



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



**Report Number:** 22-006238/D003.R000  
**Report Date:** 06/07/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/31/22 10:44

**Customer:** Rawsome  
**Product identity:** Mango Puck 1452022RWB0000418 10mg D9  
**Client/Metric ID:** .  
**Laboratory ID:** 22-006238-0003

### Summary

**Potency:**

Analyte per 3.75g	Result	Limits	Units	Status	
Δ9-THC per 3.75g	9.38		mg/3.75g		THC-Total per 3.75g 9.38 mg/3.75g
					CBD-Total per 3.75g <LOQ
(Reported in milligrams per serving)					

**Residual Solvents:**

*All analytes passing and less than LOQ.*

**Pesticides:**

*All analytes passing and less than LOQ.*

**Metals:**

Analyte	Result	Units	Limit	Status
Lead	0.0307	mg/kg	0.500	pass

**Microbiology:**

*Less than LOQ for all analytes.*



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**Customer:** Rawsome  
 United States of America (USA)  
**Product identity:** Mango Puck 1452022RWB0000418 10mg D9  
**Client/Metric ID:** .  
**Sample Date:**  
**Laboratory ID:** 22-006238-0003  
**Evidence of Cooling:** No  
**Temp:** 18.9 °C  
**Relinquished by:** UPS  
**Serving Size #1:** 3.75 g

### Sample Results

Potency per 3.75g						Method J AOAC 2015 V98-6 (mod)Units mg/se		Batch: 2204713		Analyze: 6/3/22 10:40:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes						
CBD per 3.75g	< LOQ		mg/3.75g	0.121							
CBD-A per 3.75g	< LOQ		mg/3.75g	0.121							
CBD-Total per 3.75g	< LOQ		mg/3.75g	0.227							
CBG per 3.75g <sup>†</sup>	< LOQ		mg/3.75g	0.121							
CBG-A per 3.75g <sup>†</sup>	< LOQ		mg/3.75g	0.121							
CBG-Total per 3.75g <sup>†</sup>	< LOQ		mg/3.75g	0.226							
CBN per 3.75g	< LOQ		mg/3.75g	0.121							
Δ8-THC per 3.75g <sup>†</sup>	< LOQ		mg/3.75g	0.121							
Δ9-THC per 3.75g	9.38		mg/3.75g	0.121							
THC-A per 3.75g	< LOQ		mg/3.75g	0.121							
THC-Total per 3.75g	9.38		mg/3.75g	0.227							

Microbiology									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
Aerobic Plate Count	< LOQ		cfu/g	10	2204605	06/03/22	AOAC 990.12 (Petrifilm)	X	
E.coli	< LOQ		cfu/g	10	2204603	06/03/22	AOAC 991.14 (Petrifilm)	X	
Total Coliforms	< LOQ		cfu/g	10	2204603	06/03/22	AOAC 991.14 (Petrifilm)	X	
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2204604	06/04/22	AOAC 2014.05 (RAPID)	X	
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2204604	06/04/22	AOAC 2014.05 (RAPID)	X	



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Solvents						Residual Solvents by GC/MS					Units	µg/g	Batch	Analyze 06/07/22 10:15 AM				
Analyte	Method	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes						
1,4-Dioxane		< LOQ	380	100	pass		2-Butanol	< LOQ	5000	200	pass							
2-Ethoxyethanol		< LOQ	160	30.0	pass		2-Methylbutane (Isopentane)	< LOQ		200								
2-Methylpentane		< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass							
2,2-Dimethylbutane		< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< LOQ		200								
2,3-Dimethylbutane		< LOQ		30.0			3-Methylpentane	< LOQ		30.0								
Acetone		< LOQ	5000	200	pass		Acetonitrile	< LOQ	410	100	pass							
Benzene		< LOQ	2.00	1.00	pass		Butanes (sum)	< LOQ	5000	400	pass							
Cyclohexane		< LOQ	3880	200	pass		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) Units mg/kg Batch 2204731 Analyze 06/03/22 01:17 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	
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		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		Paclobotrazole	< LOQ	0.40	0.200	pass	
Parathion-Methyl	< LOQ	0.20	0.200	pass		Permethrin	< LOQ	0.20	0.100	pass	
Phosmet	< LOQ	0.20	0.100	pass		Piperonyl butoxide	< LOQ	2.0	1.00	pass	
Prallethrin	< LOQ	0.20	0.200	pass		Propiconazole	< LOQ	0.40	0.200	pass	
Propoxur	< LOQ	0.20	0.100	pass		Pyrethrin I (total)	< LOQ	1.0	0.500	pass	
Pyridaben	< LOQ	0.20	0.100	pass		Spinosad	< LOQ	0.20	0.100	pass	
Spiromesifen	< LOQ	0.20	0.100	pass		Spirotetramat	< LOQ	0.20	0.100	pass	
Spiroxamine	< LOQ	0.40	0.200	pass		Tebuconazole	< LOQ	0.40	0.200	pass	
Thiacloprid	< LOQ	0.20	0.100	pass		Thiamethoxam	< LOQ	0.20	0.100	pass	
Trifloxystrobin	< LOQ	0.20	0.100	pass							

Metals										
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes	
Arsenic	< LOQ	0.200	mg/kg	0.0182	2204743	06/03/22	AOAC 2013.06 (mod.)	pass	X	
Cadmium	< LOQ	0.200	mg/kg	0.0182	2204743	06/03/22	AOAC 2013.06 (mod.)	pass	X	
Lead	0.0307	0.500	mg/kg	0.0182	2204743	06/03/22	AOAC 2013.06 (mod.)	pass	X	
Mercury	< LOQ	0.100	mg/kg	0.00910	2204743	06/03/22	AOAC 2013.06 (mod.)	pass	X	



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

**Abbreviations**

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

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

† = Analyte not NELAP accredited.

**Units of Measure**

cfu/g = Colony forming units per gram

g = g

µg/g = Microgram per gram

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

mg/3.75g = Milligram per 3.75g

% = Percentage of sample

% wt = µg/g divided by 10,000

**Glossary of Qualifiers**

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner  
General Manager



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**Hemp & Cannabis: Usable / Extract / Finished Product  
 Chain of Custody Record**

Document Control ID: 2832 Revision: 5  
 Effective: 01/04/2022

ORELAP ID: OR100028 ANAB ISO 17025 ID: AT-1508

<b>Company:</b> Rawsome <b>Contact:</b> Deanna Petrin <b>Address:</b> 8101 Royal Ridge Parkway <b>City:</b> Irving <b>State:</b> TX <b>Zip Code:</b> 75063 <input checked="" type="checkbox"/> <b>Email Results:</b> DROPBOX deanna@devmgf.com <input checked="" type="checkbox"/> <b>Ph:</b> (469) - 373 - 3200 <i>Billing Contact (if different)</i> <b>Name:</b> CC AUTH ON FILE <b>Email:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Ph:</b> ( ) -			<b>Analysis Requested</b> Pesticides Oregon (P2120) Residual Solvents Oregon (H0008) Heavy Metals (H0013) Mycotoxins (H0042) Micro Profile D (M1010) Terpenes (H0030) Potency- Basic (H0014) Potency Basic + Expanded (H0010) Potency Basic + ADCs (H0015) Other:								<b>PO Number:</b> <b>Project ID:</b> <b>Batch ID:</b> <b>Sampled by:</b> <b>Custom Reporting:</b>				
<b>Source Material:</b> <input checked="" type="checkbox"/> - Ind. Hemp product   <input type="checkbox"/> - Rec. Cannabis <b>Reporting Type:</b> <input type="checkbox"/> - Compliance   <input checked="" type="checkbox"/> - R&D <b>Report to:</b> <input type="checkbox"/> - METRC   <input type="checkbox"/> - ODA   <input type="checkbox"/> - USDA   <input type="checkbox"/> - Other:			<b>Turnaround time (TAT - Business Days):</b> <input type="checkbox"/> - 5BD   <input checked="" type="checkbox"/> - 3BD*   <input type="checkbox"/> - 2BD* <i>*Check for availability</i>								<b>Material Type †</b>   <b>Weight (Units)</b>   <b>Comments/Metric ID</b>				
Lab ID	Client Sample Identification	Sample date													
	Pineapple Puck 1452022RWB0000417 10mg D9	05/25/22	✓	✓	✓	✓	✓	✓				E	45g	Contains Active as Noted	
	Pink Lemonade Puck 1452022RWB0000419 10mg D9	05/25/22	✓	✓	✓	✓	✓	✓				E	45g	Please report in mg/serving	
	Mango Puck 1452022RWB0000418 10mg D9	05/25/22	✓	✓	✓	✓	✓	✓				E	45g	Standard Serving Sizes: D8: 3.3g D9: 3.75g HHC: 3.3g D10: 3.3g THCO: 3.3g CBD: 3.3g Mother Liquor: 3.3g Diamonds: 5g Hearts: 6g	
	Watermelon Puck 1452022RWB0000420 10mg D9	05/25/22	✓	✓	✓	✓	✓	✓				E	45g		
<b>Signature - Relinquished By:</b> Deanna Petrin			<b>Date:</b> 05/26/22	<b>Time:</b>	<b>Signature - Received By:</b> AC			<b>Date:</b> 5-31	<b>Time:</b> 10:44	<b>Lab Use Only:</b> <input checked="" type="checkbox"/> Shipped Via: UPS or <input type="checkbox"/> Client drop off Evidence of cooling: <input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No - Temp (°C): 18.9 Sample in good condition: <input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No Payment: <input type="checkbox"/> Cash   <input type="checkbox"/> Check   <input type="checkbox"/> CC   <input type="checkbox"/> Net: Prelog storage:					

† - Material Type Codes: Plant Material (P) ; Isolate (I) ; Concentrate/Extract (C) ; Tincture/Topical (T) ; Edible (E) ; Beverage (B) ; Vapor Product (V)

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms  
 12423 NE Whitaker Way  
 Portland, OR 97230  
 P: (503) 254-1794 | Fax: (503) 254-1452  
 info@columbiaboratories.com  
 Page \_\_\_\_\_ of \_\_\_\_\_  
 www.columbiaboratories.com



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Revision: 1 Document ID: 7148  
Legacy ID: Worksheet Validated 04/20/2021

**Laboratory Quality Control Results**

**J AOAC 2015 V98-6** **Batch ID: 2204713**

Laboratory Control Sample										
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes	
CBDVA	1	0.0344	0.033	%	103	80.0	- 120	Acceptable		
CBDV	1	0.0359	0.033	%	108	80.0	- 120	Acceptable		
CBE	1	0.0324	0.033	%	97.3	80.0	- 120	Acceptable		
CBDA	1	0.0327	0.033	%	98.1	90.0	- 110	Acceptable		
CBGA	1	0.0317	0.033	%	95.2	80.0	- 120	Acceptable		
CBG	1	0.0307	0.033	%	92.0	80.0	- 120	Acceptable		
CBD	1	0.0331	0.033	%	99.2	90.0	- 110	Acceptable		
THCV	1	0.0332	0.033	%	99.6	80.0	- 120	Acceptable		
d8THCV	1	0.0333	0.033	%	99.8	80.0	- 120	Acceptable		
THCVA	1	0.0328	0.033	%	98.5	80.0	- 120	Acceptable		
CBN	1	0.0334	0.033	%	100	90.0	- 110	Acceptable		
exo-THC	1	0.0315	0.033	%	94.4	80.0	- 120	Acceptable		
d9THC	1	0.0315	0.033	%	94.5	90.0	- 110	Acceptable		
d8THC	1	0.0301	0.033	%	90.3	80.0	- 120	Acceptable		
CBL	1	0.0303	0.033	%	91.0	80.0	- 120	Acceptable		
CBC	1	0.0329	0.033	%	98.6	80.0	- 120	Acceptable		
THCA	1	0.0332	0.033	%	99.6	90.0	- 110	Acceptable		
CBCA	1	0.0336	0.033	%	101	80.0	- 120	Acceptable		
CBLA	1	0.0346	0.033	%	104	80.0	- 120	Acceptable		
CBT	1	0.0286	0.033	%	85.8	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		
CBDA	<LOQ	0.003	%	< 0.003	Acceptable		
CBGA	<LOQ	0.003	%	< 0.003	Acceptable		
CBG	<LOQ	0.003	%	< 0.003	Acceptable		
CBD	<LOQ	0.003	%	< 0.003	Acceptable		
THCV	<LOQ	0.003	%	< 0.003	Acceptable		
d8THCV	<LOQ	0.003	%	< 0.003	Acceptable		
THCVA	<LOQ	0.003	%	< 0.003	Acceptable		
CBN	<LOQ	0.003	%	< 0.003	Acceptable		
exo-THC	<LOQ	0.003	%	< 0.003	Acceptable		
d9THC	<LOQ	0.003	%	< 0.003	Acceptable		
d8THC	<LOQ	0.003	%	< 0.003	Acceptable		
CBL	<LOQ	0.003	%	< 0.003	Acceptable		
CBC	<LOQ	0.003	%	< 0.003	Acceptable		
THCA	<LOQ	0.003	%	< 0.003	Acceptable		
CBCA	<LOQ	0.003	%	< 0.003	Acceptable		
CBLA	<LOQ	0.003	%	< 0.003	Acceptable		
CBT	<LOQ	0.003	%	< 0.003	Acceptable		

**Abbreviations**

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

**Units of Measure:**

% - Percent



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Legacy ID: Worksheet Validated 04/20/2021

**Laboratory Quality Control Results**

J AOAC 2015 V98-6		Batch ID: 2204713						
Sample Duplicate		Sample ID: 22-006236-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.003	%	NA	< 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	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d9THC	0.258	0.259	0.003	%	0.185	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	

**Abbreviations**

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

**Units of Measure:**





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Revision: 3 Document ID: 3120  
 Legacy ID: CFL-C21 Worksheet Validated 10/30/2020

**Laboratory Pesticide Quality Control Results**

AOAC 2007.1 & EN 15662		Units: mg/Kg			Batch ID: 2204731			
Method Blank		Laboratory Control Sample						
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Abamectin	0.000	< 0.250		1.059	1.000	105.9	50.0	150
Acephate	0.000	< 0.250		0.976	1.000	97.6	60.0	120
Acetaminocyl	0.000	< 1.000		3.040	4.000	76.0	40.0	160
Acetamiprid	0.000	< 0.100		0.401	0.400	100.3	60.0	120
Aldicarb	0.000	< 0.200		0.827	0.800	103.4	60.0	120
Azoxystrobin	0.000	< 0.100		0.411	0.400	102.8	60.0	120
Bifenazate	0.000	< 0.100		0.399	0.400	99.8	60.0	120
Bifenthrin	0.000	< 0.100		0.370	0.400	92.6	50.0	150
Boscalid	0.000	< 0.200		0.808	0.800	100.9	60.0	120
Carbaryl	0.000	< 0.100		0.394	0.400	98.5	60.0	120
Carbofuran	0.000	< 0.100		0.403	0.400	100.7	60.0	120
Chlorantraniliprole	0.000	< 0.100		0.418	0.400	104.5	60.0	120
Chlorfenapyr	0.000	< 0.500		1.888	2.000	94.4	60.0	120
Chlorpyrifos	0.000	< 0.100		0.391	0.400	97.7	60.0	120
Clofentazine	0.000	< 0.100		0.139	0.400	34.8	60.0	120
Cyfluthrin	0.000	< 0.500		1.990	2.000	99.5	50.0	150
Cypermethrin	0.000	< 0.500		1.991	2.000	99.5	50.0	150
Daminozide	0.000	< 0.500		0.612	2.000	30.6	60.0	120
Diazinon	0.000	< 0.100		0.414	0.400	103.4	60.0	120
Dichlorvos	0.000	< 0.500		2.247	2.000	112.4	60.0	120
Dimethoate	0.000	< 0.100		0.409	0.400	102.2	60.0	120
Ethoprophos	0.000	< 0.100		0.417	0.400	104.3	60.0	120
Etofenprox	0.000	< 0.200		0.785	0.800	98.1	50.0	150
Etoxazole	0.000	< 0.100		0.432	0.400	107.9	60.0	120
Fenoxycarb	0.000	< 0.100		0.413	0.400	103.3	60.0	120
Fenpyroximate	0.000	< 0.200		0.815	0.800	101.9	60.0	120
Fipronil	0.000	< 0.200		0.806	0.800	100.8	60.0	120
Fonicamid	0.000	< 0.250		0.952	1.000	95.2	60.0	120
Fludioxonil	0.000	< 0.200		0.803	0.800	100.4	50.0	150
Hexythiazox	0.000	< 0.250		1.004	1.000	100.4	60.0	120
Imazalil	0.000	< 0.100		0.387	0.400	96.6	60.0	120
Imidacloprid	0.000	< 0.200		0.765	0.800	95.6	60.0	120
Kresoxim-methyl	0.000	< 0.200		0.769	0.800	96.2	60.0	120
Malathion	0.000	< 0.100		0.409	0.400	102.3	60.0	120
Metlaxyl	0.000	< 0.100		0.417	0.400	104.2	60.0	120
Methiocarb	0.000	< 0.100		0.395	0.400	98.8	60.0	120
Methomyl	0.000	< 0.200		0.736	0.800	92.0	60.0	120
MGK-264	0.000	< 0.100		0.427	0.400	106.6	50.0	150
Myclobutanil	0.000	< 0.100		0.390	0.400	97.5	60.0	120
Naled	0.000	< 0.250		0.481	1.000	48.1	50.0	150
Oxamyl	0.000	< 0.500		1.831	2.000	91.6	60.0	120
Pacllobutrazole	0.000	< 0.200		0.861	0.800	107.6	60.0	120
Parathion-Methyl	0.000	< 0.200		0.697	0.800	87.2	50.0	150
Permethrin	0.000	< 0.100		0.381	0.400	95.3	50.0	150
Phosmet	0.000	< 0.100		0.413	0.400	103.1	50.0	150
Piperonyl butoxide	0.000	< 0.500		2.209	2.000	110.4	60.0	120
Prallethrin	0.000	< 0.100		0.407	0.400	101.7	60.0	120
Propiconazole	0.000	< 0.200		0.822	0.800	102.8	60.0	120
Propoxur	0.000	< 0.100		0.416	0.400	103.9	60.0	120
Pyrethrin (Summe)	0.000	< 0.100		0.433	0.413	104.8	60.0	120
Pyridaben	0.000	< 0.100		0.398	0.400	99.4	50.0	150
Spirosad	0.000	< 0.100		0.418	0.388	107.8	50.0	150
Spiromesifen	0.000	< 0.100		0.395	0.400	98.7	60.0	120
Spirotetramat	0.000	< 0.100		0.395	0.400	98.7	60.0	120
Spiroxamine	0.000	< 0.200		0.829	0.800	103.6	60.0	120
Tebuconazole	0.000	< 0.200		0.829	0.800	103.6	60.0	120
Thiacloprid	0.000	< 0.100		0.423	0.400	105.7	60.0	120
Thiamethoxam	0.000	< 0.100		0.374	0.400	93.5	60.0	120
Trifloxystrobin	0.000	< 0.100		0.407	0.400	101.8	60.0	120



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Report Number: 22-006238/D003.R000  
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Revision: 3 Document ID: 3120  
Legacy ID: CFL-C21 Worksheet Validated 10/30/2020

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg				Batch ID: 2204731				
Matrix Spike/Matrix Spike Duplicate Recoveries					Sample ID: 22-006239-0001					
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.001	0.942	0.928	1.000	1.4%	< 30	94.1%	92.8%	50 - 150	
Acephate	0.000	1.209	1.209	1.000	0.0%	< 30	120.9%	120.9%	50 - 150	
Acetaminophen	0.000	4.485	4.127	4.000	8.3%	< 30	112.1%	103.2%	50 - 150	
Acetamiprid	0.000	0.488	0.491	0.400	0.7%	< 30	122.0%	122.8%	50 - 150	
Aldicarb	0.000	0.952	0.959	0.800	0.7%	< 30	119.0%	119.9%	50 - 150	
Azoxystrobin	0.000	0.469	0.474	0.400	1.1%	< 30	117.3%	118.6%	50 - 150	
Bifenazate	0.000	0.386	0.407	0.400	5.4%	< 30	96.4%	101.8%	50 - 150	
Bifenthrin	0.000	0.401	0.399	0.400	0.5%	< 30	100.2%	99.6%	50 - 150	
Boscalid	0.000	0.848	0.801	0.800	5.6%	< 30	105.9%	100.2%	50 - 150	
Carbaryl	0.000	0.548	0.556	0.400	1.6%	< 30	137.0%	139.1%	50 - 150	
Carbofuran	0.000	0.469	0.464	0.400	1.0%	< 30	117.2%	116.1%	50 - 150	
Chlorantraniliprole	0.000	0.429	0.429	0.400	0.1%	< 30	107.3%	107.2%	50 - 150	
Chlorfenapyr	0.000	2.066	1.904	2.000	8.1%	< 30	103.3%	95.2%	50 - 150	
Chlorpyrifos	0.000	0.400	0.403	0.400	0.6%	< 30	100.1%	100.7%	50 - 150	
Clofentazine	0.000	0.385	0.401	0.400	4.1%	< 30	96.4%	100.4%	50 - 150	
Cyfluthrin	0.000	2.690	2.842	2.000	5.5%	< 30	134.5%	142.1%	30 - 150	
Cypermethrin	0.000	2.576	2.553	2.000	0.9%	< 30	128.8%	127.7%	50 - 150	
Daminozide	0.000	0.974	0.987	2.000	1.3%	< 30	48.7%	49.3%	30 - 150	
Diazinon	0.000	0.430	0.441	0.400	2.7%	< 30	107.4%	110.3%	50 - 150	
Dichlorvos	0.000	2.303	2.345	2.000	1.8%	< 30	115.2%	117.3%	50 - 150	
Dimethoate	0.000	0.493	0.498	0.400	1.2%	< 30	123.2%	124.6%	50 - 150	
Ethoprophos	0.000	0.435	0.452	0.400	3.8%	< 30	108.7%	112.9%	50 - 150	
Etofenprox	0.000	0.853	0.854	0.800	0.2%	< 30	106.6%	106.8%	50 - 150	
Etoxazole	0.000	0.420	0.422	0.400	0.5%	< 30	105.0%	105.5%	50 - 150	
Fenoxycarb	0.000	0.493	0.503	0.400	2.1%	< 30	123.2%	125.8%	50 - 150	
Fenpyroximate	0.000	0.963	0.995	0.800	3.3%	< 30	120.3%	124.4%	50 - 150	
Fipronil	0.000	1.387	1.388	0.800	0.1%	< 30	173.4%	173.6%	50 - 150	Q
Flonicamid	0.000	1.005	1.165	1.000	14.7%	< 30	100.5%	116.5%	50 - 150	
Fludioxonil	0.000	0.742	0.783	0.800	5.4%	< 30	92.7%	97.9%	50 - 150	
Hexythiazox	0.000	1.121	1.132	1.000	1.0%	< 30	112.1%	113.2%	50 - 150	
Imazalil	0.000	0.445	0.450	0.400	1.0%	< 30	111.4%	112.5%	50 - 150	
Imidacloprid	0.000	0.657	0.686	0.800	4.4%	< 30	82.1%	85.8%	50 - 150	
Kresoxim-methyl	0.000	0.833	0.871	0.800	4.5%	< 30	104.1%	108.9%	50 - 150	
Malathion	0.000	0.458	0.463	0.400	1.1%	< 30	114.6%	115.9%	50 - 150	
Metaxalyl	0.000	0.463	0.462	0.400	0.3%	< 30	115.7%	115.4%	50 - 150	
Methiocarb	0.000	0.438	0.436	0.400	0.5%	< 30	109.6%	109.0%	50 - 150	
Methomyl	0.000	0.794	0.782	0.800	1.6%	< 30	99.3%	97.7%	50 - 150	
MGK-264	0.000	0.583	0.575	0.400	1.4%	< 30	145.8%	143.7%	50 - 150	
Myclobutanil	0.000	0.435	0.450	0.400	3.3%	< 30	108.8%	112.4%	50 - 150	
Naled	0.000	1.266	1.289	1.000	1.8%	< 30	126.6%	128.9%	50 - 150	
Oxamyl	0.000	1.881	1.891	2.000	0.5%	< 30	94.1%	94.5%	50 - 150	
Pacllobutrazole	0.000	1.338	1.316	0.800	1.7%	< 30	167.3%	164.5%	50 - 150	Q
Parathion-Methyl	0.000	0.832	0.906	0.800	8.6%	< 30	103.9%	113.2%	30 - 150	
Permethrin	0.000	0.399	0.411	0.400	2.8%	< 30	99.9%	102.7%	50 - 150	
Phosmet	0.000	0.454	0.493	0.400	8.2%	< 30	113.6%	123.3%	50 - 150	
Piperonyl butoxide	0.000	2.231	2.309	2.000	3.4%	< 30	111.6%	115.4%	50 - 150	
Prallethrin	0.000	0.599	0.604	0.400	0.9%	< 30	149.7%	151.0%	50 - 150	Q
Propiconazole	0.000	1.318	1.328	0.800	0.8%	< 30	164.8%	166.0%	50 - 150	Q
Propoxur	0.000	0.488	0.497	0.400	1.9%	< 30	121.9%	124.2%	50 - 150	
Pyrethrin (Summe)	0.000	0.446	0.455	0.413	2.1%	< 30	108.0%	110.3%	50 - 150	
Pyridaben	0.000	0.550	0.569	0.400	3.2%	< 30	137.6%	142.1%	50 - 150	
Spirosad	0.000	0.462	0.458	0.388	0.8%	< 30	119.1%	118.1%	50 - 150	
Spiromesifen	0.000	0.491	0.501	0.400	2.0%	< 30	122.9%	125.4%	50 - 150	
Spirotetramat	0.000	0.314	0.313	0.400	0.2%	< 30	78.4%	78.2%	50 - 150	
Spiroxamine	0.000	0.945	0.931	0.800	1.5%	< 30	118.2%	116.4%	50 - 150	
Tebuconazole	0.000	1.231	1.210	0.800	1.7%	< 30	153.8%	151.3%	50 - 150	Q
Thiacloprid	0.000	0.501	0.518	0.400	3.5%	< 30	125.1%	129.6%	50 - 150	
Thiamethoxam	0.000	0.420	0.417	0.400	0.6%	< 30	104.9%	104.3%	50 - 150	
Trifloxystrobin	0.000	0.428	0.432	0.400	1.0%	< 30	107.0%	108.1%	50 - 150	



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**Report Number:** 22-006238/D003.R000  
**Report Date:** 06/07/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/31/22 10:44

Revision: Document ID:  
Legacy ID: Effective:

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2204806					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		391	572	µg/g	68.4	60 - 120	
Isobutane	ND	< 200		538	731	µg/g	73.6	60 - 120	
Butane	ND	< 200		521	731	µg/g	71.3	60 - 120	
2,2-Dimethylpropane	ND	< 200		642	936	µg/g	68.6	60 - 120	
Methanol	ND	< 200		1350	1650	µg/g	81.8	60 - 120	
Ethylene Oxide	ND	< 30		44.6	56.2	µg/g	79.4	60 - 120	
2-Methylbutane	ND	< 200		1370	1620	µg/g	84.6	60 - 120	
Pentane	ND	< 200		1350	1610	µg/g	83.9	60 - 120	
Ethanol	ND	< 200		1260	1620	µg/g	77.8	70 - 130	
Ethyl Ether	ND	< 200		1320	1600	µg/g	82.5	60 - 120	
2,2-Dimethylbutane	ND	< 30		137	167	µg/g	82.0	60 - 120	
Acetone	ND	< 200		1380	1620	µg/g	85.2	60 - 120	
2-Propanol	ND	< 200		1260	1610	µg/g	78.3	60 - 120	
Acetonitrile	ND	< 100		527	635	µg/g	83.0	60 - 120	
2,3-Dimethylbutane	ND	< 30		149	177	µg/g	84.2	60 - 120	
Dichloromethane	ND	< 60		447	498	µg/g	89.8	60 - 120	
2-Methylpentane	ND	< 30		135	166	µg/g	81.3	60 - 120	
3-Methylpentane	ND	< 30		141	175	µg/g	80.6	60 - 120	
Hexane	ND	< 30		139	174	µg/g	79.9	60 - 120	
Ethyl acetate	ND	< 200		1310	1610	µg/g	81.4	60 - 120	
2-Butanol	ND	< 200		1260	1620	µg/g	77.8	60 - 120	
Tetrahydrofuran	ND	< 100		414	507	µg/g	81.7	60 - 120	
Cyclohexane	ND	< 200		1320	1610	µg/g	82.0	60 - 120	
Benzene	ND	< 1		4.23	5.22	µg/g	81.0	60 - 120	
Isopropyl Acetate	ND	< 200		1300	1610	µg/g	80.7	60 - 120	
Heptane	ND	< 200		1310	1610	µg/g	81.4	60 - 120	
1,4-Dioxane	ND	< 100		411	508	µg/g	80.9	60 - 120	
2-Ethoxyethanol	ND	< 30		116	165	µg/g	70.3	60 - 120	
Ethylene Glycol	ND	< 200		356	492	µg/g	72.4	60 - 120	
Toluene	ND	< 100		395	497	µg/g	79.5	60 - 120	
Ethylbenzene	ND	< 200		786	980	µg/g	80.2	60 - 120	
m,p-Xylene	ND	< 200		786	985	µg/g	79.8	60 - 120	
o-Xylene	ND	< 200		776	965	µg/g	80.4	60 - 120	
Cumene	ND	< 30		130	168	µg/g	77.4	60 - 120	



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QC - Sample Duplicate			Sample ID: 22-006238-0001					
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	
Tetrahydrofuran	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	
Toluene	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	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.