CYCLING FROG
ARTISAN EXTRACTS

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU GMY.D9.PF10 **BATCH #** FE14

PRODUCT NAME Passionfruit Gummies **SERVING SIZE** 1 gummy (5g)

LABORATORY: Columbia Laboratories **OREGON ACCREDITATION:** OR100028

LOQ: Limit Of Quantitation
LOD: Limit Of Detection

1 g = 10^{-3} kg = 10^{3} mg = 10^{6} µg 1 mg/kg = 1 ppm = 1000 ppb

POTENCY	PER SERVING		PER GRAM		Percent
Cannabidiol (CBD)	10.60	mg/serving	2.12	mg/g	0.21 %
Total THC (d9-THC, THCA)	**10.70**	**mg/serving**	2.14	mg/g	0.21 %
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)	**10.70**	**mg/serving**	2.14	mg/g	0.21 %
Delta-8-THC (d8-THC)	**2.81**	**mg/serving**	0.56	mg/g	0.06 %

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.

*Ethanol is a food additive used in some of our ingredients. The FDA has labeled ethanol as Generally Recognized as Safe (GRAS). Many foods contain trace amounts of ethanol, including soy sauce, pasta sauces, fruits and juices, etc. Our products contain safe levels of ethanol and always below pertinent regulatory action levels.

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-006213/D010.R000
Report Date: 06/01/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/24/23 16:17

Customer: Etz Hayim Holdings
Product identity: CYCL-GMY.D9.PF10-FE14
Client/Metrc ID: .
Laboratory ID: 23-006213-0004

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status
CBD per 1g	2.12		mg/1g	
Δ8-THC per 1g	0.562		mg/1g	
Δ9-THC per 1g	2.14		mg/1g	

THC-Total per Serving Size 2.14 mg/1g

CBD-Total per Serving Size 2.12 mg/1g

(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.

Testing in accordance with: OAR 333-007-0430

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Report Date: 06/01/2023
ORELAP#: OR100028
Purchase Order:
Received: 05/24/23 16:17

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

Product identity: CYCL-GMY.D9.PF10-FE14
Client/Metrc ID: .
Sample Date:
Laboratory ID: 23-006213-0004
Evidence of Cooling: No
Temp: 25.3
Relinquished by: courier
Serving Size #1: 1 g

Sample Results

Potency per 1g **Method:** J AOAC 2015 V98-6 (mod)[b] **Units** mg/se **Batch:** 2307737 **Analyze:** 5/26/23 7:54:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	< LOQ		mg/1g	0.0329	
CBC-A per 1g	< LOQ		mg/1g	0.0329	
CBC-Total per 1g	< LOQ		mg/1g	0.0618	
CBD per 1g	2.12		mg/1g	0.0329	
CBD-A per 1g	< LOQ		mg/1g	0.0329	
CBD-Total per 1g	2.12		mg/1g	0.0618	
CBDV per 1g	< LOQ		mg/1g	0.0329	
CBDV-A per 1g	< LOQ		mg/1g	0.0329	
CBDV-Total per 1g	< LOQ		mg/1g	0.0615	
CBE per 1g	< LOQ		mg/1g	0.0329	
CBG per 1g	< LOQ		mg/1g	0.0329	
CBG-A per 1g	< LOQ		mg/1g	0.0329	
CBG-Total per 1g	< LOQ		mg/1g	0.0615	
CBL per 1g	< LOQ		mg/1g	0.0329	
CBL-A per 1g	< LOQ		mg/1g	0.0329	
CBL-Total per 1g	< LOQ		mg/1g	0.0618	
CBN per 1g	< LOQ		mg/1g	0.0329	
CBT per 1g	< LOQ		mg/1g	0.0329	
Δ8-THCV per 1g	< LOQ		mg/1g	0.0329	
Δ10-THC-9R per 1g	< LOQ		mg/1g	0.0329	
Δ10-THC-9S per 1g	< LOQ		mg/1g	0.0329	
Δ10-THC-Total per 1g	< LOQ		mg/1g	0.0659	
Δ8-THC per 1g	0.562		mg/1g	0.0329	
Δ9-THC per 1g	2.14		mg/1g	0.0329	
delta-9-THCP per 1g	< LOQ		mg/1g	0.0329	
exo-THC per 1g	< LOQ		mg/1g	0.0329	
THC-A per 1g	< LOQ		mg/1g	0.0329	
THC-Total per 1g	2.14		mg/1g	0.0618	
THCV per 1g	< LOQ		mg/1g	0.0329	
THCV-A per 1g	< LOQ		mg/1g	0.0329	

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Purchase Order:
Received: 05/24/23 16:17

Potency per 1g

Method: J AOAC 2015 V98-6 (mod)þ **Units** mg/se **Batch:** 2307737 **Analyze:** 5/26/23 7:54:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
THCV-Total per 1g	< LOQ		mg/1g	0.0619	
Total Cannabinoids per 1g	4.82		mg/1g		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2307682	05/28/23	AOAC 991.14 (Petrifilm)þ		
Total Coliforms	< LOQ		cfu/g	10	2307682	05/28/23	AOAC 991.14 (Petrifilm)þ		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2307684	05/28/23	AOAC 2014.05 (RAPID)þ		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2307684	05/28/23	AOAC 2014.05 (RAPID)þ		

Solvents

Method: Residual Solvents by GC/MSþ **Units** µg/g **Batch** 2307795 **Analyze** 05/31/23 10:39 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-Dimethy butane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< LOQ		200		
2,3-Dimethy 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							

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Pesticides

Method: AOAC 2007.01 & EN 15662 (mod)þ **Units** mg/kg **Batch** 2307780 **Analyze** 05/31/23 06:34 AM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin¥	< LOQ	0.50	0.250	pass		Acephate¥	< LOQ	0.40	0.200	pass	
Acequinocyl¥	< LOQ	2.0	1.00	pass		Acetamiprid¥	< LOQ	0.20	0.100	pass	
Aldicarb¥	< LOQ	0.40	0.200	pass		Azoxystrobin¥	< LOQ	0.20	0.100	pass	
Bifenazate¥	< LOQ	0.20	0.100	pass		Bifenthrin¥	< LOQ	0.20	0.100	pass	
Boscalid¥	< LOQ	0.40	0.200	pass		Carbaryl¥	< LOQ	0.20	0.100	pass	
Carbofuran¥	< LOQ	0.20	0.100	pass		Chlorantraniliprole¥	< LOQ	0.20	0.100	pass	
Chlorfenapyr¥	< LOQ	1.0	0.500	pass		Chlorpyrifos¥	< LOQ	0.20	0.100	pass	
Clofentezine¥	< LOQ	0.20	0.100	pass		Cyfluthrin¥	< LOQ	1.0	0.500	pass	
Cypermethrin¥	< LOQ	1.0	0.500	pass		Daminozide¥	< LOQ	1.0	0.500	pass	
Diazinon¥	< LOQ	0.20	0.100	pass		Dichlorvos¥	< LOQ	1.0	0.500	pass	
Dimethoate¥	< LOQ	0.20	0.100	pass		Ethoprophos¥	< LOQ	0.20	0.100	pass	
Etofenprox¥	< LOQ	0.40	0.200	pass		Etoxazole¥	< LOQ	0.20	0.100	pass	
Fenoxycarb¥	< LOQ	0.20	0.100	pass		Fenpyroximate¥	< LOQ	0.40	0.200	pass	
Fipronil¥	< LOQ	0.40	0.200	pass		Flonicamid¥	< LOQ	1.0	0.400	pass	
Fludioxonil¥	< LOQ	0.40	0.200	pass		Hexythiazox¥	< LOQ	1.0	0.400	pass	
Imazalil¥	< LOQ	0.20	0.100	pass		Imidacloprid¥	< LOQ	0.40	0.200	pass	
Kresoxim-methyl¥	< LOQ	0.40	0.200	pass		Malathion¥	< LOQ	0.20	0.100	pass	
Metalaxyl¥	< LOQ	0.20	0.100	pass		Methiocarb¥	< LOQ	0.20	0.100	pass	
Methomyl¥	< LOQ	0.40	0.200	pass		MGK-264¥	< LOQ	0.20	0.100	pass	
Myclobutanil¥	< LOQ	0.20	0.100	pass		Naled¥	< LOQ	0.50	0.250	pass	
Oxamyl¥	< LOQ	1.0	0.500	pass		Paclobutrazole¥	< LOQ	0.40	0.200	pass	
Parathion-Methyl¥	< LOQ	0.20	0.100	pass		Permethrin¥	< LOQ	0.20	0.100	pass	
Phosmet¥	< LOQ	0.20	0.100	pass		Piperonyl butoxide¥	< LOQ	2.0	1.00	pass	
Prallethrin¥	< LOQ	0.20	0.100	pass		Propiconazole¥	< LOQ	0.40	0.200	pass	
Propoxur¥	< LOQ	0.20	0.100	pass		Pyrethrin I (total)¥	< LOQ	1.0	0.500	pass	
Pyridaben¥	< LOQ	0.20	0.100	pass		Spinosad¥	< LOQ	0.20	0.100	pass	
Spiromesifen¥	< LOQ	0.20	0.100	pass		Spirotetramat¥	< LOQ	0.20	0.100	pass	
Spiroxamine¥	< LOQ	0.40	0.200	pass		Tebuconazole¥	< LOQ	0.40	0.200	pass	
Thiacloprid¥	< LOQ	0.20	0.100	pass		Thiamethoxam¥	< LOQ	0.20	0.100	pass	
Trifloxystrobin¥	< LOQ	0.20	0.100	pass							

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Arsenic¥	< LOQ	0.200	mg/kg	0.0162	2307782	05/30/23	AOAC 2013.06 (mod.)þ	pass	
Cadmium¥	< LOQ	0.200	mg/kg	0.0162	2307782	05/30/23	AOAC 2013.06 (mod.)þ	pass	
Lead¥	< LOQ	0.500	mg/kg	0.0162	2307782	05/30/23	AOAC 2013.06 (mod.)þ	pass	
Mercury¥	< LOQ	0.100	mg/kg	0.00809	2307782	05/30/23	AOAC 2013.06 (mod.)þ	pass	

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Abbreviations

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

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

þ = 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

Columbia LABORATORIES
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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: 2307737**

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	2	0.0282	0.0283	%	99.5	80.0 - 120	Acceptable	
CBDV	2	0.0292	0.0291	%	100	80.0 - 120	Acceptable	
CBE	2	0.0339	0.0344	%	98.6	80.0 - 120	Acceptable	
CBDA	1	0.0299	0.0311	%	96.1	90.0 - 110	Acceptable	
CBGA	1	0.0299	0.0311	%	96.4	80.0 - 120	Acceptable	
CBG	1	0.0310	0.0322	%	96.4	80.0 - 120	Acceptable	
CBD	1	0.0309	0.0323	%	95.5	90.0 - 110	Acceptable	
THCV	2	0.0205	0.0201	%	102	80.0 - 120	Acceptable	
d8THCV	2	0.0260	0.0268	%	96.9	80.0 - 120	Acceptable	
THCVA	2	0.0297	0.0299	%	99.4	80.0 - 120	Acceptable	
CBN	1	0.0320	0.0329	%	97.2	80.0 - 120	Acceptable	
exo-THC	2	0.0288	0.0292	%	98.4	80.0 - 120	Acceptable	
d9THC	1	0.0326	0.0341	%	95.5	90.0 - 110	Acceptable	
d8THC	1	0.0407	0.0420	%	96.9	90.0 - 110	Acceptable	
9S-d10THC	1	0.0230	0.0240	%	95.6	80.0 - 120	Acceptable	
CBL	2	0.0316	0.0315	%	100	80.0 - 120	Acceptable	
9R-d10THC	1	0.0294	0.0310	%	94.7	80.0 - 120	Acceptable	
CBC	2	0.0307	0.0309	%	99.5	80.0 - 120	Acceptable	
THCA	1	0.0305	0.0314	%	97.2	90.0 - 110	Acceptable	
CBCA	2	0.0323	0.0326	%	99.1	80.0 - 120	Acceptable	
CBLA	2	0.0324	0.0331	%	98.0	80.0 - 120	Acceptable	
d9THCP	2	0.0317	0.0321	%	98.9	80.0 - 120	Acceptable	
CBT	2	0.0319	0.0327	%	97.8	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBDV	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBE	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBDA	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBGA	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBG	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBD	<LOQ	0.00306	%	< 0.00306	Acceptable	
THCV	<LOQ	0.00306	%	< 0.00306	Acceptable	
d8THCV	<LOQ	0.00306	%	< 0.00306	Acceptable	
THCVA	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBN	<LOQ	0.00306	%	< 0.00306	Acceptable	
exo-THC	<LOQ	0.00306	%	< 0.00306	Acceptable	
d9THC	<LOQ	0.00306	%	< 0.00306	Acceptable	
d8THC	<LOQ	0.00306	%	< 0.00306	Acceptable	
9S-d10THC	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBL	<LOQ	0.00306	%	< 0.00306	Acceptable	
9R-d10THC	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBC	<LOQ	0.00306	%	< 0.00306	Acceptable	
THCA	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBCA	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBLA	<LOQ	0.00306	%	< 0.00306	Acceptable	
d9THCP	<LOQ	0.00306	%	< 0.00306	Acceptable	
CBT	<LOQ	0.00306	%	< 0.00306	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 Valida ed 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2307737**

Sample Duplicate Sample ID **23-006206-0001**

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBG	0.258	0.257	0.00325	%	0.381	< 20	Acceptable	
CBD	0.517	0.515	0.00325	%	0.338	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBC	0.00442	0.00442	0.00325	%	0.0659	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.00325	%	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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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662			Units: mg/Kg					Batch ID: 2307780	
Method Blank				Laboratory Control Sample					
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits		Notes
Abamectin	0.000	< 0.250		0.969	1.000	96.9	50.0	150	
Acephate	0.009	< 0.200		0.677	0.800	84.6	60.0	120	
Acequinocyl	0.000	< 1.000		3.766	4.000	94.2	40.0	160	
Acetamiprid	0.000	< 0.100		0.363	0.400	90.8	60.0	120	
Aldicarb	0.000	< 0.200		0.781	0.800	97.6	60.0	120	
Azoxystrobin	0.003	< 0.100		0.368	0.400	92.0	60.0	120	
Bifenazate	0.000	< 0.100		0.421	0.400	105.2	60.0	120	
Bifenthrin	0.000	< 0.100		0.377	0.400	94.1	50.0	150	
Boscalid	0.000	< 0.200		0.812	0.800	101.5	60.0	120	
Carbaryl	0.000	< 0.100		0.377	0.400	94.2	60.0	120	
Carbofuran	0.000	< 0.100		0.370	0.400	92.4	60.0	120	
Chlorantraniliprole	0.000	< 0.100		0.386	0.400	96.4	60.0	120	
Chlorfenapyr	0.000	< 0.500		2.051	2.000	102.5	60.0	120	
Chlorpyrifos	0.007	< 0.100		0.345	0.400	86.3	60.0	120	
Clofentezine	0.000	< 0.100		0.326	0.400	81.6	60.0	120	
Cyfluthrin	0.000	< 0.500		2.124	2.000	106.2	50.0	150	
Cypermethrin	0.000	< 0.500		1.962	2.000	98.1	50.0	150	
Daminozide	0.000	< 0.500		0.623	2.000	*31.1*	60.0	120	Q6
Diazinon	0.000	< 0.100		0.395	0.400	98.8	60.0	120	
Dichlorvos	0.000	< 0.500		1.780	2.000	89.0	60.0	120	
Dimethoate	0.000	< 0.100		0.348	0.400	87.0	60.0	120	
Ethoprophos	0.000	< 0.100		0.366	0.400	91.4	60.0	120	
Etofenprox	0.000	< 0.200		0.747	0.800	93.3	50.0	150	
Etoxazole	0.000	< 0.100		0.382	0.400	95.4	60.0	120	
Fenoxycarb	0.000	< 0.100		0.380	0.400	95.0	60.0	120	
Fenpyroximate	0.000	< 0.200		0.767	0.800	95.9	60.0	120	
Fipronil	0.000	< 0.200		0.773	0.800	96.6	60.0	120	
Flonicamid	0.000	< 0.250		0.881	1.000	88.1	60.0	120	
Fludioxonil	0.000	< 0.200		0.730	0.800	91.3	50.0	150	
Hexythiazox	0.000	< 0.250		0.920	1.000	92.0	60.0	120	
Imazalil	0.000	< 0.100		0.362	0.400	90.6	60.0	120	
Imidacloprid	0.000	< 0.200		0.661	0.800	82.6	60.0	120	
Kresoxim methyl	0.000	< 0.200		0.771	0.800	96.3	60.0	120	
Malathion	0.000	< 0.100		0.370	0.400	92.5	60.0	120	
Metalaxyl	0.000	< 0.100		0.388	0.400	97.0	60.0	120	
Methiocarb	0.000	< 0.100		0.385	0.400	96.2	60.0	120	
Methomyl	0.000	< 0.200		0.684	0.800	85.4	60.0	120	
MGK 264	0.000	< 0.100		0.395	0.400	98.9	50.0	150	
Myclobutanil	0.000	< 0.100		0.389	0.400	97.3	60.0	120	
Naled	0.000	< 0.250		0.953	1.000	95.3	50.0	150	
Oxamyl	0.000	< 0.500		1.684	2.000	84.2	60.0	120	
Paclobutrazole	0.000	< 0.200		0.774	0.800	96.7	60.0	120	
Parathion Methyl	0.000	< 0.100		0.415	0.400	103.7	50.0	150	
Permethrin	0.000	< 0.100		0.365	0.400	91.2	50.0	150	
Phosmet	0.000	< 0.100		0.383	0.400	95.7	50.0	150	
Piperonyl butoxide	0.000	< 0.500		1.946	2.000	97.3	60.0	120	
Prallethrin	0.000	< 0.100		0.391	0.400	97.7	60.0	120	
Propiconazole	0.000	< 0.200		0.771	0.800	96.3	60.0	120	
Propoxur	0.000	< 0.100		0.367	0.400	91.8	60.0	120	
Pyrethrin (Summe)	0.001	< 0.100		0.475	0.488	97.4	60.0	120	
Pyridaben	0.000	< 0.100		0.377	0.400	94.4	50.0	150	
Spinosad	0.000	< 0.100		0.361	0.388	93.1	50.0	150	
Spiromesifen	0.000	< 0.100		0.371	0.400	92.8	60.0	120	
Spirotetramat	0.000	< 0.100		0.383	0.400	95.6	60.0	120	
Spiroxamine	0.000	< 0.200		0.780	0.800	97.5	60.0	120	
ebuconazole	0.000	< 0.200		0.771	0.800	96.4	60.0	120	
hiacloprid	0.000	< 0.100		0.379	0.400	94.6	60.0	120	
hiamethoxam	0.000	< 0.100		0.344	0.400	86.0	60.0	120	
rifloxystrobin	0.000	< 0.100		0.376	0.400	93.9	60.0	120	

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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 **Units:** mg/Kg **Batch ID:** 2307780

Matrix Spike/Matrix Spike Duplicate Recoveries **Sample ID: 23-006213-0001**

Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits		Notes
Abamectin	0.000	0.956	0.950	1.000	0.6%	< 30	95.6%	95.0%	50	150	
Acephate	0.008	0.696	0.691	0.800	0.7%	< 30	86.0%	85.4%	50	150	
Acequinocyl	0.000	3.889	4.039	4.000	3.8%	< 30	97.2%	101.0%	50	150	
Acetamiprid	0.000	0.378	0.375	0.400	1.0%	< 30	94.6%	93.6%	50	150	
Aldicarb	0.000	0.795	0.799	0.800	0.5%	< 30	99.4%	99.8%	50	150	
Azoxystrobin	0.003	0.373	0.379	0.400	1.9%	< 30	92.5%	94.2%	50	150	
Bifenazate	0.000	0.424	0.419	0.400	1.1%	< 30	105.9%	104.8%	50	150	
Bifenthrin	0.000	0.397	0.396	0.400	0.4%	< 30	99.3%	99.0%	50	150	
Boscalid	0.000	0.844	0.832	0.800	1.4%	< 30	105.5%	104.1%	50	150	
Carbaryl	0.000	0.391	0.397	0.400	1.6%	< 30	97.7%	99.3%	50	150	
Carbofuran	0.000	0.392	0.384	0.400	2.1%	< 30	98.1%	96.1%	50	150	
Chlorantraniliprole	0.000	0.387	0.398	0.400	2.7%	< 30	96.7%	99.4%	50	150	
Chlorfenapyr	0.000	2.229	1.961	2.000	12.8%	< 30	111.4%	98.0%	50	150	
Chlorpyrifos	0.007	0.345	0.336	0.400	2.6%	< 30	84.4%	82.2%	50	150	
Clofentezine	0.000	0.330	0.333	0.400	0.9%	< 30	82.6%	83.3%	50	150	
Cyfluthrin	0.000	2.194	2.166	2.000	1.3%	< 30	109.7%	108.3%	30	150	
Cypermethrin	0.000	2.032	2.017	2.000	0.7%	< 30	101.6%	100.9%	50	150	
Daminozide	0.000	0.645	0.635	2.000	1.6%	< 30	32.3%	31.7%	30	150	
Diazinon	0.000	0.398	0.395	0.400	0.5%	< 30	99.4%	98.9%	50	150	
Dichlorvos	0.000	1.760	1.865	2.000	5.8%	< 30	88.0%	93.2%	50	150	
Dimethoate	0.013	0.397	0.393	0.400	0.9%	< 30	96.1%	95.2%	50	150	
Ethoprophos	0.000	0.376	0.385	0.400	2.3%	< 30	94.0%	96.2%	50	150	
Etofenprox	0.000	0.773	0.762	0.800	1.5%	< 30	96.6%	95.2%	50	150	
Etoxazole	0.000	0.392	0.393	0.400	0.3%	< 30	97.9%	98.2%	50	150	
Fenoxycarb	0.000	0.386	0.390	0.400	1.2%	< 30	96.4%	97.5%	50	150	
Fenpyroximate	0.000	0.819	0.822	0.800	0.4%	< 30	102.3%	102.8%	50	150	
Fipronil	0.000	0.780	0.807	0.800	3.5%	< 30	97.5%	100.9%	50	150	
Flonicamid	0.000	1.041	0.989	1.000	5.1%	< 30	104.1%	98.9%	50	150	
Fludioxonil	0.000	0.742	0.717	0.800	3.4%	< 30	92.8%	89.6%	50	150	
Hexythiazox	0.000	0.973	0.968	1.000	0.4%	< 30	97.3%	96.8%	50	150	
Imazalil	0.000	0.385	0.375	0.400	2.7%	< 30	96.2%	93.7%	50	150	
Imidacloprid	0.028	0.777	0.692	0.800	11.9%	< 30	93.6%	83.1%	50	150	
Kresoxim methyl	0.000	0.796	0.801	0.800	0.7%	< 30	99.5%	100.2%	50	150	
Malathion	0.000	0.388	0.392	0.400	1.2%	< 30	96.9%	98.0%	50	150	
Metalaxyl	0.000	0.392	0.398	0.400	1.6%	< 30	98.0%	99.6%	50	150	
Methiocarb	0.000	0.398	0.396	0.400	0.5%	< 30	99.5%	99.0%	50	150	
Methomyl	0.000	0.791	0.727	0.800	8.5%	< 30	98.9%	90.9%	50	150	
MGK 264	0.000	0.409	0.406	0.400	0.8%	< 30	102.1%	101.4%	50	150	
Myclobutanil	0.000	0.397	0.380	0.400	4.4%	< 30	99.3%	95.1%	50	150	
Naled	0.000	0.992	0.981	1.000	1.2%	< 30	99.2%	98.1%	50	150	
Oxamyl	0.000	1.957	1.778	2.000	9.6%	< 30	97.9%	88.9%	50	150	
Paclobutrazole	0.000	0.798	0.799	0.800	0.1%	< 30	99.8%	99.9%	50	150	
Parathion Methyl	0.000	0.414	0.460	0.400	10.6%	< 30	103.4%	115.0%	30	150	
Permethrin	0.000	0.382	0.386	0.400	1.1%	< 30	95.5%	96.6%	50	150	
Phosmet	0.000	0.410	0.413	0.400	0.8%	< 30	102.5%	103.3%	50	150	
Piperonyl butoxide	0.000	1.970	2.017	2.000	2.3%	< 30	98.5%	100.8%	50	150	
Prallethrin	0.000	0.396	0.384	0.400	3.0%	< 30	98.9%	96.0%	50	150	
Propiconazole	0.000	0.835	0.830	0.800	0.6%	< 30	104.4%	103.8%	50	150	
Propoxur	0.000	0.384	0.393	0.400	2.4%	< 30	95.8%	98.1%	50	150	
Pyrethrin (Summe)	0.017	0.613	0.607	0.488	1.0%	< 30	122.3%	121.1%	50	150	
Pyridaben	0.000	0.374	0.372	0.400	0.7%	< 30	93.6%	93.0%	50	150	
Spinosad	0.000	0.380	0.363	0.388	4.8%	< 30	98.1%	93.5%	50	150	
Spiromesifen	0.000	0.381	0.367	0.400	3.8%	< 30	95.2%	91.7%	50	150	
Spirotetramat	0.000	0.382	0.379	0.400	0.6%	< 30	95.4%	94.8%	50	150	
Spiroxamine	0.000	0.787	0.802	0.800	1.9%	< 30	98.4%	100.3%	50	150	
tebuconazole	0.000	0.795	0.807	0.800	1.5%	< 30	99.4%	100.9%	50	150	
thiacloprid	0.000	0.395	0.389	0.400	1.6%	< 30	98.8%	97.3%	50	150	
thiamethoxam	0.000	0.393	0.376	0.400	4.4%	< 30	98.3%	94.1%	50	150	
trifloxystrobin	0.000	0.378	0.382	0.400	1.0%	< 30	94.6%	95.6%	50	150	

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Laboratory Quality Control Results

Residual Solvents **Batch ID:** 2307795

	Method Blank				Laboratory Control Sample						
Analyte	**Result**		**LOQ**	**Notes**	**Result**	**Spike**	**Units**	**% Rec**	**Limits**		**Notes**
Propane	ND	<	200		560	584	µg/g	95.9	60	120	
Isobutane	ND	<	200		694	767	µg/g	90.5	60	120	
Butane	ND	<	200		690	782	µg/g	88.2	60	120	
2,2 Dimethylpropane	ND	<	200		958	939	µg/g	102.0	60	120	
Methanol	ND	<	200		1560	1610	µg/g	96.9	60	120	
Ethylene Oxide	ND	<	30		48	57.1	µg/g	84.1	60	120	
2 Methylbutane	ND	<	200		1510	1600	µg/g	94.4	60	120	
Pentane	ND	<	200		1520	1610	µg/g	94.4	60	120	
Ethanol	ND	<	200		1510	1600	µg/g	94.4	70	130	
Ethyl Ether	ND	<	200		1530	1610	µg/g	95.0	60	120	
2,2 Dimethylbutane	ND	<	30		164	173	µg/g	94.8	60	120	
Acetone	ND	<	200		1530	1620	µg/g	94.4	60	120	
2 Propanol	ND	<	200		1550	1600	µg/g	96.9	60	120	
Acetonitrile	ND	<	100		442	488	µg/g	90.6	60	120	
2,3 Dimethylbutane	ND	<	30		160	165	µg/g	97.0	60	120	
Dichloromethane	ND	<	60		459	487	µg/g	94.3	60	120	
2 Methylpentane	ND	<	30		154	160	µg/g	96.3	60	120	
3 Methylpentane	ND	<	30		153	161	µg/g	95.0	60	120	
Hexane	ND	<	30		153	162	µg/g	94.4	60	120	
Ethyl acetate	ND	<	200		1480	1600	µg/g	92.5	60	120	
2 Butanol	ND	<	200		1500	1610	µg/g	93.2	60	120	
etrahydrofuran	ND	<	100		459	483	µg/g	95.0	60	120	
Cyclohexane	ND	<	200		1520	1610	µg/g	94.4	60	120	
Benzene	ND	<	1		4.53	4.98	µg/g	91.0	60	120	
Isopropyl Acetate	ND	<	200		1490	1610	µg/g	92.5	60	120	
Heptane	ND	<	200		1490	1620	µg/g	92.0	60	120	
1,4 Dioxane	ND	<	100		452	494	µg/g	91.5	60	120	
2 Ethoxyethanol	ND	<	30		153	165	µg/g	92.7	60	120	
Ethylene Glycol	ND	<	200		328	486	µg/g	67.5	60	120	
oluene	ND	<	100		436	513	µg/g	85.0	60	120	
Ethylbenzene	ND	<	200		849	967	µg/g	87.8	60	120	
m,p Xylene	ND	<	200		869	994	µg/g	87.4	60	120	
o Xylene	ND	<	200		843	992	µg/g	85.0	60	120	
Cumene	ND	<	30		144	171	µg/g	84.2	60	120	

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QC - Sample Duplicate **Sample ID: 23-006174-0001**

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	
Acetonitrile	ND	ND	100	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	
3 Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30	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	
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	
1,4 Dioxane	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2 Ethoxyethanol	ND	ND	30	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	
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	

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	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.