
Daminozide	0.246	1.521	1.523	2.000	0.2%	< 30	63.8%	63.9%	30 150	
Diazinon	0.000	0.113	0.116	0.400	2.8%	< 30	28.2%	29.0%	50 150	Q
Dichlorvos	0.030	1.398	1.456	2.000	4.1%	< 30	68.4%	71.3%	50 150	
Dimethoate	0.000	0.339	0.345	0.400	1.8%	< 30	84.8%	86.4%	50 150	
Ethoprophos	0.000	0.207	0.206	0.400	0.6%	< 30	51.8%	51.5%	50 150	
Etofenprox	0.000	0.445	0.441	0.800	0.9%	< 30	55.7%	55.2%	50 150	
Etoxazole	0.005	0.342	0.347	0.400	1.5%	< 30	84.2%	85.4%	50 150	
Fenoxycarb	0.000	0.210	0.205	0.400	2.4%	< 30	52.6%	51.3%	50 150	
Fenpyroximate	0.000	0.249	0.241	0.800	3.1%	< 30	31.1%	30.1%	50 150	Q
Fipronil	0.000	0.263	0.299	0.800	12.8%	< 30	32.9%	37.4%	50 150	Q
Fonicamid	0.000	0.916	0.873	1.000	4.8%	< 30	91.6%	87.3%	50 150	
Fludioxonil	0.000	1.020	0.994	0.800	2.5%	< 30	127.5%	124.3%	50 150	
Hexythiazox	0.000	0.600	0.563	1.000	6.3%	< 30	60.0%	56.3%	50 150	
Imazalil	0.000	0.288	0.285	0.400	0.8%	< 30	71.9%	71.3%	50 150	
Imidacloprid	0.000	0.710	0.702	0.800	1.2%	< 30	88.8%	87.8%	50 150	
Kresoxim methyl	0.000	0.425	0.441	0.800	3.6%	< 30	53.2%	55.1%	50 150	
Malathion	0.050	0.316	0.322	0.400	2.1%	< 30	66.4%	67.8%	50 150	
Metaxyl	0.000	0.288	0.294	0.400	2.0%	< 30	72.1%	73.6%	50 150	
Methiocarb	0.000	0.245	0.250	0.400	2.2%	< 30	61.2%	62.6%	50 150	
Methomyl	0.000	0.789	0.744	0.800	5.9%	< 30	98.7%	93.0%	50 150	
MGK 264	0.000	0.088	0.083	0.400	5.5%	< 30	22.0%	20.8%	50 150	Q
Myclobutanil	0.000	0.133	0.145	0.400	8.8%	< 30	33.2%	36.3%	50 150	Q
Naled	0.000	0.447	0.449	1.000	0.5%	< 30	44.7%	44.9%	50 150	Q
Oxamyl	0.000	1.955	1.993	2.000	1.9%	< 30	97.7%	99.7%	50 150	
Paclobutrazole	0.000	0.417	0.422	0.800	1.2%	< 30	52.1%	52.8%	50 150	
Parathion Methyl	0.000	0.040	0.043	0.400	6.8%	< 30	10.0%	10.7%	30 150	Q
Permethrin	0.059	0.332	0.323	0.400	3.4%	< 30	68.3%	66.0%	50 150	
Phosmet	0.000	0.237	0.238	0.400	0.3%	< 30	59.3%	59.5%	50 150	
Piperonyl butoxide	0.000	1.648	1.676	2.000	1.6%	< 30	82.4%	83.8%	50 150	
Prallethrin	0.000	0.139	0.121	0.400	13.7%	< 30	34.8%	30.4%	50 150	Q
Propiconazole	0.014	0.459	0.470	0.800	2.4%	< 30	55.6%	56.9%	50 150	
Propoxur	0.003	0.255	0.257	0.400	1.0%	< 30	62.8%	63.4%	50 150	
Pyrethrin (Summe)	0.000	0.280	0.263	0.488	6.3%	< 30	57.4%	53.9%	50 150	
Pyridaben	0.000	0.257	0.248	0.400	3.3%	< 30	64.2%	62.1%	50 150	
Spinosad	0.000	0.280	0.280	0.388	0.1%	< 30	72.1%	72.1%	50 150	
Spiromesifen	0.025	0.386	0.378	0.400	2.4%	< 30	90.4%	88.3%	50 150	
Spirotetramat	0.000	0.459	0.459	0.400	0.1%	< 30	114.7%	114.6%	50 150	
Spiroxamine	0.000	0.609	0.630	0.800	3.3%	< 30	76.1%	78.7%	50 150	
ebuconazole	0.000	0.304	0.362	0.800	17.5%	< 30	38.0%	45.3%	50 150	Q
hiacloprid	0.000	0.289	0.289	0.400	0.1%	< 30	72.2%	72.1%	50 150	
hiamethoxam	0.000	0.415	0.360	0.400	14.0%	< 30	103.7%	90.1%	50 150	
rifloxystrobin	0.013	0.296	0.296	0.400	0.3%	< 30	70.9%	70.7%	50 150	



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Laboratory Quality Control Results

Residual Solvents				Batch ID: 2210737					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		514	572	µg/g	89.9	60	120
Isobutane	ND	< 200		640	731	µg/g	87.6	60	120
Butane	ND	< 200		630	731	µg/g	86.2	60	120
2,2 Dimethylpropane	ND	< 200		838	936	µg/g	89.5	60	120
Methanol	ND	< 200		1360	1620	µg/g	84.0	60	120
Ethylene Oxide	ND	< 30		47.9	56.2	µg/g	85.2	60	120
2 Methylbutane	ND	< 200		1340	1610	µg/g	83.2	60	120
Pentane	ND	< 200		1320	1600	µg/g	82.5	60	120
Ethanol	ND	< 200		1360	1610	µg/g	84.5	70	130
Ethyl Ether	ND	< 200		1370	1630	µg/g	84.0	60	120
2,2 Dimethylbutane	ND	< 30		147	171	µg/g	86.0	60	120
Acetone	ND	< 200		1400	1630	µg/g	85.9	60	120
2 Propanol	ND	< 200		1580	1620	µg/g	97.5	60	120
Ethyl Formate	ND	< 500		1340	1670	µg/g	80.2	70	130
Acetonitrile	ND	< 100		416	498	µg/g	83.5	60	120
Methyl Acetate	ND	< 500		1360	1730	µg/g	78.6	70	130
2,3 Dimethylbutane	ND	< 30		143	171	µg/g	83.6	60	120
Dichloromethane	ND	< 60		413	483	µg/g	85.5	60	120
2 Methylpentane	ND	< 30		140	168	µg/g	83.3	60	120
M BE	ND	< 500		1370	1650	µg/g	83.0	70	130
3 Methylpentane	ND	< 30		127	167	µg/g	76.0	60	120
Hexane	ND	< 30		185	182	µg/g	101.6	60	120
1 Propanol	ND	< 500		1260	1620	µg/g	77.8	70	130
Methylethylketone	ND	< 500		1290	1620	µg/g	79.6	70	130
Ethyl acetate	ND	< 200		1360	1610	µg/g	84.5	60	120
2 Butanol	ND	< 200		1370	1600	µg/g	85.6	60	120
tetrahydrofuran	ND	< 100		401	483	µg/g	83.0	60	120
Cyclohexane	ND	< 200		1360	1610	µg/g	84.5	60	120
2 methyl 1 propanol	ND	< 500		1270	1620	µg/g	78.4	70	130
Benzene	ND	< 1		4.69	5.02	µg/g	93.4	60	120
Isopropyl Acetate	ND	< 200		1400	1620	µg/g	86.4	60	120
Heptane	ND	< 200		1440	1610	µg/g	89.4	60	120
1 Butanol	ND	< 500		1280	1630	µg/g	78.5	70	130
Propyl Acetate	ND	< 500		1270	1610	µg/g	78.9	70	130
1,4 Dioxane	ND	< 100		416	491	µg/g	84.7	60	120
2 Ethoxyethanol	ND	< 30		160	181	µg/g	88.4	60	120
Methylisobutylketone	ND	< 500		1290	1620	µg/g	79.6	70	130
3 Methyl 1 butanol	ND	< 500		1290	1630	µg/g	79.1	70	130
Ethylene Glycol	ND	< 200		358	484	µg/g	74.0	60	120
oluene	ND	< 100		414	485	µg/g	85.4	60	120
Isobutyl Acetate	ND	< 500		1290	1630	µg/g	79.1	70	130
1 Pentanol	ND	< 500		1230	1620	µg/g	75.9	70	130
Butyl Acetate	ND	< 500		1250	1620	µg/g	77.2	70	130
Ethylbenzene	ND	< 200		809	969	µg/g	83.5	60	120
m,p Xylene	ND	< 200		819	994	µg/g	82.4	60	120
o Xylene	ND	< 200		806	967	µg/g	83.4	60	120
Cumene	ND	< 30		141	171	µg/g	82.5	60	120
Anisole	ND	< 500		1240	1630	µg/g	76.1	70	130
DMSO	ND	< 500		1280	1680	µg/g	76.2	70	130
1,2 dimethoxyethane	ND	< 50		138	169	µg/g	81.7	70	130
riethylamine	ND	< 500		1350	1630	µg/g	82.8	70	130
N,N dimethylformamide	ND	< 150		391	482	µg/g	81.1	70	130
N,N dimethylacetamide	ND	< 150		385	510	µg/g	75.5	70	130
Pyridine	ND	< 50		164	203	µg/g	80.8	70	130
Sulfone	ND	< 50		128	172	µg/g	74.4	70	130
1,2 Dichloroethane	ND	< 1		0.89	1	µg/g	89.0	70	130
Chloroform	ND	< 1		0.885	1	µg/g	88.5	70	130
richloroethylene	ND	< 1		0.912	1	µg/g	91.2	70	130
1,1 Dichloroethane	ND	< 1		0.856	1	µg/g	85.8	70	130



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QC - Sample Duplicate

Sample ID: 22-014730-0001

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	
M BE	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	
etrahydrofuran	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	
oluene	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	
diethylamine	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	
richloroethylene	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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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.