

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU	BATCH #	LOQ: Limit Of Quantitation	
PRODUCT NAME	SERVING SIZE	LOD: Limit Of Detection	
LABORATORY :	OREGON ACCREDITATION: OR100028	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)	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: 23-007387/D012.R000
Report Date: 07/05/2023
ORELAP#: OR100028
Purchase Order:
Received: 06/21/23 16:24

Customer: Etz Hayim Holdings
Product identity: FORM-TN.O.FS.CM50-FE29
Client/Metric ID: .
Laboratory ID: 23-007387-0002

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status	
CBC per 1g	4.65		mg/1g		CBD-Total per Serving Size 56.4 mg/1g
CBD per 1g	56.4		mg/1g		
CBDV per 1g	0.667		mg/1g		THC-Total per Serving Size 1.98 mg/1g
CBE per 1g	1.01		mg/1g		(Reported in milligrams per serving)
CBG per 1g	2.33		mg/1g		
CBL per 1g	0.378		mg/1g		
CBN per 1g	0.0465		mg/1g		
CBT per 1g	1.57		mg/1g		
Δ9-THC per 1g	1.98		mg/1g		

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: 06/21/23 16:24

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

Product identity: FORM-TN.O.FS.CM50-FE29

Client/Metric ID: .

Sample Date:

Laboratory ID: 23-007387-0002

Evidence of Cooling: No

Temp: 22.6 °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: 2308537	Analyze: 6/24/23 1:02:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	4.65		mg/1g	0.0328	
CBC-A per 1g	< LOQ		mg/1g	0.0328	
CBC-Total per 1g	4.65		mg/1g	0.0616	
CBD per 1g	56.4		mg/1g	0.328	
CBD-A per 1g	< LOQ		mg/1g	0.0328	
CBD-Total per 1g	56.4		mg/1g	0.357	
CBDV per 1g	0.667		mg/1g	0.0328	
CBDV-A per 1g	< LOQ		mg/1g	0.0328	
CBDV-Total per 1g	0.667		mg/1g	0.0613	
CBE per 1g	1.01		mg/1g	0.0328	
CBG per 1g	2.33		mg/1g	0.0328	
CBG-A per 1g	< LOQ		mg/1g	0.0328	
CBG-Total per 1g	2.33		mg/1g	0.0613	
CBL per 1g	0.378		mg/1g	0.0328	
CBL-A per 1g	< LOQ		mg/1g	0.0328	
CBL-Total per 1g	0.378		mg/1g	0.0616	
CBN per 1g	0.0465		mg/1g	0.0328	
CBT per 1g	1.57		mg/1g	0.0328	
Δ8-THCV per 1g	< LOQ		mg/1g	0.0328	
Δ10-THC-9R per 1g	< LOQ		mg/1g	0.0328	
Δ10-THC-9S per 1g	< LOQ		mg/1g	0.0328	
Δ10-THC-Total per 1g	< LOQ		mg/1g	0.0657	
Δ8-THC per 1g	< LOQ		mg/1g	0.0328	
Δ9-THC per 1g	1.98		mg/1g	0.0328	
delta-9-THCP per 1g	< LOQ		mg/1g	0.0328	
exo-THC per 1g	< LOQ		mg/1g	0.0328	
THC-A per 1g	< LOQ		mg/1g	0.0328	
THC-Total per 1g	1.98		mg/1g	0.0617	
THCV per 1g	< LOQ		mg/1g	0.0328	
THCV-A per 1g	< LOQ		mg/1g	0.0328	



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Received: 06/21/23 16:24

Potency per 1g	Method: J AOAC 2015 V98-6 (mod) ^P	Units mg/se	Batch: 2308537	Analyze: 6/24/23 1:02:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
THCV-Total per 1g	< LOQ		mg/1g	0.0617	
Total Cannabinoids per 1g	69.0		mg/1g		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2308648	07/01/23 AOAC 991.14 (Petrifilm) ^P		I
Total Coliforms	< LOQ		cfu/g	10	2308648	07/01/23 AOAC 991.14 (Petrifilm) ^P		I
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2308649	07/01/23 AOAC 2014.05 (RAPID) ^P		I
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2308649	07/01/23 AOAC 2014.05 (RAPID) ^P		I

Solvents	Method: Residual Solvents by GC/MS ^P	Units µg/g	Batch 2308701	Analyze 06/30/23 09:23 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							



Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod) ^b											
Units mg/kg Batch 2308728 Analyze 07/03/23 06:48 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		Pacllobutrazole [¥]	< 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	0.0986	2308688	06/29/23	AOAC 2013.06 (mod.) ^b	pass		
Cadmium [¥]	< LOQ	0.200	mg/kg	0.0986	2308688	06/29/23	AOAC 2013.06 (mod.) ^b	pass		
Lead [¥]	< LOQ	0.500	mg/kg	0.0986	2308688	06/29/23	AOAC 2013.06 (mod.) ^b	pass		
Mercury [¥]	< LOQ	0.100	mg/kg	0.0493	2308688	06/29/23	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

Glossary of Qualifiers

I: Insufficient sample received to meet method requirements.

Approved Signatory

Derrick Tanner
General Manager



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Received: 06/21/23 16:24

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

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2308537

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0307	0.0316	%	97.3	80.0	- 120	Acceptable	
CBDV	2	0.0308	0.0315	%	97.6	80.0	- 120	Acceptable	
CBE	2	0.0334	0.0348	%	95.8	80.0	- 120	Acceptable	
CBDA	1	0.0314	0.0333	%	94.4	90.0	- 110	Acceptable	
CBGA	1	0.0311	0.0330	%	94.3	80.0	- 120	Acceptable	
CBG	1	0.0356	0.0380	%	93.7	80.0	- 120	Acceptable	
CBD	1	0.0348	0.0370	%	94.2	90.0	- 110	Acceptable	
THCV	2	0.0231	0.0236	%	97.7	80.0	- 120	Acceptable	
d8THCV	2	0.0269	0.0279	%	96.5	80.0	- 120	Acceptable	
THCVA	2	0.0299	0.0308	%	97.0	80.0	- 120	Acceptable	
CBN	1	0.0333	0.0350	%	94.9	80.0	- 120	Acceptable	
exo-THC	2	0.0271	0.0283	%	95.8	80.0	- 120	Acceptable	
d9THC	1	0.0341	0.0361	%	94.4	90.0	- 110	Acceptable	
d8THC	1	0.0429	0.0450	%	95.4	90.0	- 110	Acceptable	
9S-d10THC	1	0.0242	0.0255	%	94.7	80.0	- 120	Acceptable	
CBL	2	0.0304	0.0311	%	97.7	80.0	- 120	Acceptable	
9R-d10THC	1	0.0310	0.0329	%	94.3	80.0	- 120	Acceptable	
CBC	2	0.0286	0.0293	%	97.7	80.0	- 120	Acceptable	
THCA	1	0.0312	0.0331	%	94.2	90.0	- 110	Acceptable	
CBCA	2	0.0309	0.0320	%	96.9	80.0	- 120	Acceptable	
CBLA	2	0.0292	0.0302	%	96.5	80.0	- 120	Acceptable	
d9THCP	2	0.0310	0.0326	%	95.1	80.0	- 120	Acceptable	
CBT	2	0.0315	0.0326	%	96.7	80.0	- 120	Acceptable	

Method Blank						
Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBDV	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBE	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBDA	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBGA	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBG	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBD	<LOQ	0.00317	%	< 0.00317	Acceptable	
THCV	<LOQ	0.00317	%	< 0.00317	Acceptable	
d8THCV	<LOQ	0.00317	%	< 0.00317	Acceptable	
THCVA	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBN	<LOQ	0.00317	%	< 0.00317	Acceptable	
exo-THC	<LOQ	0.00317	%	< 0.00317	Acceptable	
d9THC	<LOQ	0.00317	%	< 0.00317	Acceptable	
d8THC	<LOQ	0.00317	%	< 0.00317	Acceptable	
9S-d10THC	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBL	<LOQ	0.00317	%	< 0.00317	Acceptable	
9R-d10THC	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBC	<LOQ	0.00317	%	< 0.00317	Acceptable	
THCA	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBCA	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBLA	<LOQ	0.00317	%	< 0.00317	Acceptable	
d9THCP	<LOQ	0.00317	%	< 0.00317	Acceptable	
CBT	<LOQ	0.00317	%	< 0.00317	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

J AOAC 2015 V98-6		Batch ID: 2308537						
Sample Duplicate		Sample ID: 23-007387-0002						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBDV	0.0664	0.0667	0.00323	%	0.482	< 20	Acceptable	
CBE	0.101	0.101	0.00323	%	0.310	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBG	0.234	0.233	0.00323	%	0.654	< 20	Acceptable	
CBD	5.69	5.64	0.00323	%	0.925	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBN	0.00467	0.00465	0.00323	%	0.392	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
d9THC	0.198	0.198	0.00323	%	0.132	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBL	0.0376	0.0378	0.00323	%	0.589	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBC	0.465	0.465	0.00323	%	0.0596	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00323	%	NA	< 20	Acceptable	
CBT	0.157	0.157	0.00323	%	0.301	< 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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Revision: 2 Document ID: 7087
 Legacy ID: CFL-E33Effective:

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2308701					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		509	584	µg/g	87.2	60 - 120	
Isobutane	ND	< 200		704	767	µg/g	91.8	60 - 120	
Butane	ND	< 200		701	782	µg/g	89.6	60 - 120	
2,2-Dimethylpropane	ND	< 200		756	939	µg/g	80.5	60 - 120	
Methanol	ND	< 200		1520	1640	µg/g	92.7	60 - 120	
Ethylene Oxide	ND	< 30		50.9	57.1	µg/g	89.1	60 - 120	
2-Methylbutane	ND	< 200		1400	1600	µg/g	87.5	60 - 120	
Pentane	ND	< 200		1430	1620	µg/g	88.3	60 - 120	
Ethanol	ND	< 200		1560	1610	µg/g	96.9	70 - 130	
Ethyl Ether	ND	< 200		1450	1610	µg/g	90.1	60 - 120	
2,2-Dimethylbutane	ND	< 30		152	168	µg/g	90.5	60 - 120	
Acetone	ND	< 200		1480	1620	µg/g	91.4	60 - 120	
2-Propanol	ND	< 200		1620	1600	µg/g	101.3	60 - 120	
Ethyl Formate	ND	< 500		1370	1600	µg/g	85.6	70 - 130	
Acetonitrile	ND	< 100		436	484	µg/g	90.1	60 - 120	
Methyl Acetate	ND	< 500		1470	1610	µg/g	91.3	70 - 130	
2,3-Dimethylbutane	ND	< 30		140	162	µg/g	86.4	60 - 120	
Dichloromethane	ND	< 60		444	483	µg/g	91.9	60 - 120	
2-Methylpentane	ND	< 30		162	174	µg/g	93.1	60 - 120	
MTBE	ND	< 500		1490	1610	µg/g	92.5	70 - 130	
3-Methylpentane	ND	< 30		160	168	µg/g	95.2	60 - 120	
Hexane	ND	< 30		151	168	µg/g	89.9	60 - 120	
1-Propanol	ND	< 500		1500	1600	µg/g	93.8	70 - 130	
Methylethylketone	ND	< 500		1480	1620	µg/g	91.4	70 - 130	
Ethyl acetate	ND	< 200		1520	1600	µg/g	95.0	60 - 120	
2-Butanol	ND	< 200		1650	1600	µg/g	103.1	60 - 120	
Tetrahydrofuran	ND	< 100		467	514	µg/g	90.9	60 - 120	
Cyclohexane	ND	< 200		1500	1600	µg/g	93.8	60 - 120	
2-methyl-1-propanol	ND	< 500		1470	1610	µg/g	91.3	70 - 130	
Benzene	ND	< 1		3.93	5.12	µg/g	76.8	60 - 120	
Isopropyl Acetate	ND	< 200		1530	1620	µg/g	94.4	60 - 120	
Heptane	ND	< 200		1490	1610	µg/g	92.5	60 - 120	
1-Butanol	ND	< 500		1510	1600	µg/g	94.4	70 - 130	
Propyl Acetate	ND	< 500		1450	1600	µg/g	90.6	70 - 130	
1,4-Dioxane	ND	< 100		466	493	µg/g	94.5	60 - 120	
2-Ethoxyethanol	ND	< 30		175	163	µg/g	107.4	60 - 120	
Methylisobutylketone	ND	< 500		1450	1600	µg/g	90.6	70 - 130	
3-Methyl-1-butanol	ND	< 500		1530	1610	µg/g	95.0	70 - 130	
Ethylene Glycol	ND	< 200		288	483	µg/g	59.6	60 - 120	
Toluene	ND	< 100		454	493	µg/g	92.1	60 - 120	
Isobutyl Acetate	ND	< 500		1430	1600	µg/g	89.4	70 - 130	
1-Pentanol	ND	< 500		1570	1600	µg/g	98.1	70 - 130	
Butyl Acetate	ND	< 500		1420	1600	µg/g	88.8	70 - 130	
Ethylbenzene	ND	< 200		901	969	µg/g	93.0	60 - 120	
m,p-Xylene	ND	< 200		892	968	µg/g	92.1	60 - 120	
o-Xylene	ND	< 200		908	976	µg/g	93.0	60 - 120	
Cumene	ND	< 30		148	162	µg/g	91.4	60 - 120	
Anisole	ND	< 500		1390	1610	µg/g	86.3	70 - 130	
DMSO	ND	< 500		1080	1610	µg/g	67.1	70 - 130	Q6
1,2-dimethoxyethane	ND	< 50		149	164	µg/g	90.9	70 - 130	
Triethylamine	ND	< 500		1280	1600	µg/g	80.0	70 - 130	
N,N-dimethylformamide	ND	< 150		440	484	µg/g	90.9	70 - 130	
N,N-dimethylacetamide	ND	< 150		413	489	µg/g	84.5	70 - 130	
Pyridine	ND	< 50		123	172	µg/g	71.5	70 - 130	
Sulfolane	ND	< 50		108	163	µg/g	66.3	70 - 130	Q6
1,2-Dichloroethane	ND	< 1		0.959	1	µg/g	95.9	70 - 130	
Chloroform	ND	< 1		1.03	1	µg/g	103.0	70 - 130	
Trichloroethylene	ND	< 1		1.21	1	µg/g	121.0	70 - 130	
1,1-Dichloroethane	ND	< 1		0.994	1	µg/g	99.4	70 - 130	



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QC - Sample Duplicate		Sample ID: 23-007062-0002						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/Fail	Notes
Propane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60	µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
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	
1,2-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Trichloroethylene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
1,1-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	

Abbreviations

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

Units of Measure:

µg/g - Microgram per gram or ppm



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 Portland, OR 97230
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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg			Batch ID: 2308728			
Method Blank		Laboratory Control Sample						
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Abamectin	0.000	< 0.250		0.912	1.000	91.2	50.0	150
Acephate	0.035	< 0.200		0.798	0.800	99.8	60.0	120
Acetaminocyl	0.000	< 1.000		3.817	4.000	95.4	40.0	160
Acetamiprid	0.000	< 0.100		0.385	0.400	96.1	60.0	120
Aldicarb	0.000	< 0.200		0.793	0.800	99.1	60.0	120
Azoxystrobin	0.000	< 0.100		0.374	0.400	93.6	60.0	120
Bifenazate	0.000	< 0.100		0.385	0.400	96.3	60.0	120
Bifenthrin	0.000	< 0.100		0.370	0.400	92.5	50.0	150
Boscalid	0.000	< 0.200		0.738	0.800	92.3	60.0	120
Carbaryl	0.000	< 0.100		0.388	0.400	97.1	60.0	120
Carbofuran	0.000	< 0.100		0.386	0.400	96.5	60.0	120
Chlorantraniliprole	0.000	< 0.100		0.383	0.400	95.8	60.0	120
Chlorfenapyr	0.000	< 0.500		2.149	2.000	107.4	60.0	120
Chlorpyrifos	0.002	< 0.100		0.373	0.400	93.2	60.0	120
Clofentazine	0.000	< 0.100		0.366	0.400	91.5	60.0	120
Cyfluthrin	0.010	< 0.500		1.796	2.000	89.8	50.0	150
Cypermethrin	0.000	< 0.500		1.928	2.000	96.4	50.0	150
Daminozide	0.000	< 0.500		0.816	2.000	40.8	60.0	120
Diazinon	0.000	< 0.100		0.409	0.400	102.4	60.0	120
Dichlorvos	0.000	< 0.500		1.935	2.000	96.8	60.0	120
Dimethoate	0.000	< 0.100		0.371	0.400	92.9	60.0	120
Ethoprophos	0.000	< 0.100		0.395	0.400	98.7	60.0	120
Etofenprox	0.000	< 0.200		0.773	0.800	96.6	50.0	150
Etoxazole	0.001	< 0.100		0.389	0.400	97.3	60.0	120
Fenoxycarb	0.000	< 0.100		0.376	0.400	93.9	60.0	120
Fenpyroximate	0.000	< 0.200		0.758	0.800	94.8	60.0	120
Fipronil	0.000	< 0.200		0.778	0.800	97.3	60.0	120
Fonicamid	0.000	< 0.250		1.011	1.000	101.1	60.0	120
Fludioxonil	0.000	< 0.200		0.791	0.800	98.9	50.0	150
Hexythiazox	0.004	< 0.250		0.952	1.000	95.2	60.0	120
Imazalil	0.000	< 0.100		0.395	0.400	98.7	60.0	120
Imidacloprid	0.000	< 0.200		0.723	0.800	90.3	60.0	120
Kresoxim-methyl	0.000	< 0.200		0.816	0.800	102.0	60.0	120
Malathion	0.000	< 0.100		0.386	0.400	96.6	60.0	120
Metlaxyl	0.000	< 0.100		0.389	0.400	97.2	60.0	120
Methiocarb	0.000	< 0.100		0.391	0.400	97.6	60.0	120
Methomyl	0.000	< 0.200		0.737	0.800	92.1	60.0	120
MGK-264	0.000	< 0.100		0.392	0.400	98.0	50.0	150
Myclobutanil	0.000	< 0.100		0.383	0.400	95.7	60.0	120
Naled	0.000	< 0.250		0.932	1.000	93.2	50.0	150
Oxamyl	0.000	< 0.500		1.799	2.000	90.0	60.0	120
Pacllobutrazole	0.000	< 0.200		0.783	0.800	97.9	60.0	120
Parathion-Methyl	0.000	< 0.100		0.340	0.400	84.9	50.0	150
Permethrin	0.000	< 0.100		0.382	0.400	95.6	50.0	150
Phosmet	0.000	< 0.100		0.389	0.400	97.2	50.0	150
Piperonyl butoxide	0.000	< 0.500		1.968	2.000	98.4	60.0	120
Prallethrin	0.000	< 0.100		0.379	0.400	94.6	60.0	120
Propiconazole	0.000	< 0.200		0.761	0.800	95.1	60.0	120
Propoxur	0.000	< 0.100		0.390	0.400	97.6	60.0	120
Pyrethrin (Summe)	0.002	< 0.100		0.471	0.488	96.4	60.0	120
Pyridaben	0.000	< 0.100		0.387	0.400	96.7	50.0	150
Spinosad	0.000	< 0.100		0.375	0.388	96.6	50.0	150
Spiromesifen	0.000	< 0.100		0.382	0.400	95.5	60.0	120
Spirotetramat	0.000	< 0.100		0.377	0.400	94.3	60.0	120
Spiroxamine	0.004	< 0.200		0.760	0.800	95.0	60.0	120
Tebuconazole	0.000	< 0.200		0.781	0.800	97.6	60.0	120
Thiacloprid	0.000	< 0.100		0.384	0.400	96.0	60.0	120
Thiamethoxam	0.000	< 0.100		0.371	0.400	92.8	60.0	120
Trifloxystrobin	0.003	< 0.100		0.375	0.400	93.8	60.0	120

Q6



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Portland, OR 97230
503-254-1794



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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg					Batch ID: 2308728				
Matrix Spike/Matrix Spike Duplicate Recoveries		Sample ID: 23-007725-0001									
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes	
Abamectin	0.000	0.803	0.758	1.000	5.7%	< 30	80.3%	75.8%	50 - 150		
Acephate	0.087	0.721	0.747	0.800	4.0%	< 30	79.2%	82.4%	50 - 150		
Acetaminophen	0.000	1.881	1.792	4.000	4.8%	< 30	47.0%	44.8%	50 - 150	Q	
Acetamiprid	0.000	0.357	0.368	0.400	3.2%	< 30	89.2%	92.0%	50 - 150		
Aldicarb	0.000	0.739	0.772	0.800	4.4%	< 30	92.4%	96.5%	50 - 150		
Azoxystrobin	0.000	0.321	0.340	0.400	5.6%	< 30	80.3%	84.9%	50 - 150		
Bifenazate	0.000	0.341	0.356	0.400	4.4%	< 30	85.3%	89.1%	50 - 150		
Bifenthrin	0.000	0.204	0.204	0.400	0.2%	< 30	50.9%	51.0%	50 - 150		
Boscalid	0.062	0.733	0.716	0.800	2.7%	< 30	83.9%	81.6%	50 - 150		
Carbaryl	0.000	0.318	0.308	0.400	3.2%	< 30	79.4%	76.9%	50 - 150		
Carbofuran	0.000	0.347	0.339	0.400	2.3%	< 30	86.7%	84.7%	50 - 150		
Chlorantraniliprole	0.000	0.373	0.385	0.400	3.1%	< 30	93.3%	96.2%	50 - 150		
Chlorfenapyr	0.000	1.420	1.421	2.000	0.0%	< 30	71.0%	71.0%	50 - 150		
Chlorpyrifos	0.003	0.334	0.329	0.400	1.6%	< 30	82.9%	81.6%	50 - 150		
Clofentezine	0.003	0.303	0.308	0.400	1.8%	< 30	74.8%	76.2%	50 - 150		
Cyfluthrin	0.000	0.752	0.749	2.000	0.4%	< 30	37.6%	37.4%	30 - 150		
Cypermethrin	0.000	1.636	1.587	2.000	3.0%	< 30	81.8%	79.4%	50 - 150		
Daminozide	0.004	0.807	0.869	2.000	7.4%	< 30	40.2%	43.2%	30 - 150		
Diazinon	0.002	0.346	0.378	0.400	8.8%	< 30	86.0%	93.9%	50 - 150		
Dichlorvos	0.000	1.723	1.743	2.000	1.1%	< 30	86.2%	87.1%	50 - 150		
Dimethoate	0.000	0.396	0.410	0.400	3.4%	< 30	99.1%	102.4%	50 - 150		
Ethoprophos	0.000	0.353	0.360	0.400	1.7%	< 30	88.3%	89.9%	50 - 150		
Etofenprox	0.000	0.550	0.499	0.800	9.8%	< 30	68.8%	62.3%	50 - 150		
Etoxazole	0.000	0.318	0.312	0.400	2.1%	< 30	79.6%	77.9%	50 - 150		
Fenoxycarb	0.000	0.329	0.349	0.400	6.0%	< 30	82.2%	87.3%	50 - 150		
Fenpyroximate	0.000	0.445	0.441	0.800	0.8%	< 30	55.6%	55.2%	50 - 150		
Fipronil	0.000	0.604	0.606	0.800	0.3%	< 30	75.5%	75.7%	50 - 150		
Flonicamid	0.000	1.061	1.135	1.000	6.8%	< 30	106.1%	113.5%	50 - 150		
Fludioxonil	0.000	0.795	0.797	0.800	0.2%	< 30	99.4%	99.6%	50 - 150		
Hexythiazox	0.004	0.596	0.629	1.000	5.5%	< 30	59.2%	62.5%	50 - 150		
Imazalil	0.003	0.348	0.368	0.400	5.5%	< 30	86.4%	91.2%	50 - 150		
Imidacloprid	0.000	0.838	0.916	0.800	8.8%	< 30	104.8%	114.5%	50 - 150		
Kresoxim-methyl	0.000	0.669	0.674	0.800	0.7%	< 30	83.6%	84.2%	50 - 150		
Malathion	0.000	0.346	0.350	0.400	1.0%	< 30	86.6%	87.5%	50 - 150		
Metaxalyl	0.000	0.351	0.372	0.400	6.0%	< 30	87.7%	93.1%	50 - 150		
Methiocarb	0.000	0.328	0.351	0.400	7.0%	< 30	81.9%	87.8%	50 - 150		
Methomyl	0.000	0.733	0.794	0.800	7.9%	< 30	91.7%	99.2%	50 - 150		
MGK-264	0.000	0.326	0.350	0.400	7.1%	< 30	81.5%	87.5%	50 - 150		
Myclobutanil	0.000	0.344	0.346	0.400	0.5%	< 30	86.0%	86.5%	50 - 150		
Naled	0.000	0.806	0.779	1.000	3.4%	< 30	80.6%	77.9%	50 - 150		
Oxamyl	0.000	1.967	2.077	2.000	5.4%	< 30	98.3%	103.8%	50 - 150		
Pacllobutrazole	0.000	0.660	0.699	0.800	5.7%	< 30	82.5%	87.3%	50 - 150		
Parathion-Methyl	0.000	0.274	0.288	0.400	5.3%	< 30	68.4%	72.1%	30 - 150		
Permethrin	0.000	0.229	0.230	0.400	0.4%	< 30	57.3%	57.6%	50 - 150		
Phosmet	0.000	0.316	0.348	0.400	9.7%	< 30	79.1%	87.1%	50 - 150		
Piperonyl butoxide	0.000	1.546	1.630	2.000	5.2%	< 30	77.3%	81.5%	50 - 150		
Prallethrin	0.000	0.411	0.431	0.400	4.7%	< 30	102.7%	107.6%	50 - 150		
Propiconazole	0.001	0.703	0.714	0.800	1.5%	< 30	87.7%	89.1%	50 - 150		
Propoxur	0.000	0.358	0.341	0.400	4.9%	< 30	89.4%	85.1%	50 - 150		
Pyrethrin (Summe)	0.000	0.310	0.321	0.488	3.5%	< 30	63.4%	65.7%	50 - 150		
Pyridaben	0.000	0.342	0.326	0.400	4.7%	< 30	85.5%	81.6%	50 - 150		
Spinosad	0.000	0.307	0.313	0.388	1.7%	< 30	79.2%	80.6%	50 - 150		
Spiromesifen	0.000	0.337	0.339	0.400	0.5%	< 30	84.3%	84.7%	50 - 150		
Spirotetramat	0.000	0.508	0.533	0.400	4.8%	< 30	127.0%	133.3%	50 - 150		
Spiroxamine	0.004	0.682	0.756	0.800	10.3%	< 30	84.8%	94.0%	50 - 150		
Tebuconazole	0.000	0.658	0.711	0.800	7.6%	< 30	82.3%	88.8%	50 - 150		
Thiacloprid	0.000	0.354	0.379	0.400	6.8%	< 30	88.5%	94.7%	50 - 150		
Thiamethoxam	0.000	0.399	0.427	0.400	6.7%	< 30	99.8%	106.8%	50 - 150		
Trifloxystrobin	0.000	0.254	0.272	0.400	6.8%	< 30	63.5%	68.0%	50 - 150		



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



Report Number: 23-007387/D012.R000
Report Date: 07/05/2023
ORELAP#: OR100028
Purchase Order:
Received: 06/21/23 16:24





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.

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU	BATCH #	LOQ: Limit Of Quantitation	
PRODUCT NAME	SERVING SIZE	LOD: Limit Of Detection	
LABORATORY :	OREGON ACCREDITATION: OR100028	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)	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		
Water Activity	Pass		
TERPENES	% OF SAMPLE		
Farnesene	%		
β-Caryophyllene	%		
α-Bisabolol	%		
Guaiol	%		
Humulene	%		
Caryophyllene Oxide	%		

1. American Herbal Pharmacopoeia. (2014). Cannabis Inflorescence: Standards of Identity, Analysis, and Quality Control. Washington DC: AHP.



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



Report Number: 23-009649/D002.R000
Report Date: 08/23/2023
ORELAP#: OR100028
Purchase Order: 2596040
Received: 08/14/23 15:45

Customer: Etz Hayim Holdings
Product identity: FORM-TN.O.FS.MP50-FH24
Client/Metric ID: .
Laboratory ID: 23-009649-0001

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status	
CBC per 1g	4.44		mg/1g		CBD-Total per Serving Size 55.6 mg/1g
CBD per 1g	55.6		mg/1g		
CBDV per 1g	0.628		mg/1g		THC-Total per Serving Size 1.94 mg/1g
CBE per 1g	0.807		mg/1g		(Reported in milligrams per serving)
CBG per 1g	2.31		mg/1g		
CBL per 1g	0.374		mg/1g		
CBT per 1g	1.70		mg/1g		
Δ9-THC per 1g	1.94		mg/1g		

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Terpenes:

Analyte	Percent by weight	Percent of Total	Analyte	Percent by weight	Percent of Total
β-Caryophyllene	0.103	0.00%	farnesene	0.0900	0.00%
(-)-caryophyllene oxide	0.0687	0.00%	β-Myrcene	0.0414	0.00%
(-)-Guaiaol	0.0406	0.00%	α-Bisabolol	0.0402	0.00%
Humulene	0.0388	0.00%			

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.



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 503-254-1794



Report Number: 23-009649/D002.R000
Report Date: 08/23/2023
ORELAP#: OR100028
Purchase Order: 2596040
Received: 08/14/23 15:45

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

Product identity: FORM-TN.O.FS.MP50-FH24

Client/Metric ID: .

Sample Date:

Laboratory ID: 23-009649-0001

Evidence of Cooling: No

Temp: 27.4 °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: 2310097	Analyze: 8/17/23 2:59:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	4.44		mg/1g	0.0327	
CBC-A per 1g	< LOQ		mg/1g	0.0327	
CBC-Total per 1g	4.44		mg/1g	0.0614	
CBD per 1g	55.6		mg/1g	0.327	
CBD-A per 1g	< LOQ		mg/1g	0.0327	
CBD-Total per 1g	55.6		mg/1g	0.356	
CBDV per 1g	0.628		mg/1g	0.0327	
CBDV-A per 1g	< LOQ		mg/1g	0.0327	
CBDV-Total per 1g	0.628		mg/1g	0.0610	
CBE per 1g	0.807		mg/1g	0.0327	
CBG per 1g	2.31		mg/1g	0.0327	
CBG-A per 1g	< LOQ		mg/1g	0.0327	
CBG-Total per 1g	2.31		mg/1g	0.0610	
CBL per 1g	0.374		mg/1g	0.0327	
CBL-A per 1g	< LOQ		mg/1g	0.0327	
CBL-Total per 1g	0.374		mg/1g	0.0614	
CBN per 1g	< LOQ		mg/1g	0.0327	
CBT per 1g	1.70		mg/1g	0.0327	
Δ8-THCV per 1g	< LOQ		mg/1g	0.0327	
Δ10-THC-9R per 1g	< LOQ		mg/1g	0.0327	
Δ10-THC-9S per 1g	< LOQ		mg/1g	0.0327	
Δ10-THC-Total per 1g	< LOQ		mg/1g	0.0654	
Δ8-THC per 1g	< LOQ		mg/1g	0.0327	
Δ9-THC per 1g	1.94		mg/1g	0.0327	
delta-9-THCP per 1g	< LOQ		mg/1g	0.0327	
exo-THC per 1g	< LOQ		mg/1g	0.0327	
THC-A per 1g	< LOQ		mg/1g	0.0327	
THC-Total per 1g	1.94		mg/1g	0.0614	
THCV per 1g	< LOQ		mg/1g	0.0327	
THCV-A per 1g	< LOQ		mg/1g	0.0327	



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Portland, OR 97230
503-254-1794



Report Number: 23-009649/D002.R000
Report Date: 08/23/2023
ORELAP#: OR100028
Purchase Order: 2596040
Received: 08/14/23 15:45

Potency per 1g	Method: J AOAC 2015 V98-6 (mod) ^P	Units mg/se	Batch: 2310097	Analyze: 8/17/23 2:59:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
THCV-Total per 1g	< LOQ		mg/1g	0.0614	
Total Cannabinoids per 1g	67.8		mg/1g		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2310082	08/19/23 AOAC 991.14 (Petrifilm) ^P		
Total Coliforms	< LOQ		cfu/g	10	2310082	08/19/23 AOAC 991.14 (Petrifilm) ^P		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2310083	08/19/23 AOAC 2014.05 (RAPID) ^P		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2310083	08/19/23 AOAC 2014.05 (RAPID) ^P		

Solvents	Method: Residual Solvents by GC/MS ^P	Units µg/g	Batch 2310111	Analyze 08/17/23 12:53 PM							
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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Report Number: 23-009649/D002.R000
Report Date: 08/23/2023
ORELAP#: OR100028
Purchase Order: 2596040
Received: 08/14/23 15:45

Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod) ^b											
Units mg/kg Batch 2310121 Analyze 08/17/23 03:24 PM											
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin [¥]	< LOQ	0.50	0.250	pass		Acephate [¥]	< LOQ	0.40	0.200	pass	
Acequinocyl [¥]	< LOQ	2.0	1.00	pass		Acetamiprid [¥]	< LOQ	0.20	0.100	pass	
Aldicarb [¥]	< LOQ	0.40	0.200	pass		Azoxystrobin [¥]	< LOQ	0.20	0.100	pass	
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		Fonicamid [¥]	< LOQ	1.0	0.400	pass	
Fludioxonil [¥]	< LOQ	0.40	0.200	pass		Hexythiazox [¥]	< LOQ	1.0	0.400	pass	
Imazali [¥]	< 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		Paclotubrazole [¥]	< 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							



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Portland, OR 97230
503-254-1794



Report Number: 23-009649/D002.R000
Report Date: 08/23/2023
ORELAP#: OR100028
Purchase Order: 2596040
Received: 08/14/23 15:45

Terpenes				Method: J AOAC 2015 V98-6	Units %	Batch 2310293	Analyze 08/22/23 03:45 PM		
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
β-Caryophyllene	0.103	0.019	0.000%		farnesene	0.0900	0.019	0.0000%	
(-)-caryophyllene oxide	0.0687	0.019	0.0000%		β-Myrcene	0.0414	0.019	0.0000%	
(-)-Guaiol	0.0406	0.019	0.0000%		a-Bisabolol	0.0402	0.019	0.0000%	
Humulene	0.0388	0.019	0.0000%		(R)-(+)-Limonene	< LOQ	0.019	0.00%	
Geraniol	< LOQ	0.019	0.00%		(±)-trans-Nerolidol	< LOQ	0.019	0.00%	
trans-β-Ocimene	< LOQ	0.012	0.00%		a-phellandrene	< LOQ	0.019	0.00%	
(±)-cis-Nerolidol	< LOQ	0.019	0.00%		Sabinene	< LOQ	0.019	0.00%	
d-3-Carene	< LOQ	0.019	0.00%		nerol	< LOQ	0.019	0.00%	
valencene	< LOQ	0.019	0.00%		(-)-a-Terpineol	< LOQ	0.019	0.00%	
(±)-fenchone	< LOQ	0.019	0.00%		(+)-Pulegone	< LOQ	0.019	0.00%	
(-)-β-Pinene	< LOQ	0.019	0.00%		(+)-Borneol	< LOQ	0.019	0.00%	
Geranyl acetate	< LOQ	0.019	0.00%		(-)-Isopulegol	< LOQ	0.019	0.00%	
(+)-Cedrol	< LOQ	0.019	0.00%		(+)-fenchol	< LOQ	0.019	0.00%	
(±)-Camphor	< LOQ	0.019	0.00%		a-cedrene	< LOQ	0.019	0.00%	
a-pinene	< LOQ	0.019	0.00%		a-Terpinene	< LOQ	0.019	0.00%	
Camphene	< LOQ	0.019	0.00%		cis-β-Ocimene	< LOQ	0.006	0.00%	
Eucalyptol	< LOQ	0.019	0.00%		gamma-Terpinene	< LOQ	0.019	0.00%	
Isoborneol	< LOQ	0.019	0.00%		Linalool	< LOQ	0.019	0.00%	
Menthol	< LOQ	0.019	0.00%		p-Cymene	< LOQ	0.019	0.00%	
Sabinene hydrate	< LOQ	0.019	0.00%		Terpinolene	< LOQ	0.019	0.00%	
Total Terpenes	< LOQ								

Metals									
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes	
Arsenic [‡]	< LOQ	0.200	mg/kg	0.0812	2310146	08/17/23 AOAC 2013.06 (mod.) ^b	pass		
Cadmium [‡]	< LOQ	0.200	mg/kg	0.0812	2310146	08/17/23 AOAC 2013.06 (mod.) ^b	pass		
Lead [‡]	< LOQ	0.500	mg/kg	0.0812	2310146	08/17/23 AOAC 2013.06 (mod.) ^b	pass		
Mercury [‡]	< LOQ	0.100	mg/kg	0.0406	2310146	08/17/23 AOAC 2013.06 (mod.) ^b	pass		



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Report Number: 23-009649/D002.R000
Report Date: 08/23/2023
ORELAP#: OR100028
Purchase Order: 2596040
Received: 08/14/23 15:45

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



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



Report Number: 23-009649/D002.R000
Report Date: 08/23/2023
ORELAP#: OR100028
Purchase Order: 2596040
Received: 08/14/23 15:45

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

Laboratory Quality Control Results

JAOAC2015 V986 Batch ID: 2310097

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDA	2	0.0318	0.0311	%	102	80.0 - 120	Acceptable	
CBV	2	0.0315	0.0307	%	103	80.0 - 120	Acceptable	
CEE	2	0.0355	0.0349	%	102	80.0 - 120	Acceptable	
CBDA	1	0.0329	0.0336	%	98.0	90.0 - 110	Acceptable	
CBGA	1	0.0329	0.0336	%	98.1	80.0 - 120	Acceptable	
CBG	1	0.0343	0.0344	%	99.5	80.0 - 120	Acceptable	
CB	1	0.0349	0.0352	%	99.1	90.0 - 110	Acceptable	
THCV	2	0.0229	0.0222	%	103	80.0 - 120	Acceptable	
δ8THCV	2	0.0276	0.0272	%	102	80.0 - 120	Acceptable	
THCVA	2	0.0318	0.0310	%	103	80.0 - 120	Acceptable	
CBN	1	0.0352	0.0351	%	100	80.0 - 120	Acceptable	
exo-THC	2	0.0318	0.0311	%	102	80.0 - 120	Acceptable	
δ9THC	1	0.0350	0.0345	%	102	90.0 - 110	Acceptable	
δ8THC	1	0.0324	0.0325	%	99.8	90.0 - 110	Acceptable	
9SaTHC	1	0.0354	0.0354	%	100	80.0 - 120	Acceptable	
CB	2	0.0314	0.0311	%	101	80.0 - 120	Acceptable	
9RdTHC	1	0.0319	0.0323	%	99.0	80.0 - 120	Acceptable	
CB	2	0.0324	0.0319	%	102	80.0 - 120	Acceptable	
THCA	1	0.0323	0.0331	%	97.8	90.0 - 110	Acceptable	
CBGA	2	0.0333	0.0325	%	102	80.0 - 120	Acceptable	
CBLA	2	0.0508	0.0500	%	102	80.0 - 120	Acceptable	
δ9THCP	2	0.0330	0.0323	%	102	80.0 - 120	Acceptable	
CB	2	0.0323	0.0314	%	103	80.0 - 120	Acceptable	

Analyte	Result	LOG	Units	Limits	Evaluation	Notes
CBDA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBV	<LOQ	0.00320	%	< 0.00320	Acceptable	
CEE	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBDA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBGA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBG	<LOQ	0.00320	%	< 0.00320	Acceptable	
CB	<LOQ	0.00320	%	< 0.00320	Acceptable	
THCV	<LOQ	0.00320	%	< 0.00320	Acceptable	
δ8THCV	<LOQ	0.00320	%	< 0.00320	Acceptable	
THCVA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBN	<LOQ	0.00320	%	< 0.00320	Acceptable	
exo-THC	<LOQ	0.00320	%	< 0.00320	Acceptable	
δ9THC	<LOQ	0.00320	%	< 0.00320	Acceptable	
δ8THC	<LOQ	0.00320	%	< 0.00320	Acceptable	
9SaTHC	<LOQ	0.00320	%	< 0.00320	Acceptable	
CB	<LOQ	0.00320	%	< 0.00320	Acceptable	
9RdTHC	<LOQ	0.00320	%	< 0.00320	Acceptable	
CB	<LOQ	0.00320	%	< 0.00320	Acceptable	
THCA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBGA	<LOQ	0.00320	%	< 0.00320	Acceptable	
CBLA	<LOQ	0.00320	%	< 0.00320	Acceptable	
δ9THCP	<LOQ	0.00320	%	< 0.00320	Acceptable	
CB	<LOQ	0.00320	%	< 0.00320	Acceptable	

Abbreviations
 ND - None Detected at or above MFL
 RP - Relative Percent Difference
 LOQ - Limit of Quantitation

Units of Measure:
 %- Percent



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Report Number: 23-009649/D002.R000
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Revision: 4 Document ID: 7148
 Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 2310097						
Sample Duplicate		Sample ID: 23-0096396001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBF	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBDA	0.342	0.276	0.00307	%	21.1	< 20	Outlier	Q4
CBDA	0.00843	0.00670	0.00307	%	22.9	< 20	Outlier	Q4
CBG	0.00391	<LOQ	0.00307	%	NA	< 20	Acceptable	H2
CBF	0.154	0.126	0.00307	%	20.6	< 20	Outlier	Q4
THCV	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
δ8THCV	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
δ9THC	0.00750	0.00686	0.00307	%	8.89	< 20	Acceptable	
δ8THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
9Saδ10THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
9Rd10THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBF	0.00744	0.00602	0.00307	%	21.0	< 20	Outlier	Q4
THCA	0.00573	0.00464	0.00307	%	21.0	< 20	Outlier	Q4
CBDA	0.0154	0.0125	0.00307	%	21.1	< 20	Outlier	Q4
CBLA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
δ9THCP	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBF	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	

Abbreviations

- ND - None Detected at or above MFL
- RPD - Relative Percent Difference
- LOQ - Limit of Quantitation
- Q4 - Non-homogenous sample matrix, affecting RPD result and/or % recoveries.
- R2 - Sample replicates RPD non-calculable, as only one replicate is within analytical range.

Units of Measure:

% - Percent



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Laboratory Quality Control Results

Residual Solvents				Batch ID: 2310111					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		486	584	µg/g	83.2	60 - 120	
Isobutane	ND	< 200		695	767	µg/g	90.6	60 - 120	
Butane	ND	< 200		682	782	µg/g	87.2	60 - 120	
2,2-Dimethylpropane	ND	< 200		794	939	µg/g	84.6	60 - 120	
Methanol	ND	< 200		1550	1670	µg/g	92.8	60 - 120	
Ethylene Oxide	ND	< 30		50	57.1	µg/g	87.6	60 - 120	
2-Methylbutane	ND	< 200		1430	1680	µg/g	85.1	60 - 120	
Pentane	ND	< 200		1400	1670	µg/g	83.8	60 - 120	
Ethanol	ND	< 200		1500	1660	µg/g	90.4	70 - 130	
Ethyl Ether	ND	< 200		1430	1670	µg/g	85.6	60 - 120	
2,2-Dimethylbutane	ND	< 30		169	189	µg/g	89.4	60 - 120	
Acetone	ND	< 200		1450	1670	µg/g	86.8	60 - 120	
2-Propanol	ND	< 200		1430	1630	µg/g	87.7	60 - 120	
Ethyl Formate	ND	< 500		4530	1600	µg/g	283.1	70 - 130	Q6
Acetonitrile	ND	< 100		412	492	µg/g	83.7	60 - 120	
Methyl Acetate	ND	< 500		1560	1600	µg/g	97.5	70 - 130	
2,3-Dimethylbutane	ND	< 30		152	180	µg/g	84.4	60 - 120	
Dichloromethane	ND	< 60		427	488	µg/g	87.5	60 - 120	
2-Methylpentane	ND	< 30		155	182	µg/g	85.2	60 - 120	
MTBE	ND	< 500		1590	1610	µg/g	98.8	70 - 130	
3-Methylpentane	ND	< 30		159	177	µg/g	89.8	60 - 120	
Hexane	ND	< 30		150	177	µg/g	84.7	60 - 120	
1-Propanol	ND	< 500		1640	1600	µg/g	102.5	70 - 130	
Methylethylketone	ND	< 500		1530	1610	µg/g	95.0	70 - 130	
Ethyl acetate	ND	< 200		1370	1630	µg/g	84.0	60 - 120	
2-Butanol	ND	< 200		1400	1630	µg/g	85.9	60 - 120	
Tetrahydrofuran	ND	< 100		417	488	µg/g	85.5	60 - 120	
Cyclohexane	ND	< 200		1380	1610	µg/g	85.7	60 - 120	
2-methyl-1-propanol	ND	< 500		1710	1610	µg/g	106.2	70 - 130	
Benzene	ND	< 1		3.58	4.79	µg/g	74.7	60 - 120	
Isopropyl Acetate	ND	< 200		1380	1650	µg/g	83.6	60 - 120	
Heptane	ND	< 200		1350	1630	µg/g	82.8	60 - 120	
1-Butanol	ND	< 500		1770	1600	µg/g	110.6	70 - 130	
Propyl Acetate	ND	< 500		1580	1600	µg/g	98.8	70 - 130	
1,4-Dioxane	ND	< 100		439	523	µg/g	83.9	60 - 120	
2-Ethoxyethanol	ND	< 30		146	179	µg/g	81.6	60 - 120	
Methylisobutylketone	ND	< 500		1610	1600	µg/g	100.6	70 - 130	
3-Methyl-1-butanol	ND	< 500		1710	1600	µg/g	106.9	70 - 130	
Ethylene Glycol	ND	< 200		319	508	µg/g	63.0	60 - 120	
Toluene	ND	< 100		428	496	µg/g	86.3	60 - 120	
Isobutyl Acetate	ND	< 500		1610	1610	µg/g	100.0	70 - 130	
1-Pentanol	ND	< 500		1860	1600	µg/g	116.3	70 - 130	
Butyl Acetate	ND	< 500		1610	1610	µg/g	100.0	70 - 130	
Ethylbenzene	ND	< 200		794	978	µg/g	81.2	60 - 120	
m,p-Xylene	ND	< 200		801	994	µg/g	80.6	60 - 120	
o-Xylene	ND	< 200		797	982	µg/g	81.2	60 - 120	
Cumene	ND	< 30		131	171	µg/g	76.6	60 - 120	
Anisole	ND	< 500		1760	1600	µg/g	110.0	70 - 130	
DMSO	ND	< 500		1400	1620	µg/g	86.4	70 - 130	
1,2-dimethoxyethane	ND	< 50		173	188	µg/g	93.0	70 - 130	
Triethylamine	ND	< 500		1430	1600	µg/g	89.4	70 - 130	
N,N-dimethylformamide	ND	< 150		483	480	µg/g	100.6	70 - 130	
N,N-dimethylacetamide	ND	< 150		478	483	µg/g	99.0	70 - 130	
Pyridine	ND	< 50		161	168	µg/g	95.8	70 - 130	
Silofane	ND	< 50		164	161	µg/g	101.9	70 - 130	
1,2-Dichloroethane	ND	< 1		0.837	1	µg/g	83.7	70 - 130	
Chloroform	ND	< 1		0.951	1	µg/g	95.1	70 - 130	
Trichloroethylene	ND	< 1		0.926	1	µg/g	92.6	70 - 130	
1,1,1-Trichloroethane	ND	< 1		0.758	1	µg/g	75.8	70 - 130	



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QC- Sample Duplicate	Sample ID: 23-009604-0001						
Analyte	Result	Org. Result	LOQ Units	RPD	Limits	Accept/ Fail	Notes
Propane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30 µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100 µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500 µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60 µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
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	
Methylethylketone	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	
1,2-Dichloroethane	ND	ND	1 µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1 µg/g	0.0	< 20	Acceptable	
Trichloroethylene	ND	ND	1 µg/g	0.0	< 20	Acceptable	
1,1-Dichloroethane	ND	ND	1 µg/g	0.0	< 20	Acceptable	

Abbreviations

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

Units of Measure:

µg/g- Microgram per gram or ppm



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Portland, OR 97230
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Laboratory Pesticide Quality Control Results

AOAC2007.1 &EN 15662		Units: mg/Kg			Batch ID 2310121			
Method Blank	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS% Re	Limits	Notes
Abamectin	0.00	< 0.250		0.842	1.000	84.2	50.0	150
Acephate	0.00	< 0.200		0.651	0.800	81.4	60.0	120
Acoquinocyl	0.00	< 1.000		3.416	4.000	85.4	40.0	160
Acetamiprid	0.00	< 0.100		0.335	0.400	83.7	60.0	120
Aldicarb	0.00	< 0.200		0.728	0.800	91.1	60.0	120
Azoxystrobin	0.004	< 0.100		0.339	0.400	84.8	60.0	120
Bfenazate	0.00	< 0.100		0.349	0.400	87.2	60.0	120
Bifenthrin	0.00	< 0.100		0.321	0.400	80.1	50.0	150
Boscalid	0.028	< 0.200		0.671	0.800	83.9	60.0	120
Carbaryl	0.00	< 0.100		0.330	0.400	82.6	60.0	120
Carbofuran	0.00	< 0.100		0.331	0.400	82.8	60.0	120
Chlorantraniliprole	0.00	< 0.100		0.327	0.400	81.9	60.0	120
Chlorfenapyr	0.00	< 0.500		1.875	2.000	93.8	60.0	120
Chlorpyrifos	0.00	< 0.100		0.359	0.400	89.8	60.0	120
Clofentezane	0.00	< 0.100		0.308	0.400	76.9	60.0	120
Cyfluthrin	0.00	< 0.500		1.794	2.000	89.7	50.0	150
Cypermethrin	0.00	< 0.500		1.580	2.000	79.0	50.0	150
Daminozide	0.00	< 0.500		0.674	2.000	33.7	60.0	120
Diazinon	0.00	< 0.100		0.342	0.400	85.6	60.0	120
Dichlorvos	0.00	< 0.500		1.847	2.000	92.4	60.0	120
Dimethoate	0.00	< 0.100		0.339	0.400	84.7	60.0	120
Ethiofoprofos	0.00	< 0.100		0.337	0.400	84.1	60.0	120
Etofenprox	0.00	< 0.200		0.656	0.800	82.0	50.0	150
Etoxazole	0.003	< 0.100		0.334	0.400	83.6	60.0	120
Fenoxycarb	0.00	< 0.100		0.319	0.400	79.8	60.0	120
Fenproximate	0.005	< 0.200		0.651	0.800	81.4	60.0	120
Fipronil	0.00	< 0.200		0.643	0.800	80.4	60.0	120
Fonicamid	0.00	< 0.250		0.907	1.000	90.7	60.0	120
Fudioxonil	0.00	< 0.200		0.710	0.800	88.7	50.0	150
Hexythiazox	0.00	< 0.250		0.834	1.000	83.4	60.0	120
Imazail	0.00	< 0.100		0.334	0.400	83.5	60.0	120
Imidacloprid	0.005	< 0.200		0.685	0.800	85.6	60.0	120
Kiesoxim-methyl	0.00	< 0.200		0.656	0.800	81.9	60.0	120
Malathion	0.00	< 0.100		0.326	0.400	81.5	60.0	120
Metaxyl	0.00	< 0.100		0.337	0.400	84.3	60.0	120
Methiocarb	0.00	< 0.100		0.331	0.400	82.8	60.0	120
Methomyl	0.00	< 0.200		0.723	0.800	90.4	60.0	120
MCK-264	0.00	< 0.100		0.339	0.400	84.6	50.0	150
Myclobutani	0.00	< 0.100		0.355	0.400	88.9	60.0	120
Naled	0.00	< 0.250		0.856	1.000	85.6	50.0	150
Oxamyl	0.00	< 0.500		1.678	2.000	83.9	60.0	120
Padobutrazole	0.00	< 0.200		0.670	0.800	83.8	60.0	120
Parathion-Methyl	0.00	< 0.100		0.362	0.400	90.5	50.0	150
Permethrin	0.00	< 0.100		0.329	0.400	82.2	50.0	150
Phosmet	0.00	< 0.100		0.345	0.400	86.3	50.0	150
Piperonyl butoxide	0.00	< 0.500		1.750	2.000	87.5	60.0	120
Prallethrin	0.00	< 0.100		0.358	0.400	89.4	60.0	120
Propiconazole	0.00	< 0.200		0.612	0.800	76.5	60.0	120
Propoxur	0.00	< 0.100		0.332	0.400	82.9	60.0	120
Pyrethrin (Summe)	0.009	< 0.100		0.420	0.488	86.0	60.0	120
Pyridaben	0.00	< 0.100		0.328	0.400	81.9	50.0	150
Spinosad	0.00	< 0.100		0.320	0.388	82.6	50.0	150
Spiromesfen	0.00	< 0.100		0.350	0.400	87.4	60.0	120
Spirotetramat	0.00	< 0.100		0.334	0.400	83.5	60.0	120
Spiroxamine	0.00	< 0.200		0.684	0.800	85.5	60.0	120
Tebuconazole	0.00	< 0.200		0.613	0.800	76.7	60.0	120
Thiadoprid	0.00	< 0.100		0.318	0.400	79.4	60.0	120
Thiamethoxam	0.00	< 0.100		0.368	0.400	90.6	60.0	120
Trifloxystrobin	0.00	< 0.100		0.335	0.400	83.8	60.0	120

Q6



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Laboratory Pesticide Quality Control Results

AOAC2007.1 & EN 15662		Units: mg/Kg				Batch ID 2310121				
Matrix Spke/Matrix Spke Duplicate Recoveries	Result	MS Res	MSD Res	Spike	PPD%	Limit	MS % Re	MSD % Re	Limits	Notes
Abamectin	0.000	0.805	0.729	1.000	9.8%	< 30	80.5%	72.9%	50 - 150	
Acephate	0.019	0.659	0.703	0.800	6.7%	< 30	80.0%	85.5%	50 - 150	
Acequinocyl	0.000	3.355	3.339	4.000	0.5%	< 30	83.9%	83.3%	50 - 150	
Acetamiprid	0.000	0.339	0.325	0.400	4.1%	< 30	84.7%	81.3%	50 - 150	
Aldicarb	0.000	0.732	0.700	0.800	4.6%	< 30	91.6%	87.4%	50 - 150	
Azoxystrobin	0.004	0.343	0.320	0.400	6.8%	< 30	84.8%	79.2%	50 - 150	
Bfenazate	0.000	0.342	0.338	0.400	1.3%	< 30	85.6%	84.3%	50 - 150	
Bifenthrin	0.000	0.311	0.309	0.400	0.7%	< 30	77.8%	77.2%	50 - 150	
Boscalid	0.024	0.620	0.636	0.800	2.7%	< 30	74.4%	76.4%	50 - 150	
Carbaryl	0.000	0.342	0.326	0.400	4.8%	< 30	85.4%	81.4%	50 - 150	
Carbofuran	0.000	0.331	0.313	0.400	5.6%	< 30	82.8%	78.3%	50 - 150	
Chlorantraniliprole	0.000	0.313	0.293	0.400	6.5%	< 30	78.3%	73.4%	50 - 150	
Chlorfenapyr	0.000	1.360	1.537	2.000	12.3%	< 30	68.0%	76.9%	50 - 150	
Chlorpyrifos	0.000	0.353	0.356	0.400	0.9%	< 30	88.2%	89.0%	50 - 150	
Clofentezane	0.000	0.090	0.103	0.400	13.6%	< 30	22.5%	25.8%	50 - 150	
Cyfluthrin	0.000	1.771	1.702	2.000	4.0%	< 30	88.6%	85.1%	30 - 150	
Cypermethrin	0.000	1.702	1.556	2.000	9.0%	< 30	85.1%	77.8%	50 - 150	
Daminozide	0.000	0.684	0.652	2.000	4.8%	< 30	34.2%	32.6%	30 - 150	
Diazinon	0.000	0.328	0.306	0.400	6.9%	< 30	82.0%	76.5%	50 - 150	
Dichlorvos	0.000	1.794	1.739	2.000	3.1%	< 30	89.7%	87.0%	50 - 150	
Dimethoate	0.000	0.342	0.315	0.400	8.2%	< 30	85.5%	78.8%	50 - 150	
Ethionphos	0.001	0.335	0.318	0.400	5.3%	< 30	83.5%	79.1%	50 - 150	
Etofenprox	0.000	0.628	0.605	0.800	3.6%	< 30	78.5%	75.7%	50 - 150	
Etoxazole	0.004	0.318	0.306	0.400	3.7%	< 30	78.4%	75.8%	50 - 150	
Fenoxycarb	0.000	0.335	0.311	0.400	7.7%	< 30	83.9%	77.6%	50 - 150	
Fenpyroximate	0.005	0.688	0.649	0.800	5.9%	< 30	85.4%	80.5%	50 - 150	
Fipronil	0.000	0.693	0.635	0.800	8.5%	< 30	86.6%	79.5%	50 - 150	
Fonicamid	0.000	0.884	0.780	1.000	12.4%	< 30	88.4%	78.0%	50 - 150	
Fludioxonil	0.000	0.696	0.668	0.800	4.0%	< 30	87.0%	83.6%	50 - 150	
Hexythiazox	0.000	0.782	0.746	1.000	4.7%	< 30	78.2%	74.6%	50 - 150	
Imazalil	0.000	0.341	0.324	0.400	5.0%	< 30	85.2%	81.0%	50 - 150	
Imidacloprid	0.005	0.698	0.609	0.800	13.7%	< 30	86.6%	75.9%	50 - 150	
Kiesoxim-methyl	0.000	0.667	0.640	0.800	4.2%	< 30	83.4%	80.0%	50 - 150	
Malathion	0.000	0.325	0.308	0.400	5.5%	< 30	81.4%	77.0%	50 - 150	
Metaxyl	0.000	0.348	0.330	0.400	5.3%	< 30	87.0%	82.5%	50 - 150	
Methiocarb	0.000	0.340	0.332	0.400	2.2%	< 30	84.9%	83.1%	50 - 150	
Methomyl	0.000	0.680	0.642	0.800	5.9%	< 30	85.0%	80.2%	50 - 150	
MCK-264	0.000	0.322	0.320	0.400	0.5%	< 30	80.5%	80.1%	50 - 150	
Mydobutani	0.000	0.335	0.294	0.400	13.5%	< 30	84.1%	73.5%	50 - 150	
Naled	0.000	0.880	0.847	1.000	3.8%	< 30	88.0%	84.7%	50 - 150	
Oxaryl	0.000	1.828	1.494	2.000	20.1%	< 30	91.4%	74.7%	50 - 150	
Padobutrazole	0.001	0.685	0.638	0.800	7.1%	< 30	85.5%	79.7%	50 - 150	
Parathion-Methyl	0.000	0.366	0.295	0.400	21.3%	< 30	91.5%	73.9%	30 - 150	
Permethrin	0.000	0.302	0.302	0.400	0.2%	< 30	75.6%	75.4%	50 - 150	
Phosmet	0.000	0.358	0.342	0.400	4.5%	< 30	89.6%	85.6%	50 - 150	
Piperonyl butoxide	0.000	1.658	1.620	2.000	2.3%	< 30	82.9%	81.0%	50 - 150	
Prallethrin	0.011	0.353	0.358	0.400	1.7%	< 30	85.3%	86.8%	50 - 150	
Propiconazole	0.000	0.647	0.593	0.800	8.7%	< 30	80.8%	74.1%	50 - 150	
Propoxur	0.000	0.343	0.327	0.400	5.1%	< 30	85.5%	81.6%	50 - 150	
Pyrethrin (Summe)	0.001	0.315	0.308	0.488	2.4%	< 30	64.4%	62.9%	50 - 150	
Pyridaben	0.000	0.293	0.279	0.400	5.0%	< 30	73.2%	69.7%	50 - 150	
Spiromesfen	0.000	0.314	0.300	0.388	4.5%	< 30	81.0%	77.4%	50 - 150	
Spiromesfen	0.000	0.348	0.322	0.400	7.6%	< 30	87.0%	80.6%	50 - 150	
Spirotetramat	0.000	0.335	0.318	0.400	5.1%	< 30	83.7%	79.5%	50 - 150	
Spiroxamine	0.000	0.700	0.678	0.800	3.1%	< 30	87.4%	84.7%	50 - 150	
Tebuconazole	0.000	0.630	0.573	0.800	9.4%	< 30	78.7%	71.7%	50 - 150	
Thiadoprid	0.000	0.325	0.305	0.400	6.5%	< 30	81.4%	76.2%	50 - 150	
Thiamethoxam	0.000	0.357	0.329	0.400	8.0%	< 30	89.2%	82.3%	50 - 150	
Trifloxystrobin	0.000	0.324	0.305	0.400	6.0%	< 30	81.1%	76.4%	50 - 150	



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Report Number: 23-009649/D002.R000
Report Date: 08/23/2023
ORELAP#: OR100028
Purchase Order: 2596040
Received: 08/14/23 15:45

Revision: 1 Document ID: 7086
 Legacy ID: CFL-E57Worksheet Validated 11/04/2020

Terpenes Quality Control Results

Method Reference: EPA5035				Batch ID: 2310293					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	LCS	Units	LCS% Rec	Limits	Notes
a-pinene	<LOQ	< 200		480	500	µg/g	96%	70 - 130	
Camphene	<LOQ	< 200		497	500	µg/g	99%	70 - 130	
Sabinene	<LOQ	< 200		464	500	µg/g	93%	70 - 130	
b-Pinene	<LOQ	< 200		473	500	µg/g	95%	70 - 130	
b-Myrcene	<LOQ	< 200		506	500	µg/g	101%	70 - 130	
a-phellandrene	<LOQ	< 200		498	500	µg/g	100%	70 - 130	
d-3-Carene	<LOQ	< 200		486	500	µg/g	97%	70 - 130	
a-Terpinene	<LOQ	< 200		498	500	µg/g	100%	70 - 130	
p-Cymene	<LOQ	< 200		501	500	µg/g	100%	70 - 130	
D-Limonene	<LOQ	< 200		482	500	µg/g	96%	70 - 130	
Eucalyptol	<LOQ	< 200		519	500	µg/g	104%	70 - 130	
b-cis-Cimene	<LOQ	< 67		159	167	µg/g	95%	70 - 130	
b-trans-Cimene	<LOQ	< 133		332	333	µg/g	100%	70 - 130	
g-Terpinene	<LOQ	< 200		478	500	µg/g	96%	70 - 130	
Sabinene Hydrate	<LOQ	< 200		492	500	µg/g	98%	70 - 130	
Terpinolene	<LOQ	< 200		501	500	µg/g	100%	70 - 130	
D-Fenchone	<LOQ	< 200		486	500	µg/g	97%	70 - 130	
Linalool	<LOQ	< 200		531	500	µg/g	106%	70 - 130	
Fenchol	<LOQ	< 200		482	500	µg/g	96%	70 - 130	
Camphor	<LOQ	< 200		499	500	µg/g	100%	70 - 130	
Isopulego	<LOQ	< 200		540	500	µg/g	108%	70 - 130	
Isoborneol	<LOQ	< 200		533	500	µg/g	107%	70 - 130	
Borneol	<LOQ	< 200		505	500	µg/g	101%	70 - 130	
DL-Menthol	<LOQ	< 200		633	500	µg/g	127%	70 - 130	
Terpineol	<LOQ	< 200		497	500	µg/g	99%	70 - 130	
Nerd	<LOQ	< 200		488	500	µg/g	98%	70 - 130	
Pulegone	<LOQ	< 200		514	500	µg/g	103%	70 - 130	
Geraniol	<LOQ	< 200		513	500	µg/g	103%	70 - 130	
Geranyl Acetate	<LOQ	< 200		512	500	µg/g	102%	70 - 130	
a-Cedrene	<LOQ	< 200		501	500	µg/g	100%	70 - 130	
b-Caryophyllene	<LOQ	< 200		521	500	µg/g	104%	70 - 130	
a-Humulene	<LOQ	< 200		489	500	µg/g	98%	70 - 130	
Valene	<LOQ	< 200		509	500	µg/g	102%	70 - 130	
cis-Nerolidol	<LOQ	< 200		541	500	µg/g	108%	70 - 130	
a-Farnesene	<LOQ	< 200		575	500	µg/g	115%	70 - 130	
trans-Nerolidol	<LOQ	< 200		521	500	µg/g	104%	70 - 130	
Caryophyllene Oxide	<LOQ	< 200		532	500	µg/g	106%	70 - 130	
Guaiol	<LOQ	< 200		499	500	µg/g	100%	70 - 130	
Cedrol	<LOQ	< 200		531	500	µg/g	106%	70 - 130	
a-Bisabolol	<LOQ	< 200		526	500	µg/g	105%	70 - 130	

Definitions

LOQ	Limit of Quantitation
LCS	Laboratory Control Sample
% REC	Percent Recovery



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Report Number: 23-009649/D002.R000
Report Date: 08/23/2023
ORELAP#: OR100028
Purchase Order: 2596040
Received: 08/14/23 15:45

Revision: 1 Document ID: 7086
 Legacy ID: CFL-E57Worksheet Validated 11/04/2020

Terpenes Quality Control Results

Method Reference: EPA5035		Batch ID: 2310293					
Sample/ Sample Duplicate		Sample ID: 23-009646-002					
Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	10700	11000	197	µg/g	3%	< 20	
Camphene	361	337	197	µg/g	7%	< 20	
Sabinene	<LOQ	<LOQ	197	µg/g	0%	< 20	
b-Pinene	5370	5490	197	µg/g	2%	< 20	
b-Myrcene	110000	110000	197	µg/g	0%	< 20	
a-phellandrene	<LOQ	<LOQ	197	µg/g	0%	< 20	
d-3-Carene	<LOQ	<LOQ	197	µg/g	0%	< 20	
a-Terpinene	<LOQ	<LOQ	197	µg/g	0%	< 20	
p-Cymene	<LOQ	<LOQ	197	µg/g	0%	< 20	
D-Limonene	30100	30800	197	µg/g	2%	< 20	
Eucalyptol	<LOQ	<LOQ	197	µg/g	0%	< 20	
b-cis-Cimene	369	364	65.6	µg/g	1%	< 20	
b-trans-Cimene	8080	8250	131	µg/g	2%	< 20	
g-Terpinene	<LOQ	<LOQ	197	µg/g	0%	< 20	
Sabinene Hydrate	<LOQ	<LOQ	197	µg/g	0%	< 20	
Terpinolene	1080	1100	197	µg/g	2%	< 20	
D-Fenchone	393	398	197	µg/g	1%	< 20	
Linalool	5600	5720	197	µg/g	2%	< 20	
Fenchol	1630	1660	197	µg/g	2%	< 20	
Camphor	<LOQ	<LOQ	197	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	197	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Borneol	485	493	197	µg/g	2%	< 20	
DL-Menthhol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Terpineol	1290	1320	197	µg/g	2%	< 20	
Nerd	<LOQ	<LOQ	197	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	197	µg/g	0%	< 20	
Geraniol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Geranyl Acetate	<LOQ	<LOQ	197	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	197	µg/g	0%	< 20	
b-Caryophyllene	21500	21900	197	µg/g	2%	< 20	
a-Humulene	7730	7900	197	µg/g	2%	< 20	
Valnene	717	754	197	µg/g	5%	< 20	
cis-Nerolidol	<LOQ	<LOQ	197	µg/g	0%	< 20	
a-Farnesene	10700	10200	197	µg/g	5%	< 20	
trans-Nerolidol	1950	<LOQ	197	µg/g	0%	< 20	
Caryophyllene Oxide	1410	1400	197	µg/g	1%	< 20	
Guaiol	5060	5110	197	µg/g	1%	< 20	
Cedrol	<LOQ	<LOQ	197	µg/g	0%	< 20	
a-Bisabolol	4020	4090	197	µg/g	2%	< 20	

Definitions

RPD Relative Percent Difference



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Received: 08/14/23 15:45





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.

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU	BATCH #	LOQ: Limit Of Quantitation	
PRODUCT NAME	SERVING SIZE	LOD: Limit Of Detection	
LABORATORY :	OREGON ACCREDITATION: OR100028	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)	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		
Water Activity	Pass		
TERPENES	% OF SAMPLE		
Farnesene	%		
β-Caryophyllene	%		
α-Bisabolol	%		
Guaiol	%		
Humulene	%		
Caryophyllene Oxide	%		



1. American Herbal Pharmacopoeia. (2014). Cannabis Inflorescence: Standards of Identity, Analysis, and Quality Control. Washington DC: AHP.



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Portland, OR 97230
503-254-1794



Report Number: 23-008422/D002.R001
Report Date: 08/02/2023
ORELAP#: OR100028
Purchase Order: 2558667
Received: 07/17/23 16:20

This is an amended version of report# 23-008422/D002.R000.

Reason: Report includes additional testing.

Customer: Etz Hayim Holdings
Product identity: FORM-TN.O.FS50-FF40
Client/Metric ID: .
Laboratory ID: 23-008422-0002

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status	
CBC per 1g	4.61		mg/1g		CBD-Total per Serving Size 59.3 mg/1g
CBD per 1g	59.3		mg/1g		
CBDV per 1g	0.846		mg/1g		THC-Total per Serving Size 2.04 mg/1g
CBE per 1g	0.906		mg/1g		(Reported in milligrams per serving)
CBG per 1g	2.30		mg/1g		
CBL per 1g	0.360		mg/1g		
CBN per 1g	0.0611		mg/1g		
CBT per 1g	1.68		mg/1g		
Δ9-THC per 1g	2.04		mg/1g		

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Terpenes:

Analyte	Percent by weight	Percent of Total	Analyte	Percent by weight	Percent of Total
β-Caryophyllene	0.100	24.75%	farnesene	0.0792	19.60%
(-)-caryophyllene oxide	0.0748	18.51%	β-Myrcene	0.0401	9.93%
α-Bisabolol	0.0397	9.83%	Humulene	0.0371	9.18%
(-)-Guaiaol	0.0326	8.07%	Total Terpenes	0.404	100.00%

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.



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Report Number: 23-008422/D002.R001
Report Date: 08/02/2023
ORELAP#: OR100028
Purchase Order: 2558667
Received: 07/17/23 16:20

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

Product identity: FORM-TN.O.FS50-FF40

Client/Metric ID: .

Sample Date:

Laboratory ID: 23-008422-0002

Evidence of Cooling: No

Temp: 23.6 °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: 2309237	Analyze: 7/19/23 4:27:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	4.61		mg/1g	0.0329	
CBC-A per 1g	< LOQ		mg/1g	0.0329	
CBC-Total per 1g	4.61		mg/1g	0.0618	
CBD per 1g	59.3		mg/1g	0.329	
CBD-A per 1g	< LOQ		mg/1g	0.0329	
CBD-Total per 1g	59.3		mg/1g	0.358	
CBDV per 1g	0.846		mg/1g	0.0329	
CBDV-A per 1g	< LOQ		mg/1g	0.0329	
CBDV-Total per 1g	0.846		mg/1g	0.0615	
CBE per 1g	0.906		mg/1g	0.0329	
CBG per 1g	2.30		mg/1g	0.0329	
CBG-A per 1g	< LOQ		mg/1g	0.0329	
CBG-Total per 1g	2.30		mg/1g	0.0615	
CBL per 1g	0.360		mg/1g	0.0329	
CBL-A per 1g	< LOQ		mg/1g	0.0329	
CBL-Total per 1g	0.360		mg/1g	0.0618	
CBN per 1g	0.0611		mg/1g	0.0329	
CBT per 1g	1.68		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	< LOQ		mg/1g	0.0329	
Δ9-THC per 1g	2.04		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	2.04		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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Report Number: 23-008422/D002.R001
Report Date: 08/02/2023
ORELAP#: OR100028
Purchase Order: 2558667
Received: 07/17/23 16:20

Potency per 1g	Method: J AOAC 2015 V98-6 (mod) ^P	Units mg/se	Batch: 2309237	Analyze: 7/19/23 4:27:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
THCV-Total per 1g	< LOQ		mg/1g	0.0618	
Total Cannabinoids per 1g	72.1		mg/1g		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2309458	07/29/23 AOAC 991.14 (Petrifilm) ^P		I
Total Coliforms	< LOQ		cfu/g	10	2309458	07/29/23 AOAC 991.14 (Petrifilm) ^P		I
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2309459	07/29/23 AOAC 2014.05 (RAPID) ^P		I
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2309459	07/29/23 AOAC 2014.05 (RAPID) ^P		I

Solvents	Method: Residual Solvents by GC/MS ^P					Units µg/g	Batch 2309574	Analyze 07/31/23 01:51 PM				
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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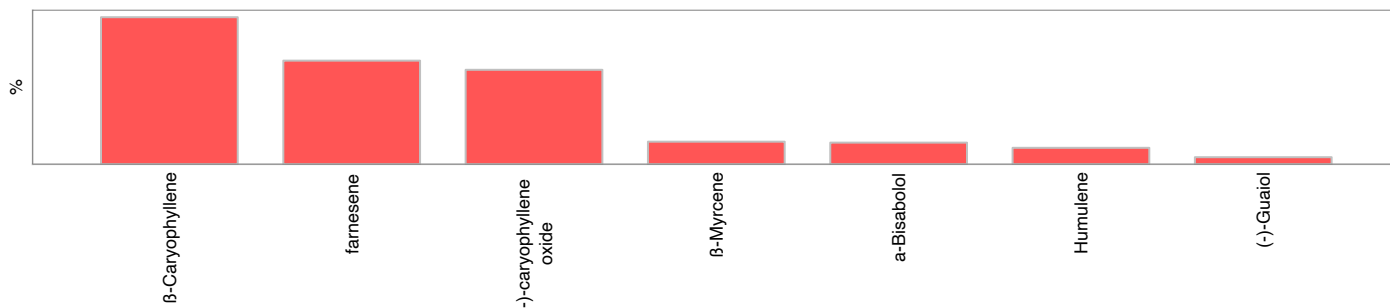


Report Number: 23-008422/D002.R001
Report Date: 08/02/2023
ORELAP#: OR100028
Purchase Order: 2558667
Received: 07/17/23 16:20

Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod) ^b											
Units mg/kg Batch 2309567 Analyze 07/31/23 12:44 PM											
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin [¥]	< LOQ	0.50	0.250	pass		Acephate [¥]	< LOQ	0.40	0.200	pass	
Acequinocyl [¥]	< LOQ	2.0	1.00	pass		Acetamiprid [¥]	< LOQ	0.20	0.100	pass	
Aldicarb [¥]	< LOQ	0.40	0.200	pass		Azoxystrobin [¥]	< LOQ	0.20	0.100	pass	
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		Fonicamid [¥]	< LOQ	1.0	0.400	pass	
Fludioxonil [¥]	< LOQ	0.40	0.200	pass		Hexythiazox [¥]	< LOQ	1.0	0.400	pass	
Imazali [¥]	< 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	0.100	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							



Terpenes				Method: J AOAC 2015 V98-6	Units %	Batch 2309568	Analyze 07/28/23 06:02 PM		
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
β-Caryophyllene	0.100	0.019	24.752%		farnesene	0.0792	0.019	19.6040%	
(-)-caryophyllene oxide	0.0748	0.019	18.5149%		β-Myrcene	0.0401	0.019	9.9257%	
α-Bisabolol	0.0397	0.019	9.8267%		Humulene	0.0371	0.019	9.1832%	
(-)-Guaiol	0.0326	0.019	8.0693%		(R)-(+)-Limonene	< LOQ	0.019	0.00%	
p-Cymene	< LOQ	0.019	0.00%		Linalool	< LOQ	0.019	0.00%	
Geraniol	< LOQ	0.019	0.00%		(+)-Cedrol	< LOQ	0.019	0.00%	
(+)-fenchol	< LOQ	0.019	0.00%		(±)-trans-Nerolidol	< LOQ	0.019	0.00%	
Isoborneol	< LOQ	0.019	0.00%		nerol	< LOQ	0.019	0.00%	
(+)-Borneol	< LOQ	0.019	0.00%		Sabinene	< LOQ	0.019	0.00%	
Camphene	< LOQ	0.019	0.00%		(+)-Pulegone	< LOQ	0.019	0.00%	
trans-β-Ocimene	< LOQ	0.013	0.00%		Menthol	< LOQ	0.019	0.00%	
(±)-cis-Nerolidol	< LOQ	0.019	0.00%		(-)-β-Pinene	< LOQ	0.019	0.00%	
Terpinolene	< LOQ	0.019	0.00%		(-)-α-Terpineol	< LOQ	0.019	0.00%	
Geranyl acetate	< LOQ	0.019	0.00%		(±)-fenchone	< LOQ	0.019	0.00%	
α-pinene	< LOQ	0.019	0.00%		Sabinene hydrate	< LOQ	0.019	0.00%	
(-)-Isopulegol	< LOQ	0.019	0.00%		(±)-Camphor	< LOQ	0.019	0.00%	
α-cedrene	< LOQ	0.019	0.00%		α-phellandrene	< LOQ	0.019	0.00%	
α-Terpinene	< LOQ	0.019	0.00%		cis-β-Ocimene	< LOQ	0.006	0.00%	
d-3-Carene	< LOQ	0.019	0.00%		Eucalyptol	< LOQ	0.019	0.00%	
γ-Terpinene	< LOQ	0.019	0.00%		valencene	< LOQ	0.019	0.00%	
Total Terpenes	0.404								



Metals								
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic [¥]	< LOQ	0.200	mg/kg	0.0847	2309580	07/31/23 AOAC 2013.06 (mod.) ^Þ	pass	
Cadmium [¥]	< LOQ	0.200	mg/kg	0.0847	2309580	07/31/23 AOAC 2013.06 (mod.) ^Þ	pass	
Lead [¥]	< LOQ	0.500	mg/kg	0.0847	2309580	07/31/23 AOAC 2013.06 (mod.) ^Þ	pass	
Mercury [¥]	< LOQ	0.100	mg/kg	0.0423	2309580	07/31/23 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.

Ⓟ = 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

Glossary of Qualifiers

I: Insufficient sample received to meet method requirements.

Approved Signatory

Derrick Tanner
General Manager



12423 NE Whitaker Way
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Report Number: 23-008422/D002.R001
Report Date: 08/02/2023
ORELAP#: OR100028
Purchase Order: 2558667
Received: 07/17/23 16:20

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

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2309237

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0298	0.0311	%	95.9	80.0	- 120	Acceptable	
CBDV	2	0.0297	0.0307	%	96.7	80.0	- 120	Acceptable	
CBE	2	0.0334	0.0349	%	95.8	80.0	- 120	Acceptable	
CBDA	1	0.0312	0.0325	%	95.9	90.0	- 110	Acceptable	
CBGA	1	0.0311	0.0326	%	95.3	80.0	- 120	Acceptable	
CBG	1	0.0318	0.0332	%	95.7	80.0	- 120	Acceptable	
CBD	1	0.0326	0.0337	%	96.6	90.0	- 110	Acceptable	
THCV	2	0.0215	0.0222	%	96.8	80.0	- 120	Acceptable	
d8THCV	2	0.0259	0.0272	%	95.5	80.0	- 120	Acceptable	
THCVA	2	0.0298	0.0310	%	96.2	80.0	- 120	Acceptable	
CBN	1	0.0323	0.0340	%	95.0	80.0	- 120	Acceptable	
exo-THC	2	0.0300	0.0311	%	96.4	80.0	- 120	Acceptable	
d9THC	1	0.0317	0.0329	%	96.2	90.0	- 110	Acceptable	
d8THC	1	0.0307	0.0320	%	96.0	90.0	- 110	Acceptable	
9S-d10THC	1	0.0328	0.0343	%	95.7	80.0	- 120	Acceptable	
CBL	2	0.0305	0.0311	%	98.1	80.0	- 120	Acceptable	
9R-d10THC	1	0.0296	0.0313	%	94.8	80.0	- 120	Acceptable	
CBC	2	0.0301	0.0319	%	94.5	80.0	- 120	Acceptable	
THCA	1	0.0305	0.0322	%	94.7	90.0	- 110	Acceptable	
CBCA	2	0.0309	0.0325	%	95.1	80.0	- 120	Acceptable	
CBLA	2	0.0476	0.0500	%	95.1	80.0	- 120	Acceptable	
d9THCP	2	0.0303	0.0323	%	93.7	80.0	- 120	Acceptable	
CBT	2	0.0302	0.0314	%	96.3	80.0	- 120	Acceptable	

Method Blank						
Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBDV	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBE	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBDA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBGA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBG	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBD	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCV	<LOQ	0.00329	%	< 0.00329	Acceptable	
d8THCV	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCVA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBN	<LOQ	0.00329	%	< 0.00329	Acceptable	
exo-THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
d9THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
d8THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
9S-d10THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBL	<LOQ	0.00329	%	< 0.00329	Acceptable	
9R-d10THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBC	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBCA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBLA	<LOQ	0.00329	%	< 0.00329	Acceptable	
d9THCP	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBT	<LOQ	0.00329	%	< 0.00329	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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Received: 07/17/23 16:20

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

Laboratory Quality Control Results

J AOAC 2015 V98-6		Batch ID: 2309237						
Sample Duplicate		Sample ID: 23-008341-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
CBDV	0.0385	0.0387	0.00324	%	0.686	< 20	Acceptable	
CBE	0.0621	0.0622	0.00324	%	0.148	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
CBG	0.0498	0.0504	0.00324	%	1.06	< 20	Acceptable	
CBD	3.39	3.39	0.00324	%	0.0904	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
CBN	0.0246	0.0248	0.00324	%	0.621	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
d9THC	0.133	0.133	0.00324	%	0.181	< 20	Acceptable	
d8THC	0.0377	0.0394	0.00324	%	4.40	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
CBL	0.00517	0.00522	0.00324	%	0.882	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
CBC	0.246	0.247	0.00324	%	0.462	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00324	%	NA	< 20	Acceptable	
CBT	0.0502	0.0505	0.00324	%	0.536	< 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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Report Number: 23-008422/D002.R001
Report Date: 08/02/2023
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Purchase Order: 2558667
Received: 07/17/23 16:20

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: 2309567			
Method Blank		Laboratory Control Sample						
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Abamectin	0.000	< 0.250		0.997	1.000	99.7	50.0	150
Acephate	0.002	< 0.200		0.711	0.800	88.9	60.0	120
Acetamiprid	0.000	< 1.000		3.870	4.000	96.8	40.0	160
Acetamiprid	0.000	< 0.100		0.390	0.400	97.5	60.0	120
Aldicarb	0.000	< 0.200		0.793	0.800	99.1	60.0	120
Azoxystrobin	0.000	< 0.100		0.398	0.400	99.5	60.0	120
Bifenazate	0.000	< 0.100		0.406	0.400	101.6	60.0	120
Bifenthrin	0.000	< 0.100		0.381	0.400	95.4	50.0	150
Boscalid	0.000	< 0.200		0.789	0.800	98.6	60.0	120
Carbaryl	0.000	< 0.100		0.394	0.400	98.4	60.0	120
Carbofuran	0.000	< 0.100		0.393	0.400	98.3	60.0	120
Chlorantraniliprole	0.000	< 0.100		0.397	0.400	99.3	60.0	120
Chlorfenapyr	0.000	< 0.500		2.138	2.000	106.9	60.0	120
Chlorpyrifos	0.000	< 0.100		0.387	0.400	96.7	60.0	120
Clofentazine	0.000	< 0.100		0.371	0.400	92.7	60.0	120
Cyfluthrin	0.000	< 0.500		2.112	2.000	105.6	50.0	150
Cypermethrin	0.000	< 0.500		1.984	2.000	99.2	50.0	150
Daminozide	0.000	< 0.500		0.701	2.000	35.1	60.0	120
Diazinon	0.000	< 0.100		0.398	0.400	99.5	60.0	120
Dichlorvos	0.000	< 0.500		1.909	2.000	95.4	60.0	120
Dimethoate	0.000	< 0.100		0.384	0.400	96.0	60.0	120
Ethoprophos	0.000	< 0.100		0.391	0.400	97.8	60.0	120
Etofenprox	0.000	< 0.200		0.799	0.800	99.9	50.0	150
Etoxazole	0.000	< 0.100		0.407	0.400	101.8	60.0	120
Fenoxycarb	0.000	< 0.100		0.393	0.400	98.2	60.0	120
Fenpyroximate	0.000	< 0.200		0.811	0.800	101.4	60.0	120
Fipronil	0.000	< 0.200		0.791	0.800	98.8	60.0	120
Fonicamid	0.000	< 0.250		0.959	1.000	95.9	60.0	120
Fludioxonil	0.000	< 0.200		0.797	0.800	99.6	50.0	150
Hexythiazox	0.000	< 0.250		0.980	1.000	98.0	60.0	120
Imazalil	0.000	< 0.100		0.398	0.400	99.6	60.0	120
Imidacloprid	0.000	< 0.200		0.732	0.800	91.5	60.0	120
Kresoxim-methyl	0.000	< 0.200		0.800	0.800	100.0	60.0	120
Malathion	0.000	< 0.100		0.394	0.400	98.4	60.0	120
Metaxalyl	0.000	< 0.100		0.400	0.400	99.9	60.0	120
Methiocarb	0.000	< 0.100		0.401	0.400	100.4	60.0	120
Methomyl	0.000	< 0.200		0.810	0.800	101.3	60.0	120
MGK-264	0.000	< 0.100		0.406	0.400	101.4	50.0	150
Myclobutanil	0.000	< 0.100		0.404	0.400	101.0	60.0	120
Naled	0.000	< 0.250		0.994	1.000	99.4	50.0	150
Oxamyl	0.000	< 0.500		2.058	2.000	102.9	60.0	120
Pacllobutrazole	0.000	< 0.200		0.782	0.800	97.8	60.0	120
Parathion-Methyl	0.000	< 0.100		0.402	0.400	100.4	50.0	150
Permethrin	0.000	< 0.100		0.394	0.400	98.5	50.0	150
Phosmet	0.000	< 0.100		0.387	0.400	96.8	50.0	150
Piperonyl butoxide	0.000	< 0.500		1.943	2.000	97.1	60.0	120
Prallethrin	0.000	< 0.100		0.394	0.400	98.5	60.0	120
Propiconazole	0.000	< 0.200		0.805	0.800	100.6	60.0	120
Propoxur	0.000	< 0.100		0.384	0.400	96.1	60.0	120
Pyrethrin (Summe)	0.001	< 0.100		0.467	0.488	95.7	60.0	120
Pyridaben	0.000	< 0.100		0.389	0.400	97.1	50.0	150
Spinosad	0.000	< 0.100		0.387	0.388	99.7	50.0	150
Spiromesifen	0.000	< 0.100		0.384	0.400	96.0	60.0	120
Spirotetramat	0.000	< 0.100		0.391	0.400	97.7	60.0	120
Spiroxamine	0.000	< 0.200		0.791	0.800	98.9	60.0	120
Tebuconazole	0.000	< 0.200		0.796	0.800	99.4	60.0	120
Thiacloprid	0.000	< 0.100		0.402	0.400	100.4	60.0	120
Thiamethoxam	0.000	< 0.100		0.386	0.400	96.5	60.0	120
Trifloxystrobin	0.000	< 0.100		0.397	0.400	99.3	60.0	120

Q6



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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg				Batch ID: 2309567				
Matrix Spike/Matrix Spike Duplicate Recoveries					Sample ID: 23-008777-0001					
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.000	0.943	0.979	1.000	3.7%	< 30	94.3%	97.9%	50 - 150	
Acephate	0.001	0.669	0.661	0.800	1.3%	< 30	83.5%	82.5%	50 - 150	
Acetaminocyl	0.001	3.617	3.714	4.000	2.6%	< 30	90.4%	92.8%	50 - 150	
Acetamiprid	0.000	0.366	0.374	0.400	2.2%	< 30	91.5%	93.6%	50 - 150	
Aldicarb	0.000	0.735	0.750	0.800	1.9%	< 30	91.9%	93.7%	50 - 150	
Azoxystrobin	0.000	0.385	0.369	0.400	4.1%	< 30	96.1%	92.3%	50 - 150	
Bifenazate	0.000	0.379	0.381	0.400	0.6%	< 30	94.7%	95.3%	50 - 150	
Bifenthrin	0.000	0.372	0.368	0.400	1.0%	< 30	93.0%	92.1%	50 - 150	
Boscalid	0.000	0.823	0.730	0.800	12.0%	< 30	102.9%	91.2%	50 - 150	
Carbaryl	0.000	0.365	0.377	0.400	3.1%	< 30	91.4%	94.3%	50 - 150	
Carbofuran	0.000	0.364	0.380	0.400	4.2%	< 30	91.1%	95.0%	50 - 150	
Chlorantraniliprole	0.000	0.366	0.368	0.400	0.5%	< 30	91.5%	92.0%	50 - 150	
Chlorfenapyr	0.000	1.933	1.979	2.000	2.4%	< 30	96.6%	99.0%	50 - 150	
Chlorpyrifos	0.000	0.359	0.366	0.400	2.0%	< 30	89.8%	91.6%	50 - 150	
Clofentezine	0.000	0.302	0.305	0.400	1.0%	< 30	75.5%	76.3%	50 - 150	
Cyfluthrin	0.000	1.825	1.624	2.000	11.7%	< 30	91.3%	81.2%	30 - 150	
Cypermethrin	0.000	1.852	1.905	2.000	2.8%	< 30	92.6%	95.2%	50 - 150	
Daminozide	0.000	0.688	0.653	2.000	5.2%	< 30	34.4%	32.7%	30 - 150	
Diazinon	0.000	0.376	0.367	0.400	2.4%	< 30	93.9%	91.7%	50 - 150	
Dichlorvos	0.000	1.826	1.957	2.000	6.9%	< 30	91.3%	97.9%	50 - 150	
Dimethoate	0.000	0.378	0.392	0.400	3.6%	< 30	94.5%	97.9%	50 - 150	
Ethoprophos	0.000	0.371	0.396	0.400	6.5%	< 30	92.7%	98.9%	50 - 150	
Etofenprox	0.000	0.748	0.749	0.800	0.3%	< 30	93.4%	93.7%	50 - 150	
Etoxazole	0.000	0.385	0.386	0.400	0.5%	< 30	96.1%	96.6%	50 - 150	
Fenoxycarb	0.000	0.370	0.370	0.400	0.1%	< 30	92.4%	92.6%	50 - 150	
Fenpyroximate	0.000	0.784	0.793	0.800	1.1%	< 30	98.1%	99.1%	50 - 150	
Fipronil	0.000	0.754	0.742	0.800	1.5%	< 30	94.2%	92.8%	50 - 150	
Flonicamid	0.000	0.916	0.914	1.000	0.2%	< 30	91.6%	91.4%	50 - 150	
Fludioxonil	0.000	0.735	0.780	0.800	5.9%	< 30	91.8%	97.4%	50 - 150	
Hexythiazox	0.000	0.911	0.907	1.000	0.4%	< 30	91.1%	90.7%	50 - 150	
Imazalil	0.000	0.374	0.376	0.400	0.7%	< 30	93.5%	94.1%	50 - 150	
Imidacloprid	0.000	0.757	0.748	0.800	1.1%	< 30	94.6%	93.5%	50 - 150	
Kresoxim-methyl	0.000	0.744	0.738	0.800	0.8%	< 30	93.0%	92.3%	50 - 150	
Malathion	0.000	0.360	0.376	0.400	4.4%	< 30	90.0%	94.1%	50 - 150	
Metaxalyl	0.000	0.378	0.375	0.400	0.8%	< 30	94.5%	93.7%	50 - 150	
Methiocarb	0.000	0.370	0.378	0.400	2.2%	< 30	92.4%	94.5%	50 - 150	
Methomyl	0.000	0.760	0.775	0.800	2.0%	< 30	95.0%	96.9%	50 - 150	
MGK-264	0.000	0.373	0.353	0.400	5.3%	< 30	93.2%	88.3%	50 - 150	
Myclobutanil	0.000	0.368	0.384	0.400	4.4%	< 30	92.0%	96.1%	50 - 150	
Naled	0.000	0.930	0.920	1.000	1.1%	< 30	93.0%	92.0%	50 - 150	
Oxamyl	0.000	1.904	1.989	2.000	4.4%	< 30	95.2%	99.5%	50 - 150	
Paclobotrazole	0.000	0.739	0.737	0.800	0.2%	< 30	92.4%	92.2%	50 - 150	
Parathion-Methyl	0.000	0.396	0.348	0.400	13.0%	< 30	99.0%	87.0%	30 - 150	
Permethrin	0.000	0.359	0.364	0.400	1.2%	< 30	89.9%	90.9%	50 - 150	
Phosmet	0.000	0.374	0.366	0.400	2.2%	< 30	93.6%	91.6%	50 - 150	
Piperonyl butoxide	0.000	1.820	1.858	2.000	2.0%	< 30	91.0%	92.9%	50 - 150	
Prallethrin	0.000	0.374	0.379	0.400	1.1%	< 30	93.6%	94.7%	50 - 150	
Propiconazole	0.000	0.747	0.745	0.800	0.3%	< 30	93.4%	93.1%	50 - 150	
Propoxur	0.000	0.368	0.380	0.400	3.1%	< 30	92.1%	95.0%	50 - 150	
Pyrethrin (Summe)	0.008	0.342	0.335	0.488	1.9%	< 30	68.3%	67.1%	50 - 150	
Pyridaben	0.000	0.369	0.378	0.400	2.5%	< 30	92.1%	94.5%	50 - 150	
Spinosad	0.000	0.372	0.365	0.388	1.9%	< 30	95.9%	94.1%	50 - 150	
Spiromesifen	0.000	0.380	0.386	0.400	1.6%	< 30	94.9%	96.4%	50 - 150	
Spirotetramat	0.000	0.365	0.367	0.400	0.5%	< 30	91.1%	91.6%	50 - 150	
Spiroxamine	0.000	0.749	0.747	0.800	0.3%	< 30	93.6%	93.3%	50 - 150	
Tebuconazole	0.000	0.740	0.717	0.800	3.1%	< 30	92.5%	89.6%	50 - 150	
Thiacloprid	0.000	0.375	0.364	0.400	2.9%	< 30	93.8%	91.1%	50 - 150	
Thiamethoxam	0.000	0.387	0.367	0.400	5.4%	< 30	96.8%	91.8%	50 - 150	
Trifloxystrobin	0.000	0.371	0.374	0.400	0.9%	< 30	92.7%	93.5%	50 - 150	



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Terpenes Quality Control Results

Method Reference: EPA 5035				Batch ID: 2309568					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	LCS	Units	LCS % Rec	Limits	Notes
a-pinene	<LOQ	< 200		424	500	µg/g	85%	70 - 130	
Camphene	<LOQ	< 200		453	500	µg/g	91%	70 - 130	
Sabinene	<LOQ	< 200		438	500	µg/g	88%	70 - 130	
b-Pinene	<LOQ	< 200		432	500	µg/g	86%	70 - 130	
b-Myrcene	<LOQ	< 200		450	500	µg/g	90%	70 - 130	
a-phellandrene	<LOQ	< 200		464	500	µg/g	93%	70 - 130	
d-3-Carene	<LOQ	< 200		452	500	µg/g	90%	70 - 130	
a-Terpinene	<LOQ	< 200		445	500	µg/g	89%	70 - 130	
p-Cymene	<LOQ	< 200		438	500	µg/g	88%	70 - 130	
D-Limonene	<LOQ	< 200		438	500	µg/g	88%	70 - 130	
Eucalyptol	<LOQ	< 200		448	500	µg/g	90%	70 - 130	
b-cis-Ocimene	<LOQ	< 67		151	167	µg/g	91%	70 - 130	
b-trans-Ocimene	<LOQ	< 133		300	333	µg/g	90%	70 - 130	
g-Terpinene	<LOQ	< 200		437	500	µg/g	87%	70 - 130	
Sabinene Hydrate	<LOQ	< 200		450	500	µg/g	90%	70 - 130	
Terpinolene	<LOQ	< 200		450	500	µg/g	90%	70 - 130	
D-Fenchone	<LOQ	< 200		434	500	µg/g	87%	70 - 130	
Linalool	<LOQ	< 200		473	500	µg/g	95%	70 - 130	
Fenchol	<LOQ	< 200		444	500	µg/g	89%	70 - 130	
Camphor	<LOQ	< 200		446	500	µg/g	89%	70 - 130	
Isopulego	<LOQ	< 200		469	500	µg/g	94%	70 - 130	
Isoborneol	<LOQ	< 200		465	500	µg/g	93%	70 - 130	
Borneol	<LOQ	< 200		449	500	µg/g	90%	70 - 130	
DL-Menthol	<LOQ	< 200		450	500	µg/g	90%	70 - 130	
Terpineol	<LOQ	< 200		444	500	µg/g	89%	70 - 130	
Nerol	<LOQ	< 200		440	500	µg/g	88%	70 - 130	
Pulegone	<LOQ	< 200		459	500	µg/g	92%	70 - 130	
Geraniol	<LOQ	< 200		471	500	µg/g	94%	70 - 130	
Geranyl Acetate	<LOQ	< 200		466	500	µg/g	93%	70 - 130	
a-Cedrene	<LOQ	< 200		448	500	µg/g	90%	70 - 130	
b-Caryophyllene	<LOQ	< 200		456	500	µg/g	91%	70 - 130	
a-Humulene	<LOQ	< 200		440	500	µg/g	88%	70 - 130	
Valenene	<LOQ	< 200		447	500	µg/g	89%	70 - 130	
cis-Nerolidol	<LOQ	< 200		474	500	µg/g	95%	70 - 130	
a-Farnesene	<LOQ	< 200		490	500	µg/g	98%	70 - 130	
trans-Nerolidol	<LOQ	< 200		460	500	µg/g	92%	70 - 130	
Caryophyllene Oxide	<LOQ	< 200		464	500	µg/g	93%	70 - 130	
Guaiol	<LOQ	< 200		452	500	µg/g	90%	70 - 130	
Cedrol	<LOQ	< 200		468	500	µg/g	94%	70 - 130	
a-Bisabolol	<LOQ	< 200		464	500	µg/g	93%	70 - 130	

Definitions

LOQ	Limit of Quantitation
LCS	Laboratory Control Sample
% REC	Percent Recovery



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Terpenes Quality Control Results

Method Reference: EPA 5035		Batch ID: 2309568					
Sample/Sample Duplicate		Sample ID: 23-008678-0002					
Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	2080	1970	194	µg/g	5%	< 20	
Camphene	<LOQ	<LOQ	194	µg/g	0%	< 20	
Sabinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-Pinene	2330	2220	194	µg/g	5%	< 20	
b-Myrcene	5820	5490	194	µg/g	6%	< 20	
a-phellandrene	737	696	194	µg/g	6%	< 20	
d-3-Carene	882	836	194	µg/g	5%	< 20	
a-Terpinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
p-Cymene	211	199	194	µg/g	6%	< 20	
D-Limonene	14100	13300	194	µg/g	6%	< 20	
Eucalyptol	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-cis-Ocimene	9200	8670	64.7	µg/g	6%	< 20	
b-trans-Ocimene	<LOQ	<LOQ	129	µg/g	0%	< 20	
g-Terpinene	<LOQ	<LOQ	194	µg/g	0%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	194	µg/g	0%	< 20	
Terpinolene	25900	24500	194	µg/g	6%	< 20	
D-Fenchone	<LOQ	<LOQ	194	µg/g	0%	< 20	
Linalool	1100	1060	194	µg/g	4%	< 20	
Fenchol	284	277	194	µg/g	2%	< 20	
Camphor	<LOQ	<LOQ	194	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	194	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Borneol	<LOQ	<LOQ	194	µg/g	0%	< 20	
DL-Menthol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Terpineol	722	696	194	µg/g	4%	< 20	
Nerol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	194	µg/g	0%	< 20	
Geraniol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Geranyl_Acetate	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	194	µg/g	0%	< 20	
b-Caryophyllene	6440	6220	194	µg/g	3%	< 20	
a-Humulene	254	254	194	µg/g	0%	< 20	
Valenene	<LOQ	<LOQ	194	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Farnesene	390	372	194	µg/g	5%	< 20	
trans-Nerolidol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Caryophyllene_Oxide	1520	1470	194	µg/g	3%	< 20	
Guaiol	<LOQ	<LOQ	194	µg/g	0%	< 20	
Cedrol	<LOQ	<LOQ	194	µg/g	0%	< 20	
a-Bisabolol	<LOQ	<LOQ	194	µg/g	0%	< 20	

Definitions

RPD Relative Percent Difference



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Laboratory Quality Control Results

Residual Solvents				Batch ID: 2309574					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		495	584	µg/g	84.8	60 - 120	
Isobutane	ND	< 200		650	767	µg/g	84.7	60 - 120	
Butane	ND	< 200		655	782	µg/g	83.8	60 - 120	
2,2-Dimethylpropane	ND	< 200		816	939	µg/g	86.9	60 - 120	
Methanol	ND	< 200		1680	1640	µg/g	102.4	60 - 120	
Ethylene Oxide	ND	< 30		58.7	57.1	µg/g	102.8	60 - 120	
2-Methylbutane	ND	< 200		1420	1600	µg/g	88.8	60 - 120	
Pentane	ND	< 200		1480	1620	µg/g	91.4	60 - 120	
Ethanol	ND	< 200		1670	1610	µg/g	103.7	70 - 130	
Ethyl Ether	ND	< 200		1490	1610	µg/g	92.5	60 - 120	
2,2-Dimethylbutane	ND	< 30		160	168	µg/g	95.2	60 - 120	
Acetone	ND	< 200		1530	1620	µg/g	94.4	60 - 120	
2-Propanol	ND	< 200		1790	1600	µg/g	111.9	60 - 120	
Ethyl Formate	ND	< 500		1490	1600	µg/g	93.1	70 - 130	
Acetonitrile	ND	< 100		443	484	µg/g	91.5	60 - 120	
Methyl Acetate	ND	< 500		1570	1610	µg/g	97.5	70 - 130	
2,3-Dimethylbutane	ND	< 30		152	162	µg/g	93.8	60 - 120	
Dichloromethane	ND	< 60		457	483	µg/g	94.6	60 - 120	
2-Methylpentane	ND	< 30		164	174	µg/g	94.3	60 - 120	
MTBE	ND	< 500		1520	1610	µg/g	94.4	70 - 130	
3-Methylpentane	ND	< 30		167	168	µg/g	99.4	60 - 120	
Hexane	ND	< 30		156	168	µg/g	92.9	60 - 120	
1-Propanol	ND	< 500		1720	1600	µg/g	107.5	70 - 130	
Methylethylketone	ND	< 500		1570	1620	µg/g	96.9	70 - 130	
Ethyl acetate	ND	< 200		1610	1600	µg/g	100.6	60 - 120	
2-Butanol	ND	< 200		1800	1600	µg/g	112.5	60 - 120	
Tetrahydrofuran	ND	< 100		482	514	µg/g	93.8	60 - 120	
Cyclohexane	ND	< 200		1530	1600	µg/g	95.6	60 - 120	
2-methyl-1-propanol	ND	< 500		1770	1610	µg/g	109.9	70 - 130	
Benzene	ND	< 1		4.04	5.12	µg/g	78.9	60 - 120	
Isopropyl Acetate	ND	< 200		1610	1620	µg/g	99.4	60 - 120	
Heptane	ND	< 200		1490	1610	µg/g	92.5	60 - 120	
1-Butanol	ND	< 500		1750	1600	µg/g	109.4	70 - 130	
Propyl Acetate	ND	< 500		1540	1600	µg/g	96.3	70 - 130	
1,4-Dioxane	ND	< 100		462	493	µg/g	93.7	60 - 120	
2-Ethoxyethanol	ND	< 30		177	163	µg/g	108.6	60 - 120	
Methylisobutylketone	ND	< 500		1540	1600	µg/g	96.3	70 - 130	
3-Methyl-1-butanol	ND	< 500		1670	1610	µg/g	103.7	70 - 130	
Ethylene Glycol	ND	< 200		223	483	µg/g	46.2	60 - 120	Q6
Toluene	ND	< 100		456	493	µg/g	92.5	60 - 120	
Isobutyl Acetate	ND	< 500		1510	1600	µg/g	94.4	70 - 130	
1-Pentanol	ND	< 500		1740	1600	µg/g	108.8	70 - 130	
Butyl Acetate	ND	< 500		1480	1600	µg/g	92.5	70 - 130	
Ethylbenzene	ND	< 200		885	969	µg/g	91.3	60 - 120	
m,p-Xylene	ND	< 200		864	968	µg/g	89.3	60 - 120	
o-Xylene	ND	< 200		879	976	µg/g	90.1	60 - 120	
Cumene	ND	< 30		147	162	µg/g	90.7	60 - 120	
Anisole	ND	< 500		1320	1610	µg/g	82.0	70 - 130	
DMSO	ND	< 500		1100	1610	µg/g	68.3	70 - 130	Q6
1,2-dimethoxyethane	ND	< 50		154	164	µg/g	93.9	70 - 130	
Triethylamine	ND	< 500		1330	1600	µg/g	83.1	70 - 130	
N,N-dimethylformamide	ND	< 150		454	484	µg/g	93.8	70 - 130	
N,N-dimethylacetamide	ND	< 150		424	489	µg/g	86.7	70 - 130	
Pyridine	ND	< 50		143	172	µg/g	83.1	70 - 130	
Sulfolane	ND	< 50		118	163	µg/g	72.4	70 - 130	
1,2-Dichloroethane	ND	< 1		0.978	1	µg/g	97.8	70 - 130	
Chloroform	ND	< 1		1.05	1	µg/g	105.0	70 - 130	
Trichloroethylene	ND	< 1		1.13	1	µg/g	113.0	70 - 130	
1,1-Dichloroethane	ND	< 1		1.01	1	µg/g	101.0	70 - 130	



12423 NE Whitaker Way
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503-254-1794



Report Number: 23-008422/D002.R001
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Received: 07/17/23 16:20

Revision: 2 Document ID: 7087
Legacy ID: CFL-E33Effective:

QC - Sample Duplicate		Sample ID: 23-008675-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/Fail	Notes
Propane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60	µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
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	
1,2-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Trichloroethylene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
1,1-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	

Abbreviations

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

Units of Measure:

µg/g - Microgram per gram or ppm



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Explanation of QC Flag Comments:

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