

Certificate of Quality Assurance

PRODUCT NAME: Dog Treats

PRODUCT STRENGTH: 2 mg

LOT NUMBER: CHEW-T209

MANUFACTURER BATCH #s: CODSWC19-3(4-9)

DATES OF MANUFACTURE: 7/8/2019, 7/9/2019

Expiration date is 18 months under sealed conditions.

DATES OF ANALYSES: 7/8/2019, 7/9/2019

ACTIVE INGREDIENT: Phytocannabinoid-Rich Hemp Oil

INACTIVE INGREDIENTS: See next page.

Physical Attributes of Raw Hemp Oil

Attribute	Acceptance Criteria	Result
Appearance	Viscous Dark Amber Oil Possible Crystal Formation	Conforms
Aroma	Characteristic Hemp Aroma	Conforms
Dissolution	Not Cloudy or Turbid, Characteristic Color	Conforms
Microbial Testing	Total Aerobic Count <2000 cfu/g Total Yeast and Mold <2000 cfu/g	Conforms

Cannabinoid Potency of Raw Hemp Oil

Cannabinoid	Weight %
CBD	0.05
CBG	<0.03
CBN	<0.03
THC	ND
CBC	<0.03
THC-A	ND
CBD-A	<0.03

Pesticides*

Compound	Result	Compound	Result
Acequinocil	ND	Spinosad	ND
Pyrethrium	ND	Spirotetramat	ND
Spiromesifin	ND	Bifenazate	ND
Abamectin	ND	Fenoxycarb	ND
Imidacloprid	ND	Paclobutrazol	ND

Terpene Results*

Compound	Weight %	Compound	Weight %
β -Bisabolene	1.0-3.0	Camphene	0.1-0.2
β -Farnesene	1.0-2.0	E-Farnesene	0.1-0.2
Gualol	0.5-2.0	Farnesol	0.1-0.2
β -Maaliene	0.5-2.0	α -Bisabolol	< 0.1
Calarene	0.5-1.5	p-Cymene	< 0.1
β -Caryophyllene	0.1-1.0	Linalool	< 0.1
α -Humulene	0.1-1.0	Myrcene	< 0.1
Cadinene	0.1-1.0	Phytol	< 0.1
α -Gurjunene	0.1-0.5	Isopulegol	< 0.1
d-Limonene	0.1-0.5	Terpinene	< 0.1
Nerolidol	0.1-0.5	Geraniol	< 0.1
α -Pinene	0.1-0.5	Myrcene	< 0.1
Aristolene	0.1-0.3	γ -Terpinene	< 0.1
Eucalyptol	0.1-0.2	δ -3-Carene	< 0.1

Residual Solvents*

Solvent	Weight %
Acetone	Compliant with USP<467>
Butane	Compliant with USP<467>
Ethanol	Compliant with USP<467>
Hexane	Compliant with USP<467>
Isobutane	Compliant with USP<467>
Isopropanol	Compliant with USP<467>
Pentane	Compliant with USP<467>

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DATES OF ANALYSES: 7/8/2019, 7/9/2019

ACTIVE INGREDIENT: Phytocannabinoid-Rich Hemp Oil

INACTIVE INGREDIENTS: Water, dried brewer's yeast, glycerin, gum arabic, sodium alginate, beef liver powder, natural bacon flavor, flaxseed oil, microcrystalline cellulose, organic sweet potato powder, sunflower lecithin (non-GMO), citrus pectin, dextrin, vitamin E, sodium propionate, calcium sulfate dihydrate, natural mixed tocopherols (natural preservative)

Heavy Metals*

Metal	Result
Cadmium	Compliant with USP<233>
Lead	Compliant with USP<233>
Arsenic	Compliant with USP<233>
Mercury	Compliant with USP<233>

Analysis Results for Finished Product

Attribute	Acceptance Criteria	Result
Appearance	Soft solid dark brown cylinders	Conforms
Aroma	Characteristic of product	Conforms
Cannabidiol Content	1.8 to 2.2 mg per chew	Conforms
THC Content	None Detected	Conforms

* Results based on testing of multiple batches of hemp oil raw material.

Quality Certified by:



Matthew Plenert, Ph.D
Head Chemist and Laboratory Manager

9-18-19

Date

QC Unit released by:



David Boaz
QC Manager

9-18-19

Date



This report cannot be used for ODA, OHA or OLCC compliance requirements.

Product identity: CHEW T209
Laboratory ID: 19-011485-0001

Client/Metric ID:
Sample Date:

Summary

Potency:

Analyte per 7.37g	Result	Limits	Units	LOQ	
CBD per 7.37g	3.49		mg/7.37g	0.25	CBD-Total per 7.37g 3.49 mg/7.37g
					THC-Total per 7.37g < 0.461 mg/7.37
					(Reported in milligrams per serving)

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: My CBD Test

Product identity: CHEW T209
Client/Metric ID: .
Sample Date:
Laboratory ID: 19-011485-0001
Relinquished by: Received By Mail
Temp: 21.4 °C
Serving Size #1: 7.37 g

Sample Results

Potency per 7.37g		Batch: 1908740					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC per 7.37g [†]	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
CBC-A per 7.37g [†]	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
CBC-Total per 7.37g [†]	< LOQ		mg/7.37g	0.461	09/30/19	J AOAC 2015 V98-6	
CBD per 7.37g	3.49		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
CBD-A per 7.37g	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
CBD-Total per 7.37g	3.49		mg/7.37g	0.461	09/30/19	J AOAC 2015 V98-6	
CBDV per 7.37g [†]	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
CBDV-A per 7.37g [†]	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
CBDV-Total per 7.37g [†]	< LOQ		mg/7.37g	0.459	09/30/19	J AOAC 2015 V98-6	
CBG per 7.37g [†]	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
CBG-A per 7.37g [†]	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
CBG-Total per 7.37g [†]	< LOQ		mg/7.37g	0.461	09/30/19	J AOAC 2015 V98-6	
CBL per 7.37g [†]	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
CBN per 7.37g	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
Δ8-THC per 7.37g [†]	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
Δ9-THC per 7.37g	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
THC-A per 7.37g	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
THC-Total per 7.37g	< LOQ		mg/7.37g	0.461	09/30/19	J AOAC 2015 V98-6	
THCV per 7.37g [†]	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
THCV-A per 7.37g [†]	< LOQ		mg/7.37g	0.246	09/30/19	J AOAC 2015 V98-6	
THCV-Total per 7.37g [†]	< LOQ		mg/7.37g	0.459	09/30/19	J AOAC 2015 V98-6	



This report cannot be used for ODA, OHA or OLCC compliance requirements.

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
E.coli	< LOQ		cfu/g	10	1908515	09/25/19	AOAC 991.14 (Petrifilm)	X
Total Coliforms	< LOQ		cfu/g	10	1908515	09/25/19	AOAC 991.14 (Petrifilm)	X
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	1908514	09/25/19	AOAC 2014.05 (RAPID)	X
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	1908514	09/25/19	AOAC 2014.05 (RAPID)	X

Pesticides Method AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 1908655 Analyze 09/25/19 08:58 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.50	0.250	pass		Acephate	< LOQ	0.40	0.250	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	0.100	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 (incl.	< 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		Fonicamid	< 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	0.100	pass		Propiconazole	< LOQ	0.40	0.200	pass	
Propoxur	< LOQ	0.20	0.100	pass		Pyrethrin I (total)	< LOQ	1.0	0.500	pass	
Pyridaben	< LOQ	0.20	0.100	pass		Spinosad	< LOQ	0.20	0.100	pass	
Spiromesifen	< LOQ	0.20	0.100	pass		Spirotetramat	< LOQ	0.20	0.100	pass	
Spiroxamine	< LOQ	0.40	0.200	pass		Tebuconazole	< LOQ	0.40	0.200	pass	
Thiacloprid	< LOQ	0.20	0.100	pass		Thiamethoxam	< LOQ	0.20	0.100	pass	
Trifloxystrobin	< LOQ	0.20	0.100	pass							



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Metals								
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Arsenic	< LOQ		mg/kg	0.100	1908752	09/27/19	AOAC 2013.06 (mod.)	X
Cadmium	< LOQ		mg/kg	0.100	1908752	09/27/19	AOAC 2013.06 (mod.)	X
Lead	< LOQ		mg/kg	0.100	1908752	09/27/19	AOAC 2013.06 (mod.)	X
Mercury	< LOQ		mg/kg	0.100	1908752	09/27/19	AOAC 2013.06 (mod.)	X



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Abbreviations

Limits: Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220

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

g = Gram

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

mg/7.37g = Milligram per 7.37g

% = Percentage of sample

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

Glossary of Qualifiers

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner
General Manager



This report cannot be used for ODA, OHA or OLCC compliance requirements.

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

Cannabis Chain of Custody Record

19-011485

ORELAP ID: OR100028

My CBD Test		Analysis Requested											Please report heavy metal LOQ at .1ppm			Purchase Order Number:				
Company: Joy Organics		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	Report in mg/7.37g			Project Number:			
Contact: Joy Organics																	Project Name:			
Address:																	<input type="checkbox"/> Report Instructions: <input type="checkbox"/> Send to State - METRC <input type="checkbox"/> Email Final Results: <input type="checkbox"/> Fax Final Results <input type="checkbox"/> Cash/Check/CC/Net 30			
Email:																				Other:
Phone: Fax:																				
Processor's License:																				
Field ID	Date/Time Collected													Matrix	Weight	Serving size for edibles	Comments/Metric ID			
CHEW T209		X		X					X	X	X			treat	7.37	7.37				

Collected By:	Relinquished By:	Date	Time	Received by:	Date	Time	Lab Use Only:
<input checked="" type="checkbox"/> Standard (5 day)	Darcie Moran	9/20	4:00	JMU	9-23-19	10:35	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: 21.4
							Shipped Via: UPS
							Evidence of cooling: <input type="checkbox"/> No

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 Pixis 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 kept a maximum of 15 days from the report date unless prior arrangements have been made.



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**Columbia Food/Pixis Labs
Sample Receipt Form**

Revision: 1.00 Document Control: CF015
Revised: 04/25/2019 Effective: 05/11/2019

Job Number: 19-011485 Search Name: _____

Package/Cooler opened on (if different than received date/time) Date: 9-23-19 Time: 10:35

Received By (Initials): JV

1) Were custody seals on outside of the package/cooler?
If YES, how many and where? _____ YES NO NA

Were signature and date correct? _____ YES NO NA

2) Were custody papers included in the package/cooler? YES NO NA

3) Were custody papers properly filled out (ink, sign, date)? YES NO NA

4) Did you sign custody papers in the appropriate place? YES NO NA

5) How was the package/cooler delivered? UPS FEDEX USPS CLIENT COURIER OTHER: _____

Tracking Number (written in or copy of shipping label): 1Z 435 F09 01 2364 8446

6) Was packing material used? YES NO NA

Peanuts Bubble Wrap Foam Paper Other: _____

7) Was sufficient ice used (if appropriate)?
What kind? YES NO NA

Blue Ice Ice Cooler Packs Dry Ice

8) Were all sample containers sealed in separate plastic bags? YES NO NA

9) Did all sample containers arrive in good condition? YES NO NA

10) Were all sample container labels complete? YES NO NA

11) Did all sample container labels and tags agree with the coc? YES NO NA

12) Were correct sample containers used for the tests indicated? YES NO NA

13) Were VOA vials checked for absence of air bubbles (note if found)? YES NO NA

14) Was a sufficient amount of sample sent in each sample container? YES NO NA

15) Temperature of the samples upon receipt (See SOP for proper temps) 21.4 °C

16) Sample location prior to login: R25 R39 R44 F44 Ambient Shelf Cannabis Table Other: _____

Explain any discrepancies: _____

Page 2 of 2



This report cannot be used for ODA, OHA or OLCC compliance requirements.

Revision: 1.00 Control: CFL-C21
Revised: 08/12/2019 Effective: 08/15/2019

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg		Batch ID: 1908655				
Method Blank			Laboratory Control Sample					
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Acophate	0.000	< 0.200		0.969	1.000	96.9	69.8 - 117	
Acetaminocyl	0.000	< 1.000		4.025	4.000	100.6	72.9 - 135	
Acetamiprid	0.005	< 0.100		0.415	0.400	103.8	81.6 - 116	
Aldicarb	0.009	< 0.200		0.924	0.800	115.5	78.7 - 118	
Abamectin	0.000	< 0.288		1.100	1.000	110.0	81.4 - 113	
Azoxystrobin	0.006	< 0.100		0.396	0.400	99.1	82.3 - 114	
Bifenazate	0.000	< 0.100		0.454	0.400	113.6	84.7 - 115	
Bifenthrin	0.002	< 0.100		0.404	0.400	101.0	82.0 - 113	
Boscalid	0.002	< 0.100		0.982	0.800	122.8	80.6 - 125	
Carbaryl	0.000	< 0.100		0.425	0.400	106.2	85.1 - 113	
Carbofuran	0.000	< 0.100		0.422	0.400	105.6	82.6 - 121	
Chlorantraniliprol	0.019	< 0.100		0.412	0.400	103.1	68.3 - 120	
Chlorfenapyr	0.589	< 1.000		2.207	2.000	110.4	69.1 - 126	
Chlorpyrifos	0.009	< 0.100		0.385	0.400	96.1	80.3 - 113	
Clofentazine	0.010	< 0.100		0.271	0.400	67.9	57.0 - 106	
Cyfluthrin	0.000	< 1.000		2.079	2.000	103.9	82.2 - 118	
Cypermethrin	0.000	< 1.000		2.346	2.000	117.3	85.8 - 108	Q1
Daminozide	0.000	< 1.000		0.779	2.000	39.0	24.9 - 46.2	
Diazinon	0.006	< 0.100		0.418	0.400	104.4	71.3 - 125	
Dichlorvos	0.000	< 0.500		2.146	2.000	107.3	80.5 - 111	
Dimethoat	0.002	< 0.100		0.398	0.400	99.5	85.0 - 109	
Ethoprophos	0.000	< 0.100		0.425	0.400	106.2	88.0 - 111	
Etofenprox	0.000	< 0.100		0.821	0.800	102.6	88.6 - 111	
Etoxazol	0.000	< 0.100		0.454	0.400	113.4	74.9 - 139	
Fenoxycarb	0.003	< 0.100		0.408	0.400	102.0	75.4 - 124	
Fenpyroximat	0.002	< 0.100		0.852	0.800	106.5	85.8 - 113	
Fipronil	0.000	< 0.100		0.750	0.800	93.8	75.9 - 126	
Flonicamid	0.000	< 0.400		0.960	1.000	96.0	77.6 - 116	
Fludioxonil	0.000	< 0.100		0.841	0.800	105.2	80.7 - 111	
Hexythiazox	0.014	< 0.400		0.957	1.000	95.7	75.1 - 118	
Imazalil	0.000	< 0.100		0.341	0.400	85.4	83.0 - 117	
Imidacloprid	0.000	< 0.200		0.822	0.800	102.7	84.7 - 111	
Kresoxim-Methyl	0.000	< 0.100		0.833	0.800	104.1	77.2 - 123	
Malathion	0.001	< 0.100		0.391	0.400	97.8	83.5 - 117	
Metaxyl	0.000	< 0.100		0.401	0.400	100.2	85.4 - 109	
Methiocarb	0.000	< 0.100		0.439	0.400	109.7	82.0 - 116	
Methomyl	0.000	< 0.200		0.795	0.800	99.4	71.7 - 121	
MGK 264	0.032	< 0.100		0.444	0.400	110.9	80.7 - 120	
Myclobutanil	0.000	< 0.100		0.399	0.400	99.8	84.0 - 114	
Naled	0.000	< 0.200		0.957	1.000	95.7	63.4 - 118	
Oxamyl	0.000	< 0.400		1.957	2.000	97.9	72.6 - 119	
Paclobutrazol	0.000	< 0.200		0.789	0.800	98.6	82.5 - 125	
Parathion Methyl	0.000	< 0.200		0.782	0.800	97.8	72.3 - 134	
Permethrin	0.000	< 0.100		0.444	0.400	111.1	84.9 - 110	Q1
Phosmet	0.005	< 0.100		0.424	0.400	105.9	79.9 - 119	
Piperonyl butoxide	0.000	< 1.000		2.135	2.000	106.8	85.4 - 114	
Prallethrin	0.041	< 0.200		0.830	0.800	103.8	77.7 - 121	
Propiconazole	0.000	< 0.200		0.810	0.800	101.2	80.9 - 115	
Propoxur	0.002	< 0.100		0.425	0.400	106.3	79.1 - 121	
Pyrethrins	0.000	< 0.500		0.310	0.284	109.3	88.3 - 123	
Pyridaben	0.002	< 0.100		0.402	0.400	100.5	78.8 - 119	
Spinosad	0.000	< 0.100		0.408	0.388	105.0	77.6 - 134	
Spiromesifen	0.000	< 0.100		0.421	0.400	105.1	70.6 - 122	
Spirotetramat	0.000	< 0.100		0.428	0.400	107.0	71.8 - 124	
Spiroxamine	0.000	< 0.100		0.814	0.800	101.7	81.3 - 117	
Tebuconazol	0.006	< 0.200		0.772	0.800	96.5	76.1 - 120	
Thiacloprid	0.000	< 0.100		0.399	0.400	99.7	78.7 - 116	
Thiamethoxam	0.000	< 0.100		0.381	0.400	95.3	74.3 - 119	
Trifloxystrobin	0.000	< 0.100		0.407	0.400	101.7	88.0 - 114	

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Revision: 1.00 Control: CFL-C21
Revised: 08/12/2019 Effective: 08/15/2019

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg					Batch ID: 1908655			
Matrix Spike/Matrix Spike Duplicate Recoveries		Sample ID: 19-011464-0001								
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Acephate	0.000	1.167	1.173	1.000	0.6	< 30	116.7	117.3	50 - 150	
Acequinocyl	0.000	5.410	5.660	4.000	4.5	< 30	135.3	141.5	50 - 150	
Acetamiprid	0.000	0.550	0.574	0.400	4.2	< 30	137.6	143.5	50 - 150	
Aldicarb	0.000	1.253	1.287	0.800	2.7	< 30	156.7	160.9	50 - 150	Q1
Abamectin	0.000	1.124	1.201	1.000	6.6	< 30	112.4	120.1	50 - 150	
Azoxystrobin	0.003	0.536	0.516	0.400	3.8	< 30	133.2	128.2	50 - 150	
Bifenazate	0.000	0.506	0.536	0.400	5.7	< 30	126.5	133.9	50 - 150	
Bifenthrin	0.000	0.493	0.530	0.400	7.2	< 30	123.3	132.4	50 - 150	
Boscalid	0.000	0.973	0.894	0.800	8.4	< 30	121.6	111.8	50 - 150	
Carbaryl	0.000	0.583	0.593	0.400	1.7	< 30	145.8	148.3	50 - 150	
Carbofuran	0.000	0.582	0.583	0.400	0.2	< 30	145.4	145.7	50 - 150	
Chlorantraniliprol	0.018	0.471	0.420	0.400	11.6	< 30	113.2	100.4	50 - 150	
Chlorfenapyr	0.163	2.643	3.618	2.000	31.1	< 30	124.0	172.8	50 - 150	Q1, R
Chlorpyrifos	0.012	0.550	0.545	0.400	0.9	< 30	134.4	133.2	50 - 150	
Clofentezine	0.010	0.377	0.373	0.400	1.2	< 30	91.8	90.7	50 - 150	
Cyfluthrin	0.022	3.353	3.343	2.000	0.3	< 30	166.6	166.1	30 - 150	Q1
Cypermethrin	0.000	3.017	2.909	2.000	3.6	< 30	150.8	145.4	50 - 150	Q1
Daminozide	0.000	1.086	1.081	2.000	0.5	< 30	54.3	54.1	30 - 150	
Diazinon	0.005	0.503	0.502	0.400	0.2	< 30	124.4	124.1	50 - 150	
Dichlorvos	0.000	2.922	2.781	2.000	5.0	< 30	146.1	139.0	50 - 150	
Dimethoat	0.001	0.517	0.538	0.400	3.9	< 30	129.1	134.2	50 - 150	
Ethofenprox	0.000	0.534	0.530	0.400	0.8	< 30	133.5	132.5	50 - 150	
Etofenprox	0.000	1.075	1.103	0.800	2.6	< 30	134.4	137.9	50 - 150	
Etoxazol	0.000	0.569	0.573	0.400	0.7	< 30	142.2	143.3	50 - 150	
Fenoxycarb	0.003	0.548	0.555	0.400	1.3	< 30	136.2	138.0	50 - 150	
Fenpyroximat	0.002	0.955	0.974	0.800	2.1	< 30	119.1	121.6	50 - 150	
Fipronil	0.000	1.268	1.249	0.800	1.5	< 30	158.5	156.1	50 - 150	Q1
Flonicamid	0.000	0.952	0.967	1.000	1.6	< 30	95.2	96.7	50 - 150	
Fludioxonil	0.000	0.765	0.770	0.800	0.7	< 30	95.6	96.3	50 - 150	
Hexythiazox	0.014	2.185	2.306	1.000	5.4	< 30	217.1	229.2	50 - 150	Q1
Imazalil	0.000	0.485	0.465	0.400	4.3	< 30	121.3	116.2	50 - 150	
Imidacloprid	0.000	0.833	0.878	0.800	5.2	< 30	104.2	109.7	50 - 150	
Kresoxim-Methyl	0.000	1.040	1.055	0.800	1.4	< 30	130.1	131.8	50 - 150	
Malathion	0.000	0.537	0.533	0.400	0.7	< 30	134.3	133.3	50 - 150	
Metaxyl	0.000	0.517	0.528	0.400	2.0	< 30	129.3	131.9	50 - 150	
Methiocarb	0.000	0.530	0.539	0.400	1.5	< 30	132.6	134.6	50 - 150	
Methomyl	0.000	0.856	0.888	0.800	3.6	< 30	107.0	111.0	50 - 150	
MGK264	0.028	0.620	0.596	0.400	3.9	< 30	147.9	142.0	50 - 150	
Myclobutanil	0.000	0.429	0.393	0.400	8.7	< 30	107.3	98.3	50 - 150	
Naled	0.000	1.193	1.121	1.000	6.2	< 30	119.3	112.1	50 - 150	
Oxamyl	0.000	2.092	2.118	2.000	1.2	< 30	104.6	105.9	50 - 150	
Paclobutrazol	0.018	0.825	0.837	0.800	1.5	< 30	100.8	102.4	50 - 150	
Parathion Methyl	0.000	1.183	1.059	0.800	11.1	< 30	147.9	132.3	30 - 150	
Permethrin	0.000	0.520	0.524	0.400	0.8	< 30	129.9	130.9	50 - 150	
Phosmet	0.005	0.583	0.607	0.400	4.1	< 30	144.6	150.7	50 - 150	Q1
Piperonyl butoxide	0.000	2.508	2.441	2.000	2.7	< 30	125.4	122.1	50 - 150	
Prallethrin	0.038	1.754	2.200	0.800	22.6	< 30	214.5	270.3	50 - 150	Q1
Propiconazole	0.000	0.932	0.915	0.800	1.9	< 30	116.6	114.3	50 - 150	
Propoxur	0.001	0.588	0.585	0.400	0.4	< 30	146.7	146.2	50 - 150	
Pyrethrins	0.000	0.379	0.368	0.284	3.0	< 30	133.5	129.5	50 - 150	
Pyridaben	0.003	0.546	0.565	0.400	3.3	< 30	135.9	140.5	50 - 150	
Spinosad	0.000	0.559	0.560	0.388	0.2	< 30	144.1	144.3	50 - 150	
Spiromesifen	0.000	0.471	0.458	0.400	2.9	< 30	117.8	114.4	50 - 150	
Spirotetramat	0.000	0.400	0.414	0.400	3.5	< 30	100.0	103.5	50 - 150	
Spiroxamine	0.000	0.997	1.011	0.800	1.5	< 30	124.6	126.4	50 - 150	
Tebuconazol	0.006	0.823	0.830	0.800	0.9	< 30	102.1	103.1	50 - 150	
Thiacloprid	0.000	0.569	0.572	0.400	0.5	< 30	142.2	143.0	50 - 150	
Thiamethoxam	0.000	0.397	0.414	0.400	4.3	< 30	99.2	103.6	50 - 150	
Trifloxystrobin	0.000	0.491	0.735	0.400	28.3	< 30	122.8	183.7	50 - 150	Q1

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 Pixis 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 kept a maximum of 15 days from the report date unless prior arrangements have been made.



This report cannot be used for ODA, OHA or OLCC compliance requirements.

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 1908740**

Laboratory Control Sample								
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDV-A	0.00889	0.01	%	88.9	85 - 115	Acceptable		
CBDV	0.00983	0.01	%	98.3	85 - 115	Acceptable		
CBD-A	0.00853	0.01	%	85.3	85 - 115	Acceptable		
CBG-A	0.00894	0.01	%	89.4	85 - 115	Acceptable		
CBG	0.00961	0.01	%	96.1	85 - 115	Acceptable		
CBD	0.00958	0.01	%	95.8	85 - 115	Acceptable		
THCV	0.00983	0.01	%	98.3	85 - 115	Acceptable		
THCVA	0.00906	0.01	%	90.6	85 - 115	Acceptable		
CBN	0.00988	0.01	%	98.8	85 - 115	Acceptable		
THC	0.0101	0.01	%	101	85 - 115	Acceptable		
D8THC	0.00908	0.01	%	90.8	85 - 115	Acceptable		
CBL	0.0103	0.01	%	103	85 - 115	Acceptable		
CBC	0.00951	0.01	%	95.1	85 - 115	Acceptable		
THCA	0.00924	0.01	%	92.4	85 - 115	Acceptable		
CBCA	0.00856	0.01	%	85.6	85 - 115	Acceptable		

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes	
CBDV-A	ND	0.003	%	< 0.003	Acceptable		
CBDV	ND	0.003	%	< 0.003	Acceptable		
CBD-A	ND	0.003	%	< 0.003	Acceptable		
CBG-A	ND	0.003	%	< 0.003	Acceptable		
CBG	ND	0.003	%	< 0.003	Acceptable		
CBD	ND	0.003	%	< 0.003	Acceptable		
THCV	ND	0.003	%	< 0.003	Acceptable		
THCVA	ND	0.003	%	< 0.003	Acceptable		
CBN	ND	0.003	%	< 0.003	Acceptable		
THC	ND	0.003	%	< 0.003	Acceptable		
D8THC	ND	0.003	%	< 0.003	Acceptable		
CBL	ND	0.003	%	< 0.003	Acceptable		
CBC	ND	0.003	%	< 0.003	Acceptable		
THCA	ND	0.003	%	< 0.003	Acceptable		
CBCA	ND	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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J AOAC 2015 V98-6		Batch ID: 1908740						
Sample Duplicate		Sample ID: 19-011428-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	ND	ND	0.003	%	0	< 20	Acceptable	
CBDV	ND	ND	0.003	%	0	< 20	Acceptable	
CBD-A	ND	ND	0.003	%	0	< 20	Acceptable	
CBG-A	ND	ND	0.003	%	0	< 20	Acceptable	
CBG	ND	0.00337	0.003	%	NA	< 20	Acceptable	R2
CBD	ND	ND	0.003	%	0	< 20	Acceptable	
THCV	ND	ND	0.003	%	0	< 20	Acceptable	
THCVA	ND	ND	0.003	%	0	< 20	Acceptable	
CBN	ND	ND	0.003	%	0	< 20	Acceptable	
THC	0.139	0.140	0.003	%	0.717	< 20	Acceptable	
D8THC	ND	ND	0.003	%	0	< 20	Acceptable	
CBL	ND	ND	0.003	%	0	< 20	Acceptable	
CBC	ND	ND	0.003	%	0	< 20	Acceptable	
THCA	ND	ND	0.003	%	0	< 20	Acceptable	
CBCA	ND	ND	0.003	%	0	< 20	Acceptable	

Abbreviations

- R2 - Sample replicates RPD non-calculable, as only one replicate is within analytical range.
- ND - None Detected at or above MRL
- RPD - Relative Percent Difference
- LOQ - Limit of Quantitation

Units of Measure:

% - Percent



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Explanation of QC Flag Comments:

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