

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU	BATCH #	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	
PRODUCT NAME	SERVING SIZE		
LABORATORY :	OREGON ACCREDITATION: OR100028		
POTENCY	PER SERVING	PER GRAM	Percent
Cannabidiol (CBD)	mg/serving	mg/g	%
Total THC (d9-THC, THCA)	mg/serving	mg/g	%
Cannabigerol (CBG)	mg/serving	mg/g	%
Cannabinol (CBN)	mg/serving	mg/g	%
Cannabichromene (CBC)	mg/serving	mg/g	%
Tetrahydrocannabinolic Acid (THCA)	mg/serving	mg/g	%
Delta-9-THC (d9-THC)	mg/serving	mg/g	%
Delta-8-THC (d8-THC)	mg/serving	mg/g	%
HEAVY METALS	PER SERVING	PER GRAM	REGULATORY ACTION LEVEL
Arsenic	µg/serving	µg/g	10 µg/day ^[1]
Cadmium	µg/serving	µg/g	4.1 µg/day ^[1]
Lead	µg/serving	µg/g	6 µg/day ^[1]
Mercury	µg/serving	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*	µg/g	50,000 mg/day	
Heptane	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.



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



Report Number: 23-007980/D005.R000
Report Date: 07/19/2023
ORELAP#: OR100028
Purchase Order: 2545167
Received: 07/06/23 16:16

Customer: Etz Hayim Holdings
Product identity: FORM-TN.ISO.SBH50-FG05
Client/Metric ID: .
Laboratory ID: 23-007980-0001

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status	
CBD per 1g	53.6		mg/1g		CBD-Total per Serving Size 53.6 mg/1g
CBDV per 1g	0.201		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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Received: 07/06/23 16:16

Customer: Etz Hayim Holdings
16427 NE Airport Way
PORTLAND 97230
United States of America (USA)
Product identity: FORM-TN.ISO.SBH50-FG05
Client/Metric ID: .
Sample Date:
Laboratory ID: 23-007980-0001
Evidence of Cooling: No
Temp: 27.8 °C
Relinquished by: client
Serving Size #1: 1 g

Sample Results

Potency per 1g		Method: J AOAC 2015 V98-6 (mod) ^b	Units mg/se	Batch: 2308898	Analyze: 7/7/23 8:23:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	< LOQ		mg/1g	0.0333	
CBC-A per 1g	< LOQ		mg/1g	0.0333	
CBC-Total per 1g	< LOQ		mg/1g	0.0624	
CBD per 1g	53.6		mg/1g	0.333	
CBD-A per 1g	< LOQ		mg/1g	0.0333	
CBD-Total per 1g	53.6		mg/1g	0.362	
CBDV per 1g	0.201		mg/1g	0.0333	
CBDV-A per 1g	< LOQ		mg/1g	0.0333	
CBDV-Total per 1g	0.201		mg/1g	0.0621	
CBE per 1g	< LOQ		mg/1g	0.0333	
CBG per 1g	< LOQ		mg/1g	0.0333	
CBG-A per 1g	< LOQ		mg/1g	0.0333	
CBG-Total per 1g	< LOQ		mg/1g	0.0621	
CBL per 1g	< LOQ		mg/1g	0.0333	
CBL-A per 1g	< LOQ		mg/1g	0.0333	
CBL-Total per 1g	< LOQ		mg/1g	0.0624	
CBN per 1g	< LOQ		mg/1g	0.0333	
CBT per 1g	< LOQ		mg/1g	0.0333	
Δ8-THCV per 1g	< LOQ		mg/1g	0.0333	
Δ10-THC-9R per 1g	< LOQ		mg/1g	0.0333	
Δ10-THC-9S per 1g	< LOQ		mg/1g	0.0333	
Δ10-THC-Total per 1g	< LOQ		mg/1g	0.0665	
Δ8-THC per 1g	< LOQ		mg/1g	0.0333	
Δ9-THC per 1g	< LOQ		mg/1g	0.0333	
delta-9-THCP per 1g	< LOQ		mg/1g	0.0333	
exo-THC per 1g	< LOQ		mg/1g	0.0333	
THC-A per 1g	< LOQ		mg/1g	0.0333	
THC-Total per 1g	< LOQ		mg/1g	0.0624	
THCV per 1g	< LOQ		mg/1g	0.0333	
THCV-A per 1g	< LOQ		mg/1g	0.0333	



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Potency per 1g	Method: J AOAC 2015 V98-6 (mod) ^b		Units mg/se	Batch: 2308898	Analyze: 7/7/23 8:23:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
THCV-Total per 1g	< LOQ		mg/1g	0.0625	
Total Cannabinoids per 1g	53.8		mg/1g		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2309057	07/16/23 AOAC 991.14 (Petrifilm) ^b		
Total Coliforms	< LOQ		cfu/g	10	2309057	07/16/23 AOAC 991.14 (Petrifilm) ^b		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2309058	07/16/23 AOAC 2014.05 (RAPID) ^b		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2309058	07/16/23 AOAC 2014.05 (RAPID) ^b		

Solvents	Method: Residual Solvents by GC/MS ^b					Units µg/g	Batch 2309178	Analyze 07/18/23 10:30 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-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		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) ^b										
Units mg/kg Batch 2309141 Analyze 07/17/23 01:17 PM										
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status
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		Etiozazole [¥]	< 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	0.0969	2309192	07/17/23	AOAC 2013.06 (mod.) ^b	pass		
Cadmium [¥]	< LOQ	0.200	mg/kg	0.0969	2309192	07/17/23	AOAC 2013.06 (mod.) ^b	pass		
Lead [¥]	< LOQ	0.500	mg/kg	0.0969	2309192	07/17/23	AOAC 2013.06 (mod.) ^b	pass		
Mercury [¥]	< LOQ	0.100	mg/kg	0.0485	2309192	07/17/23	AOAC 2013.06 (mod.) ^b	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.

Ⓟ = 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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Revision: 4 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V986 Batch ID: 2308898

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% RPD	Limits	Evaluation	Notes	
CBDVA	2	0.0314	0.0316	%	99.5	80.0 - 120	Acceptable		
CBDV	2	0.0314	0.0315	%	99.6	80.0 - 120	Acceptable		
CBE	2	0.0343	0.0348	%	98.6	80.0 - 120	Acceptable		
CBDA	1	0.0310	0.0325	%	95.3	90.0 - 110	Acceptable		
CBGA	1	0.0310	0.0326	%	95.1	80.0 - 120	Acceptable		
CBG	1	0.0315	0.0332	%	94.9	80.0 - 120	Acceptable		
CBD	1	0.0324	0.0337	%	96.1	90.0 - 110	Acceptable		
THCV	2	0.0234	0.0236	%	98.8	80.0 - 120	Acceptable		
d8THCV	2	0.0275	0.0279	%	98.7	80.0 - 120	Acceptable		
THCVA	2	0.0301	0.0308	%	97.9	80.0 - 120	Acceptable		
CBN	1	0.0322	0.0340	%	94.7	80.0 - 120	Acceptable		
exo-THC	2	0.0277	0.0283	%	97.8	80.0 - 120	Acceptable		
d9THC	1	0.0319	0.0329	%	96.9	90.0 - 110	Acceptable		
d8THC	1	0.0301	0.0320	%	94.1	90.0 - 110	Acceptable		
9S-d10THC	1	0.0327	0.0343	%	95.5	80.0 - 120	Acceptable		
CBL	2	0.0306	0.0311	%	98.2	80.0 - 120	Acceptable		
9R-d10THC	1	0.0296	0.0313	%	94.6	80.0 - 120	Acceptable		
CBC	2	0.0289	0.0293	%	98.7	80.0 - 120	Acceptable		
THCA	1	0.0305	0.0322	%	94.6	90.0 - 110	Acceptable		
CBCA	2	0.0317	0.0320	%	99.1	80.0 - 120	Acceptable		
CBLA	2	0.0301	0.0302	%	99.5	80.0 - 120	Acceptable		
d9THCP	2	0.0316	0.0326	%	97.1	80.0 - 120	Acceptable		
CBT	2	0.0320	0.0326	%	98.3	80.0 - 120	Acceptable		

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBDV	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBE	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBDA	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBGA	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBG	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBD	<LOQ	0.00313	%	< 0.00313	Acceptable	
THCV	<LOQ	0.00313	%	< 0.00313	Acceptable	
d8THCV	<LOQ	0.00313	%	< 0.00313	Acceptable	
THCVA	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBN	<LOQ	0.00313	%	< 0.00313	Acceptable	
exo-THC	<LOQ	0.00313	%	< 0.00313	Acceptable	
d9THC	<LOQ	0.00313	%	< 0.00313	Acceptable	
d8THC	<LOQ	0.00313	%	< 0.00313	Acceptable	
9S-d10THC	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBL	<LOQ	0.00313	%	< 0.00313	Acceptable	
9R-d10THC	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBC	<LOQ	0.00313	%	< 0.00313	Acceptable	
THCA	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBCA	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBLA	<LOQ	0.00313	%	< 0.00313	Acceptable	
d9THCP	<LOQ	0.00313	%	< 0.00313	Acceptable	
CBT	<LOQ	0.00313	%	< 0.00313	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 Quality Control Results

JAOAC2015 V986							
Batch ID: 2308898							
Sample Duplicate							
Sample ID: 23-0079340001							
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation
CBDVA	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBDV	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBE	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBD	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBGA	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBG	17.8	18.4	0.00308	%	3.77	< 20	Acceptable
CBD	0.0490	0.0549	0.00308	%	11.4	< 20	Acceptable
THCV	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
d8THCV	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
THCVA	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBN	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
exo-THC	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
d9THC	0.00386	0.00388	0.00308	%	0.528	< 20	Acceptable
d8THC	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
9S-d10THC	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBL	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
9R-d10THC	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBC	0.00529	0.00548	0.00308	%	3.51	< 20	Acceptable
THCA	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBCA	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBLA	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
d9THCP	<LOQ	<LOQ	0.00308	%	NA	< 20	Acceptable
CBT	0.0131	0.0130	0.00308	%	0.816	< 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: 2309141			
Method Blank			Laboratory Control Sample					
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Abamectin	0.000	< 0.250		1.028	1.000	102.8	50.0 150	
Acephate	0.033	< 0.200		0.763	0.800	95.4	60.0 120	
Acequinocyl	0.000	< 1.000		4.296	4.000	107.4	40.0 160	
Acetamiprid	0.000	< 0.100		0.397	0.400	99.3	60.0 120	
Aldicarb	0.000	< 0.200		0.865	0.800	108.1	60.0 120	
Azoxystrobin	0.000	< 0.100		0.391	0.400	97.7	60.0 120	
Bifenazate	0.000	< 0.100		0.413	0.400	103.1	60.0 120	
Bifenthrin	0.000	< 0.100		0.413	0.400	103.2	50.0 150	
Boscalid	0.000	< 0.200		0.809	0.800	101.1	60.0 120	
Carbaryl	0.000	< 0.100		0.409	0.400	102.2	60.0 120	
Carbofuran	0.000	< 0.100		0.406	0.400	101.5	60.0 120	
Chlorantraniliprole	0.000	< 0.100		0.424	0.400	106.1	60.0 120	
Chlorfenapyr	0.000	< 0.500		1.815	2.000	90.8	60.0 120	
Chlorpyrifos	0.005	< 0.100		0.345	0.400	86.2	60.0 120	
Clofentezine	0.000	< 0.100		0.377	0.400	94.2	60.0 120	
Cyfluthrin	0.000	< 0.500		2.263	2.000	113.1	50.0 150	
Cypermethrin	0.000	< 0.500		2.020	2.000	101.0	50.0 150	
Daminozide	0.000	< 0.500		0.829	2.000	41.4	60.0 120	Q6
Diazinon	0.000	< 0.100		0.432	0.400	107.9	60.0 120	
Dichlorvos	0.000	< 0.500		1.894	2.000	94.7	60.0 120	
Dimethoate	0.000	< 0.100		0.387	0.400	96.8	60.0 120	
Ethoprophos	0.000	< 0.100		0.386	0.400	96.6	60.0 120	
Etofenprox	0.000	< 0.200		0.819	0.800	102.3	50.0 150	
Etoxazole	0.000	< 0.100		0.440	0.400	110.0	60.0 120	
Fenoxycarb	0.000	< 0.100		0.424	0.400	106.1	60.0 120	
Fenpyroximate	0.000	< 0.200		0.834	0.800	104.3	60.0 120	
Fipronil	0.000	< 0.200		0.869	0.800	108.7	60.0 120	
Flonicamid	0.000	< 0.250		0.973	1.000	97.3	60.0 120	
Fludioxonil	0.000	< 0.200		0.785	0.800	98.2	50.0 150	
Hexythiazox	0.000	< 0.250		1.010	1.000	101.0	60.0 120	
Imazalil	0.000	< 0.100		0.417	0.400	104.2	60.0 120	
Imidacloprid	0.000	< 0.200		0.796	0.800	99.4	60.0 120	
Kresoxin-methyl	0.000	< 0.200		0.875	0.800	109.4	60.0 120	
Malathion	0.000	< 0.100		0.411	0.400	102.7	60.0 120	
Metaxalyl	0.000	< 0.100		0.429	0.400	107.2	60.0 120	
Methiocarb	0.000	< 0.100		0.422	0.400	105.5	60.0 120	
Methomyl	0.000	< 0.200		0.801	0.800	100.1	60.0 120	
MGK-264	0.000	< 0.100		0.403	0.400	100.8	50.0 150	
Myclobutanil	0.000	< 0.100		0.421	0.400	105.3	60.0 120	
Naled	0.000	< 0.250		1.020	1.000	102.0	50.0 150	
Oxamyl	0.000	< 0.500		1.918	2.000	95.9	60.0 120	
Paclobutrazole	0.000	< 0.200		0.884	0.800	110.5	60.0 120	
Parathion-Methyl	0.000	< 0.100		0.455	0.400	113.8	50.0 150	
Permethrin	0.000	< 0.100		0.396	0.400	99.0	50.0 150	
Phosmet	0.000	< 0.100		0.426	0.400	106.4	50.0 150	
Piperonyl butoxide	0.000	< 0.500		2.154	2.000	107.7	60.0 120	
Prallethrin	0.000	< 0.100		0.433	0.400	108.2	60.0 120	
Propiconazole	0.000	< 0.200		0.837	0.800	104.6	60.0 120	
Propoxur	0.000	< 0.100		0.400	0.400	99.9	60.0 120	
Pyrethrin (Summe)	0.000	< 0.100		0.516	0.488	105.8	60.0 120	
Pyridaben	0.000	< 0.100		0.407	0.400	101.8	50.0 150	
Spinosad	0.000	< 0.100		0.416	0.388	107.2	50.0 150	
Spiromesifen	0.000	< 0.100		0.379	0.400	94.9	60.0 120	
Spirotetramat	0.000	< 0.100		0.386	0.400	96.6	60.0 120	
Spiroxamine	0.000	< 0.200		0.833	0.800	104.1	60.0 120	
Tebuconazole	0.000	< 0.200		0.845	0.800	105.6	60.0 120	
Thiacloprid	0.000	< 0.100		0.422	0.400	105.4	60.0 120	
Thiamethoxam	0.000	< 0.100		0.413	0.400	103.3	60.0 120	
Trifloxystrobin	0.000	< 0.100		0.412	0.400	103.1	60.0 120	

Q6



12423 NE Whitaker Way
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503-254-1794



Report Number: 23-007980/D005.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: 2309141					
Matrix Spike/Matrix Spike Duplicate Recoveries							Sample ID: 23-008297-0001				
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes	
Abamectin	0.000	1.141	1.114	1.000	2.4%	< 30	114.1%	111.4%	50 - 150		
Acephate	0.022	0.750	0.745	0.800	0.7%	< 30	91.1%	90.4%	50 - 150		
Acequinocyl	0.000	4.421	4.258	4.000	3.8%	< 30	110.5%	106.5%	50 - 150		
Acetamiprid	0.000	0.408	0.402	0.400	1.4%	< 30	101.9%	100.5%	50 - 150		
Aldicarb	0.000	0.894	0.899	0.800	0.5%	< 30	111.8%	112.3%	50 - 150		
Azoxystrobin	0.000	0.413	0.400	0.400	3.2%	< 30	103.3%	100.1%	50 - 150		
Bifenazate	0.000	0.404	0.411	0.400	1.8%	< 30	101.0%	102.8%	50 - 150		
Bifenthrin	0.000	0.444	0.414	0.400	6.8%	< 30	110.9%	103.6%	50 - 150		
Boscalid	0.000	0.778	0.874	0.800	11.6%	< 30	97.3%	109.3%	50 - 150		
Carbaryl	0.000	0.410	0.401	0.400	2.0%	< 30	102.4%	100.4%	50 - 150		
Carbofuran	0.000	0.400	0.402	0.400	0.4%	< 30	100.0%	100.4%	50 - 150		
Chlorantraniliprole	0.000	0.426	0.436	0.400	2.2%	< 30	106.6%	109.0%	50 - 150		
Chlorfenapyr	0.000	2.225	2.009	2.000	10.2%	< 30	111.2%	100.5%	50 - 150		
Chlorpyrifos	0.004	0.347	0.342	0.400	1.4%	< 30	85.7%	84.4%	50 - 150		
Clofentezine	0.000	0.368	0.359	0.400	2.6%	< 30	92.0%	89.7%	50 - 150		
Cyfluthrin	0.000	2.449	2.434	2.000	0.6%	< 30	122.5%	121.7%	30 - 150		
Cypermethrin	0.000	2.214	2.169	2.000	2.1%	< 30	110.7%	108.5%	50 - 150		
Daminozide	0.000	0.865	0.861	2.000	0.5%	< 30	43.3%	43.1%	30 - 150		
Diazinon	0.000	0.446	0.442	0.400	1.0%	< 30	111.5%	110.4%	50 - 150		
Dichlorvos	0.000	1.883	1.875	2.000	0.4%	< 30	94.2%	93.8%	50 - 150		
Dimethoate	0.000	0.432	0.404	0.400	6.6%	< 30	107.9%	101.0%	50 - 150		
Ethoprophos	0.000	0.406	0.385	0.400	5.3%	< 30	101.6%	96.3%	50 - 150		
Etofenprox	0.000	0.850	0.844	0.800	0.7%	< 30	106.3%	105.5%	50 - 150		
Etoxazole	0.000	0.465	0.479	0.400	2.8%	< 30	116.3%	119.6%	50 - 150		
Fenoxycarb	0.000	0.430	0.423	0.400	1.5%	< 30	107.4%	105.8%	50 - 150		
Fenpyroximate	0.000	0.897	0.866	0.800	3.5%	< 30	112.1%	108.2%	50 - 150		
Fipronil	0.000	0.868	0.878	0.800	1.2%	< 30	108.5%	109.8%	50 - 150		
Fonicamid	0.000	1.159	1.083	1.000	6.8%	< 30	115.9%	108.3%	50 - 150		
Fludioxonil	0.000	0.751	0.763	0.800	1.5%	< 30	93.9%	95.3%	50 - 150		
Hexythiazox	0.000	1.014	0.988	1.000	2.6%	< 30	101.4%	98.8%	50 - 150		
Imazalil	0.000	0.407	0.417	0.400	2.5%	< 30	101.6%	104.2%	50 - 150		
Imidacloprid	0.000	0.837	0.736	0.800	12.8%	< 30	104.7%	92.0%	50 - 150		
Kresoxim-methyl	0.000	0.841	0.839	0.800	0.2%	< 30	105.1%	104.9%	50 - 150		
Malathion	0.000	0.412	0.398	0.400	3.6%	< 30	103.1%	99.5%	50 - 150		
Metaxal	0.000	0.433	0.444	0.400	2.4%	< 30	108.4%	111.0%	50 - 150		
Methiocarb	0.000	0.422	0.429	0.400	1.8%	< 30	105.4%	107.4%	50 - 150		
Methomyl	0.000	0.922	0.811	0.800	12.8%	< 30	115.3%	101.4%	50 - 150		
MGK-264	0.000	0.454	0.411	0.400	9.9%	< 30	113.6%	102.8%	50 - 150		
Myclobutanil	0.000	0.418	0.407	0.400	2.7%	< 30	104.5%	101.7%	50 - 150		
Naled	0.000	0.996	1.007	1.000	1.1%	< 30	99.6%	100.7%	50 - 150		
Oxamyl	0.000	2.307	1.847	2.000	22.1%	< 30	115.3%	92.3%	50 - 150		
Paclobutrazole	0.000	0.869	0.891	0.800	2.5%	< 30	108.6%	111.4%	50 - 150		
Parathion-Methyl	0.000	0.448	0.551	0.400	20.8%	< 30	111.9%	137.8%	30 - 150		
Permethrin	0.000	0.408	0.396	0.400	3.1%	< 30	102.1%	99.0%	50 - 150		
Phosmet	0.000	0.432	0.433	0.400	0.2%	< 30	108.1%	108.3%	50 - 150		
Piperonyl butoxide	0.000	2.183	2.241	2.000	2.6%	< 30	109.1%	112.0%	50 - 150		
Prallethrin	0.000	0.429	0.417	0.400	2.8%	< 30	107.3%	104.3%	50 - 150		
Propiconazole	0.000	0.848	0.824	0.800	2.8%	< 30	106.0%	103.1%	50 - 150		
Propoxur	0.000	0.392	0.388	0.400	1.1%	< 30	97.9%	96.9%	50 - 150		
Pyrethrin (Summe)	0.000	0.527	0.514	0.488	2.5%	< 30	108.0%	105.3%	50 - 150		
Pyridaben	0.000	0.433	0.414	0.400	4.6%	< 30	108.3%	103.5%	50 - 150		
Spinosad	0.000	0.433	0.425	0.388	1.7%	< 30	111.6%	109.7%	50 - 150		
Spiromesifen	0.000	0.409	0.398	0.400	2.9%	< 30	102.4%	99.5%	50 - 150		
Spirotetramat	0.000	0.395	0.391	0.400	1.2%	< 30	98.8%	97.6%	50 - 150		
Spiroxamine	0.000	0.875	0.826	0.800	5.7%	< 30	109.3%	103.3%	50 - 150		
Tebuconazole	0.000	0.861	0.855	0.800	0.7%	< 30	107.6%	106.9%	50 - 150		
Thiacloprid	0.000	0.418	0.425	0.400	1.6%	< 30	104.6%	106.3%	50 - 150		
Thiamethoxam	0.000	0.511	0.444	0.400	14.0%	< 30	127.7%	111.0%	50 - 150		
Trifloxystrobin	0.000	0.425	0.416	0.400	2.1%	< 30	106.2%	104.0%	50 - 150		



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Revision: 2 Document ID: 7087
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Laboratory Quality Control Results

Residual Solvents				Batch ID: 2309178					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		597	584	µg/g	102.2	60 - 120	
Isobutane	ND	< 200		785	767	µg/g	102.3	60 - 120	
Butane	ND	< 200		782	782	µg/g	100.0	60 - 120	
2,2-Dimethylpropane	ND	< 200		961	939	µg/g	102.3	60 - 120	
Methanol	ND	< 200		1550	1640	µg/g	94.5	60 - 120	
Ethylene Oxide	ND	< 30		67.7	57.1	µg/g	118.6	60 - 120	
2-Methylbutane	ND	< 200		1430	1600	µg/g	89.4	60 - 120	
Pentane	ND	< 200		1460	1620	µg/g	90.1	60 - 120	
Ethanol	ND	< 200		1600	1610	µg/g	99.4	70 - 130	
Ethyl Ether	ND	< 200		1480	1610	µg/g	91.9	60 - 120	
2,2-Dimethylbutane	ND	< 30		158	168	µg/g	94.0	60 - 120	
Acetone	ND	< 200		1520	1620	µg/g	93.8	60 - 120	
2-Propanol	ND	< 200		1580	1600	µg/g	98.8	60 - 120	
Ethyl Formate	ND	< 500		1460	1600	µg/g	91.3	70 - 130	
Acetonitrile	ND	< 100		440	484	µg/g	90.9	60 - 120	
Methyl Acetate	ND	< 500		1650	1610	µg/g	102.5	70 - 130	
2,3-Dimethylbutane	ND	< 30		148	162	µg/g	91.4	60 - 120	
Dichloromethane	ND	< 60		446	483	µg/g	92.3	60 - 120	
2-Methylpentane	ND	< 30		159	174	µg/g	91.4	60 - 120	
MTBE	ND	< 500		1630	1610	µg/g	101.2	70 - 130	
3-Methylpentane	ND	< 30		163	168	µg/g	97.0	60 - 120	
Hexane	ND	< 30		154	168	µg/g	91.7	60 - 120	
1-Propanol	ND	< 500		1760	1600	µg/g	110.0	70 - 130	
Methylethylketone	ND	< 500		1650	1620	µg/g	101.9	70 - 130	
Ethyl acetate	ND	< 200		1500	1600	µg/g	93.8	60 - 120	
2-Butanol	ND	< 200		1590	1600	µg/g	99.4	60 - 120	
Tetrahydrofuran	ND	< 100		475	514	µg/g	92.4	60 - 120	
Cyclohexane	ND	< 200		1490	1600	µg/g	93.1	60 - 120	
2-methyl-1-propanol	ND	< 500		1860	1610	µg/g	115.5	70 - 130	
Benzene	ND	< 1		3.89	5.12	µg/g	76.0	60 - 120	
Isopropyl Acetate	ND	< 200		1520	1620	µg/g	93.8	60 - 120	
Heptane	ND	< 200		1480	1610	µg/g	91.9	60 - 120	
1-Butanol	ND	< 500		1850	1600	µg/g	115.6	70 - 130	
Propyl Acetate	ND	< 500		1640	1600	µg/g	102.5	70 - 130	
1,4-Dioxane	ND	< 100		456	493	µg/g	92.5	60 - 120	
2-Ethoxyethanol	ND	< 30		155	163	µg/g	95.1	60 - 120	
Methylisobutylketone	ND	< 500		1660	1600	µg/g	103.8	70 - 130	
3-Methyl-1-butanol	ND	< 500		1830	1610	µg/g	113.7	70 - 130	
Ethylene Glycol	ND	< 200		257	483	µg/g	53.2	60 - 120	Q6
Toluene	ND	< 100		440	493	µg/g	89.2	60 - 120	
Isobutyl Acetate	ND	< 500		1640	1600	µg/g	102.5	70 - 130	
1-Pentanol	ND	< 500		1930	1600	µg/g	120.6	70 - 130	
Butyl Acetate	ND	< 500		1620	1600	µg/g	101.3	70 - 130	
Ethylbenzene	ND	< 200		870	969	µg/g	89.8	60 - 120	
m,p-Xylene	ND	< 200		856	968	µg/g	88.4	60 - 120	
o-Xylene	ND	< 200		877	976	µg/g	89.9	60 - 120	
Cumene	ND	< 30		147	162	µg/g	90.7	60 - 120	
Anisole	ND	< 500		1560	1610	µg/g	96.9	70 - 130	
DMSO	ND	< 500		1760	1610	µg/g	109.3	70 - 130	
1,2-dimethoxyethane	ND	< 50		163	164	µg/g	99.4	70 - 130	
Triethylamine	ND	< 500		1590	1600	µg/g	99.4	70 - 130	
N,N-dimethylformamide	ND	< 150		523	484	µg/g	108.1	70 - 130	
N,N-dimethylacetamide	ND	< 150		494	489	µg/g	101.0	70 - 130	
Pyridine	ND	< 50		143	172	µg/g	83.1	70 - 130	
Sulfolane	ND	< 50		116	163	µg/g	71.2	70 - 130	



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QC - Sample Duplicate				Sample ID: 23-007980-0001			
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/Fail
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
MTBE	ND	ND	500	µg/g	0.0	< 20	Acceptable
3-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable
Hexane	ND	ND	30	µg/g	0.0	< 20	Acceptable
1-Propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable
Methyl ethyl ketone	ND	ND	500	µg/g	0.0	< 20	Acceptable
Ethyl acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable
2-Butanol	ND	ND	200	µg/g	0.0	< 20	Acceptable
Tetrahydrofuran	ND	ND	100	µg/g	0.0	< 20	Acceptable
Cyclohexane	ND	ND	200	µg/g	0.0	< 20	Acceptable
2-methyl-1-propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable
Benzene	ND	ND	1	µg/g	0.0	< 20	Acceptable
Isopropyl Acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable
Heptane	ND	ND	200	µg/g	0.0	< 20	Acceptable
1-Butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable
Propyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable
1,4-Dioxane	ND	ND	100	µg/g	0.0	< 20	Acceptable
2-Ethoxyethanol	ND	ND	30	µg/g	0.0	< 20	Acceptable
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
Toluene	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
Triethylamine	ND	ND	500	µg/g	0.0	< 20	Acceptable
N,N-dimethylformamide	ND	ND	150	µg/g	0.0	< 20	Acceptable
N,N-dimethylacetamide	ND	ND	150	µg/g	0.0	< 20	Acceptable
Pyridine	ND	ND	50	µg/g	0.0	< 20	Acceptable
Sulfolane	ND	ND	50	µg/g	0.0	< 20	Acceptable

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation
Q6 - Quality control outside QC limits. Data acceptable based on remaining QC.

Units of Measure:

µg/g- Microgram per gram or ppm



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Report Number: 23-007980/D005.R000
Report Date: 07/19/2023
ORELAP#: OR100028
Purchase Order: 2545167
Received: 07/06/23 16:16





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.