

# **Certification of Analysis**

labservices@ionizationlabs.com 737.231.0772



Prepared For:

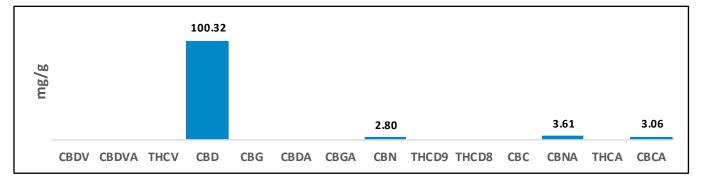
RAZAD Enterprises LLC Plano, TX 75024

# Sample Information

Test Date:	Nov 25, 2020, 2:28 PM	Sample Type:	Tincture				
Sample / Strain Name:	ZAR FS TB 2000 mg	IL Unique ID:	ILCTS551-2				
Lot # / Batch ID:	24K20153						
Sample Description:	Clear tincture with gold hue						
Notes:	Unit weight is 1 bottle = 28 gram	S					
Analyst Name:	Enrique Orci IV	Reviewer Name:	Ted Barton				
Analyst Signature:	Envique Orci II	Reviewer Signature:	Ted Barton				

# Cannabinoid Potency and Profile

Cannabinoid	Result (%)	Result (mg/g)	mg/bottle
CBDV	N/D	N/D	N/D
CBDVA	N/D	N/D	N/D
THCV	N/D	N/D	N/D
CBD	10.03%	100.32	2808.96
CBG	N/D	N/D	N/D
CBDA	N/D	N/D	N/D
CBGA	N/D	N/D	N/D
CBN	0.28%	2.80	78.40
THCD9	N/D	N/D	N/D
THCD8	N/D	N/D	N/D
CBC	N/D	N/D	N/D
CBNA	0.36%	3.61	101.08
THCA	N/D	N/D	N/D
CBCA	0.31%	3.06	85.68
Totals	10.98%	109.79	3074.12



THC Total = % of THCD9 + (% of THCA x 0.877), CBD Total = % of CBD + (% of CBDA x 0.877), CBG Total = % of CBG + (% of CBGA x 0.876), CBN Total = % of CBN + (% of CBNA x 0.876), CBC Total = % of CBC + (% of CBCA x 0.877), CBDV Total = % of CBDV + (% of CBDVA x 0.867), N/D = Not Detected

\*\* Bud/Flower potency results are presented on a dry weight basis

Testing results are based solely upon the samples submitted to Ionization Labs, LLC.	ISO 17025 Accredited
lonization Labs warrants that all analytical work is conducted in accordance with all applicable standard laboratory practices uisng validated methods. This report may	A2LA Certificate #: 5756.01
not be reproduced without the written consent of Ionization Labs.	Texas Dept of Ag Account #: TL2020003





Report Number: 20-011819/D02.R00 Report Date: 11/06/2020 ORELAP#: OR100028 Purchase Order: Received: 10/30/20 10:50

Customer:	Deschutes Labs		
Product identity:	1060418-2020-TF-05-DIS-01		
Client/Metrc ID:			
Laboratory ID:	20-011819-0002	Sample Date:	10/28/20 09:47
		Summary	

Analyte	Result (%)			
CBD	72.7		CBD-Total	72.7%
CBC	3.45	CBD		
CBN	3.39	• CBC	THC-Total	0.211%
CBG <sup>†</sup>	1.33	CBN		0.21170
CBDV <sup>†</sup>	0.540	<ul> <li>CBG</li> <li>CBDV</li> </ul>	(Reported in p	ercent of total sample)
CBL <sup>†</sup>	0.265	CBL	8 8 8	
Δ9-THC	0.211	9-THC		

## **Residual Solvents:**

All analytes passing and less than LOQ.

### Pesticides:

All analytes passing and less than LOQ.

#### Metals:

Less than LOQ for all analytes.

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.





Report Number:	20-011819/D02.R00
Report Date:	11/06/2020
ORELAP#:	OR100028
Purchase Order:	
Received:	10/30/20 10:50

Customer:

**Deschutes Labs** 

Product identity:	1060418-2020-TF-05-DIS-01
Client/Metrc ID:	
Sample Date:	10/28/20 09:47
Laboratory ID:	20-011819-0002
Relinquished by:	USPS
Temp:	18.6 °C

## Sample Results

Potency	Metho	d J AOAC 2015	V98-6 (mod)	Batch: 2009201	Analyze: 11/3/20	10:46:00 PM
Analyte	As	Dry LOQ	Notes		-	
	Received	weight				
CBC	3.45	0.0917				CBD
CBC-A <sup>†</sup>	< LOQ	0.0917				CBC
CBC-Total <sup>†</sup>	3.45	0.172				CBN
CBD	72.7	0.917				O CBG
CBD-A	< LOQ	0.0917				CBDV
CBD-Total	72.7	0.998				CBL
CBDV <sup>†</sup>	0.540	0.0917				9-THC
CBDV-A <sup>†</sup>	< LOQ	0.0917				
CBDV-Total <sup>†</sup>	0.540	0.171				
CBG <sup>†</sup>	1.33	0.0917				
CBG-A <sup>†</sup>	< LOQ	0.0917				
CBG-Total	1.33	0.171				
CBL <sup>†</sup>	0.265	0.0917				
CBN	3.39	0.0917				
$\Delta 8\text{-THC}^{\dagger}$	< LOQ	0.0917				
Δ9-THC	0.211	0.0917				
THC-A	< LOQ	0.0917				
THC-Total	0.211	0.172				
THCV <sup>†</sup>	< LOQ	0.0917				
THCV-A <sup>†</sup>	< LOQ	0.0917				
THCV-Total <sup>†</sup>	< LOQ	0.171				
Total Cannabinoids <sup>†</sup>	81.9					

 www.columbialaboratories.com
 Page 2 of 14

 Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



Method EPA5021A

380

Limits LOQ Status Notes

100 pass

400

Result

<LOQ

< LOQ

Solvents

Analyte

1,4-Dioxane

**Total Xylenes** 

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



Units µg/g

Analyte

2-Butanol

Batch 2

Total Xylenes and Ethyl < LOQ

Report N	lumber:	20	20-011819/D02.R00					
Report D	ate:	11	/06/202	0				
ORELAP	#:	OF	10002	8				
Purchase	e Order:							
Received	d:	10	/30/20	10:50				
009095	Analyz	<b>e</b> 11/0	02/20 0	9:15	AM			
Result	Limits	LOQ	Status	Notes	5			
< LOQ	5000	200	pass					
< LOQ		200						
< LOQ	5000	200	pass					
< LOQ		200						
< LOQ		30.0						
< LOQ	410	100	pass					
<100	5000	400	nass					

2170

600 pass

2-Ethoxyethanol	< LOQ	160	30.0	pass	2-Methylbutane	< LOQ		200	
2-Methylpentane	< LOQ		30.0		2-Propanol (IPA)	< LOQ	5000	200	pass
2,2-Dimethylbutane	< LOQ		30.0		2,2-Dimethylpropane	< LOQ		200	
2,3-Dimethylbutane	< LOQ		30.0		3-Methylpentane	< LOQ		30.0	
Acetone	< LOQ	5000	200	pass	Acetonitrile	< LOQ	410	100	pass
Benzene	< LOQ	2.00	1.00	pass	Butanes (sum)	< LOQ	5000	400	pass
Cyclohexane	< LOQ	3880	200	pass	Ethyl acetate	< LOQ	5000	200	pass
Ethyl benzene	< LOQ		200		Ethyl ether	< LOQ	5000	200	pass
Ethylene glycol	< LOQ	620	200	pass	Ethylene oxide	< LOQ	50.0	30.0	pass
Hexanes (sum)	< LOQ	290	150	pass	Isopropyl acetate	< LOQ	5000	200	pass
Isopropylbenzene	< LOQ	70.0	30.0	pass	m,p-Xylene	< LOQ		200	
Methanol	< LOQ	3000	200	pass	Methylene chloride	< LOQ	600	200	pass
Methylpropane	< 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

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



Pesticides

Analyte



UMDIA DRATORIES entamus Company		1	12423 NE Whitaker Way Portland, OR 97230 503-254-1794			Report Number: Report Date: ORELAP#: Purchase Order: Received:			20-011819/D02.R00 11/06/2020 OR100028 10/30/20 10:50		
	Method	AOAC 2	2007.01 & EN	15662 (mod)	Units mg/kg	Batch 200	9293	Analyze	e 11/06/20 1	2:15 PM	
	Result	Limits	LOQ Status	Notes	Analyte	1	Result	Limits I	LOQ Status	Notes	
	< LOQ	0.50	0.250 pass		Acephate		< LOQ	0.40	0.250 pass		
	< LOQ	2.0	1.00 pass		Acetamiprid		< LOQ	0.20	0.100 pass		
	< LOQ	0.40	0.200 pass		Azoxystrobin		< LOQ	0.20	0.100 pass		
	< LOQ	0.20	0.100 pass		Bifenthrin		< LOQ	0.20	0.100 pass		
	100	0.40	0.000		0		100		0.400		

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

Metals								
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Arsenic	< LOQ		mg/kg	0.0493	2009228	11/04/20	AOAC 2013.06 (mod.)	х
Cadmium	< LOQ		mg/kg	0.0493	2009228	11/04/20	AOAC 2013.06 (mod.)	х
Lead	< LOQ		mg/kg	0.0493	2009228	11/04/20	AOAC 2013.06 (mod.)	х
Mercury	< LOQ		mg/kg	0.0246	2009228	11/04/20	AOAC 2013.06 (mod.)	Х

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.





 Report Number:
 20-011819/D02.R00

 Report Date:
 11/06/2020

 ORELAP#:
 OR100028

 Purchase Order:
 10/30/20 10:50

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

## Abbreviations

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

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.

<sup>†</sup> = Analyte not NELAP accredited.

## Units of Measure

μg/g = Microgram per gram
mg/kg = Milligram per kilogram = parts per million (ppm)
% = Percentage of sample
% wt = μg/g divided by 10,000

**Glossary of Qualifiers** X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner General Manager

www.columbialaboratories.com

Page 5 of 14

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.

Columbia LABORATORIES (A Tentamus Company				12423 NE Whitaker Way Portland, OR 97230 503-254-1794 Hemp / Cannabis Usable / Extract								Report Date:         11/06/2020           ORELAP#:         OR100028           Purchase Order:         Image: Content of the second of the				OR100028 10/30/20 10:50	
	ES		Revis		c	hair	of (	Ustody 3 Rev 02, 1D: OR100	Rec /26/20	ord			20		Deschu	ites Labs	
Company: Deschutes Labs Contact: Drew Van Roekel Street: 2020 NW Industrial Park Rd City: Prineville State: C Email Results: Drew@Deschutesla Ph: ()	bs.com		y CBDV					Request	ed				Cust	roject Proje om R ort to	t Number: ect Name: eporting: State - 🗌 M	IETRC or 🗌 Ot	her: sh *
Lab ID Client Sample Identification	Date	Time	Low potency	Potency	Pesticides	Residual Solvents	Heavy Metals						Samp Samp Type	ple	Weight (Units)	C	omments/Metrc ID
1 1060418-2020-KLER-53-2ISO-01 2 1060418-2020-TF-05-DIS-01 3 1060418-2020-TF-04-TFD-X2 4 1060418-2020-TF-04-TFD-X2	10/28/20	9:47 9:47 <del>9:47</del>	~	>>>	1111	~ ~	>>>					I	e c c c c c c		5g 5g 5g	Terring Per cli	Can celled Pent email 10/30-P5-
	10/28/20 10/28/20 10/28/20 10/28/20												c c c c			-	
Relinquished By: Dreew Vern Wehl	10/28/20 Date 10/28/20	Time 0948			R	eceived JP	By:		-	ate 30	Tir 109		Evid Sam	hippe ence ple in ash	of cooling:	ion: [] Yes] [] N [ CC ] [] Net:	

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms of service associated with this COC. By signing "Relinquished by" and the current terms of service associated with this COC. By signing "Relinquished by" and the current terms of service associated with this COC. By signing "Relinquished by" and the current terms of service associated with this COC. By signing "Relinquished by" and the current terms of service associated with this COC. By signing "Relinquished by" and the current terms of service associated with this COC. By signing "Relinquished by" and the current terms of service associated with this COC. By signing "Relinquished by" and the current terms of service associated with this COC. By signing "Relinquished by" and the current terms of service associated with the current terms of service associa Samples submines to 12423 NE Whitaker Way Portland, OR 97230

 www.columbialaboratories.com
 Page 6 of 14

 Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.

Columbia LABORATORIES ATentamus Company	12423 NE Whitak Portland, OR 9 503-254-179	7230	ay		Report Number: Report Date: ORELAP#:	20-011819/D02.R00 11/06/2020 OR100028		
					Purchase Order: Received:	10/30/20 10:50		
Columbia LABORATORIES A Testanus Congany	Columbia Laboratories Sample Receipt Form				ective: 02/28/2020			
Job Number: 20-011819	Search Name:							
Package/Cooler opened on (if different than receive	d date/time) Date: 10 30 T	ime:	00					
Received By (Initials):								
<ol> <li>Were custody seals on outside of the package/c If YES, how many and where?</li> </ol>	ooler?	YES	NO	NA				
Were signature and date correct?		YES	NO	NA				
Were custody papers included in the package/co	ooler?	YES	NO	NA				
) Were custody papers properly filled out (ink, sig	gn, date)?	YES	NO	NA				
Did you sign custody papers in the appropriate	place?	YES	NO	NA				
) How was the package/cooler delivered?								
UPS FEDEX USPS	CLIENT COURIER	OTHE	R:					
Tracking Number (written in or copy of shipp	ing label): 9405 503	69	930	0109	517804			
6) Was packing material used?		YES	NO	NA				
Peanuts Bubble Wrap Foam Paper (	Other:							
7) Was sufficient ice used (if appropriate)?		YES	NO	NA				
What kind?								
	Dry Ice	(TO)	NO	NIA				
<ol> <li>Were all sample containers sealed in separate p</li> <li>Did ell complexenting and conditions</li> </ol>		YES	NO	NA				
Did all sample containers arrive in good condition Were all sample containers labely arrive in good condition	on?	TES CER	NO	NA				
10) Were all sample container labels complete?	with the energy	YES	NO	NA				
<ul> <li>Did all sample container labels and tags agree v</li> <li>Were correct sample containers used for the test</li> </ul>		(ES)	NO NO	NA				
<ul><li>12) Were VOA vials checked for absence of air bub</li></ul>		YES	NO	NA				
<ul><li>14) Was a sufficient amount of sample sent in each</li></ul>		YES	NO	NA				
<ul><li>15) Temperature of the samples upon receipt (See S</li></ul>		.0	6.00	A				
		-		Other:				
16) Sample location prior to login: R25 R39	R44 F44 Ambient Shelf	Cannal	015 1 40	ouler.				



 www.columbialaboratories.com
 Page 7 of 14

 Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.

 Testing in accordance with: OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



Report Number:	20-011819/D02.R00
Report Date:	11/06/2020
ORELAP#:	OR100028
Purchase Order:	
Received:	10/30/20 10:50

nesi	idual Solvents						Ba	tch ID:	200909	0		
Me	thod Blank					Laborator	y Control Sa	ample				
Anal	lyte	Result		LOQ	Notes	Result	Spike	Units	% Rec	L	imits	Note
Prop	ane	ND	<	200		504	595	3/84	84.7	70	- 13	0
Isobu	utane	ND	<	200	3	665	761	HE/8	87.4	70	- 13	0
Butar	ne	ND	<	200		677	761	H8/8	89.0	70	- 13	0
2,2-0	limethylpropane	ND	<	200		832	955	H8/8	87.1	70	- 13	0
Meth	hanol	ND	<	200		1460	1610	H8/8	90.7	70	- 13	0
Ethyl	ene Oxide	ND	<	30		51.2	58.3	H8/8	87.8	70	- 13	0
2-Me	thylbutane	ND	<	200		1560	1600	H8/8	97.5	70	- 13	0
Penta	ane	ND	<	200	S (	1500	1610	H8/8	93.2	70	- 13	0
Ethar	nal	ND	<	200		1450	1610	H8/8	90.1	70	- 13	0
Ethyl	Ether	ND	<	200	8	1520	1610	HE/8	94.4	70	- 13	0
2,2-0	limethylbutane	ND	<	30		155	168	H8/8	92.3	70	- 13	0
Aceto	one	ND	<	200	8	1490	1610	HE/E	92.5	70	- 13	0
2-Pro	panol	ND	<	200		1450	1600	HE/8	90.6	70	- 13	0
	Formate	ND	<	500	9	1570	1710	HE/8	91.8	70	- 13	0
_	onitrile	ND	<	100		456	486	HE/8	93.8	70	- 13	_
	yi Acetate	ND	<	500	8	1550	1610	H8/8	96.3	70	- 13	_
2.3-0	imethylbutane	ND	<	30		127	162	HE/8	78.4	70	- 13	0
Dichi	oromethane	ND	<	200	8 8	463	490	HE/8	94.5	70	- 13	0
2-Me	thylpentane	ND	<	30		146	164	H8/8	89.0	70	- 13	0
мтва		ND	<	500	6 8	1560	1620	HE/8	96.3	70	- 13	0
3.55	thylpentane	ND	<	30		149	166	HE/E	89.8	70	- 13	
Hexa	5 (C. 19) (C. 17)	ND		30	6 8	147	167	HE/E	88.0	70	- 13	-
	panol	ND	<	500		1480	1600	HE/E	92.5	70	- 13	_
	ylethylketone	ND		500		1500	1610	HE/E	93.2	70	- 13	-
	acetate	ND	*	200		1430	1610	HE/E	88.8	70	- 13	_
	tanol	ND		200		1400	1610	HE/E	87.0	70	- 13	_
	ihydrofuran	ND	-	100		436	484	HE/E	90.1	70	- 13	_
	shexane	ND		200		1460	1610	HE/E	90.7	70	- 13	-
_	thyl-1-propanol	ND	-	500		1490	1610	HE/E	92.5	70	- 13	_
Benz		ND	-	1	-	24.6	24.5	HE/E	100.4	70	- 13	-
	opyi Acetate	ND		200		1390	1620	HE/E HE/E	85.8	70	- 13	_
_		ND	_	200	-	1390	1620		89.4		- 13	-
	ane		<	500		1440	1610	H8/8	92.5	70	- 13	-
	tanol	ND	<	500	-			H8/8	92.5	70	- 13	
	yl Acetate		<			1470	1620	H8/8		70		-
-	lioxane	ND	<	100 30	-	440	484	H8/8	90.9	70	- 13	
	oxyethanol	ND	< <	30		146	186	H8/8	78.5	70	- 13	-
	tylisobutylketone	ND	*	500	-	1460	1610	HE/E	90.7	70	- 13	
		ND		200		1440	1610	H8/8	89.4	70	- 13	-
-	ene Glycol	ND	-			418	509	HE/E	82.1		- 13	_
Tolue			<	200				H8/8		70		-
	utyl Acetate	ND	<	500	<u></u>	1440	1610	HE/E	89.4	70	- 13	-
	ntanol	ND	<	500		1440	1620	H8/8	88.9	70	- 13	_
_	Acetate	ND	<	500		1440	1610	HE/8	89.4	70	- 13	_
-	bergene	ND	<	200		847	971	H8/8	87.2	70	- 13	_
-	Kylene	ND	<	200		851	975	H8/8	87.3	70	- 13	_
o-Xyl		ND	<	200		882	966	H8/8	91.3	-	- 13	_
Cum		ND	<	30	<u></u>	156	167	H8/8	93.4	70	- 13	_
Aniso		ND	<	500		1450	1610	8/84	90.1	70	- 13	_
DMS		ND	<	500		1480	1650	H8/8	89.7	70	- 13	_
	imethoxyethane	ND	<	50		143	170	H8/8	84.1		- 13	_
	hylamine	ND	<	500	9	1440	1610	H8/8	89.4		- 13	_
N/N-d	dimethylformamide	ND	<	150		449	490	8/84	91.6	70	- 13	0

 www.columbialaboratories.com
 Page 8 of 14

 Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



Report Number:	20-011819/D02.R00
Report Date:	11/06/2020
ORELAP#:	OR100028
Purchase Order:	
Received:	10/30/20 10:50

	QC - Sample Duplicate							20-011830-0001	
an Mar	Analyte	-	Org. Result		Units	RPD	Limits	Accept/Fail	Notes
ias Mix ias Mix	Propane Isobutane	ND ND	ND ND	200	H8/8	0.0	< 20	Acceptable Acceptable	
ias Mix	Butane	ND	ND	200	H8/8	0.0	< 20	Acceptable	
ias Mix	2,2-Dimethylpropane	ND	ND	200	HE/E HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Methanol	ND	ND	200	H6/6	0.0	< 20	Acceptable	
ias Mix	Ethylene Oxide	ND	ND	30	HB/B	0.0	< 20	Acceptable	
iquid Mix 1	2-Methylbutane	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Pentane	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Ethanol	ND	ND	200	HB/E	0.0	< 20	Acceptable	
iquid Mix 1	Ethyl Ether	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	2,2-Dimethylbutane	ND	ND	30	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	Acetone	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	2-Propanol	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	Ethyl Formate	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Acetonitrile	ND	ND	100	H8/8	0.0	< 20	Acceptable	
iquid Mix 2	Methyl Acetate	ND	ND	500	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	2,3-Dimethylbutane	ND	ND	30	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	Dichloromethane	ND	ND	200	HR/R	0.0	< 20	Acceptable	
iquid Mix 1 iquid Mix 2	2-Methylpentane MTRE	ND ND	ND ND	30	H8/8	0.0	< 20	Acceptable	
iquid Mix 2	3-Methylpentane	ND	ND	300	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	3-Methylpentane Hexane	ND	ND	30	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	1-Propanol	ND	ND	500	H8/8 H8/8	0.0	< 20	Acceptable	
iquid Mix 2	Methylethylketone	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Ethyl acetate	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	2-Butanol	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Tetrahydrofuran	ND	ND	100	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Cyclohexane	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	2-methyl-1-propanol	ND	ND	500	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	Benzene	ND	ND	1	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Isopropyl Acetate	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Heptane	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	1-Butanol	ND	ND	500	H8/8	0.0	< 20	Acceptable	
iquid Mix 2	Propyl Acetate	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	1,4-Dioxane	ND	ND	100	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	2-Ethoxyethanol	ND	ND	30		0.0	< 20	Acceptable	
					H8/8				
iquid Mix 2	Methylisobutylketone	ND	ND	500	H8/8	0.0	< 20	Acceptable	
iquid Mix 2	3-Methyl-1-butanol	ND	ND	500	H6/8	0.0	< 20	Acceptable	
iquid Mix 1	Ethylene Glycol	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	Toluene	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 2	Isobutyl Acetate	ND	ND	500	H8/8	0.0	< 20	Acceptable	
quid Mix 2	1-Pentanol	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	Butyl Acetate	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Ethylbenzene	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	m.p-Xylene	ND	ND	200	HE/E	0.0	< 20	Acceptable	
quid Mix 1	o-Xylene	ND	ND	200	H8/8	0.0	< 20	Acceptable	
quid Mix 1	Cumene	ND	33.1	30	H8/8	9.8	< 20	Acceptable	
iquid Mix 2	Anisole	ND	ND	500	H8/8	0.0	< 20	Acceptable	
quid Mix 2	DMSO	ND	ND	500	H8/8	0.0	< 20	Acceptable	
quid Mix 2	1,2-dimethoxyethane	ND	ND	50	H8/8	0.0	< 20	Acceptable	
quid Mix 2	Triethylamine	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	N.N-dimethylformamide	ND	ND	150	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	N.N-dimethylacetamide	ND	ND	150	HE/E	0.0	< 20	Acceptable	
	and the second sec				10/8	0.0	< 20	Acceptable	

Abbreviations

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

\* Screening only

Q1 Quality Control result biased high. Only non detect samples reported

Units of Measure:

ug/g- Microgram per gram or ppm mg/Kg - Miligrams per Kilogram Aw- Water Activity unit

 www.columbialaboratories.com
 Page 9 of 14

 Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



Report Number:	20-011819/D02.R00
Report Date:	11/06/2020
ORELAP#:	OR100028
Purchase Order:	
Received:	10/30/20 10:50

	QC - Sample Duplicate							20-011830-0001	
an Mar	Analyte	-	Org. Result		Units	RPD	Limits	Accept/Fail	Notes
ias Mix ias Mix	Propane Isobutane	ND ND	ND	200	H8/8	0.0	< 20	Acceptable Acceptable	
ias Mix	Butane	ND	ND	200	H8/8	0.0	< 20	Acceptable	
ias Mix	2,2-Dimethylpropane	ND	ND	200	HE/E HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Methanol	ND	ND	200	H6/6	0.0	< 20	Acceptable	
ias Mix	Ethylene Oxide	ND	ND	30	HB/B	0.0	< 20	Acceptable	
iquid Mix 1	2-Methylbutane	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Pentane	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Ethanol	ND	ND	200	HB/E	0.0	< 20	Acceptable	
iquid Mix 1	Ethyl Ether	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	2,2-Dimethylbutane	ND	ND	30	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	Acetone	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	2-Propanol	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	Ethyl Formate	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Acetonitrile	ND	ND	100	H8/8	0.0	< 20	Acceptable	
iquid Mix 2	Methyl Acetate	ND	ND	500	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	2,3-Dimethylbutane	ND	ND	30	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	Dichloromethane	ND	ND	200	HR/R	0.0	< 20	Acceptable	
iquid Mix 1 iquid Mix 2	2-Methylpentane MTRE	ND ND	ND ND	30	H8/8	0.0	< 20	Acceptable	
iquid Mix 2	3-Methylpentane	ND	ND	300	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	3-Methylpentane Hexane	ND	ND	30	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	1-Propanol	ND	ND	500	H8/8 H8/8	0.0	< 20	Acceptable	
iquid Mix 2	Methylethylketone	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Ethyl acetate	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	2-Butanol	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Tetrahydrofuran	ND	ND	100	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Cyclohexane	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	2-methyl-1-propanol	ND	ND	500	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	Benzene	ND	ND	1	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Isopropyl Acetate	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Heptane	ND	ND	200	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	1-Butanol	ND	ND	500	H8/8	0.0	< 20	Acceptable	
iquid Mix 2	Propyl Acetate	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	1,4-Dioxane	ND	ND	100	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	2-Ethoxyethanol	ND	ND	30		0.0	< 20	Acceptable	
					H8/8				
iquid Mix 2	Methylisobutylketone	ND	ND	500	H8/8	0.0	< 20	Acceptable	
iquid Mix 2	3-Methyl-1-butanol	ND	ND	500	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	Ethylene Glycol	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	Toluene	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 2	Isobutyl Acetate	ND	ND	500	H8/8	0.0	< 20	Acceptable	
quid Mix 2	1-Pentanol	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	Butyl Acetate	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 1	Ethylbenzene	ND	ND	200	H8/8	0.0	< 20	Acceptable	
iquid Mix 1	m.p-Xylene	ND	ND	200	HE/E	0.0	< 20	Acceptable	
quid Mix 1	o-Xylene	ND	ND	200	H8/8	0.0	< 20	Acceptable	
quid Mix 1	Cumene	ND	33.1	30	H8/8	9.8	< 20	Acceptable	
iquid Mix 2	Anisole	ND	ND	500	H8/8	0.0	< 20	Acceptable	
quid Mix 2	DMSO	ND	ND	500	H8/8	0.0	< 20	Acceptable	
quid Mix 2	1,2-dimethoxyethane	ND	ND	50	H8/8	0.0	< 20	Acceptable	
quid Mix 2	Triethylamine	ND	ND	500	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	N.N-dimethylformamide	ND	ND	150	HE/E	0.0	< 20	Acceptable	
iquid Mix 2	N.N-dimethylacetamide	ND	ND	150	HE/E	0.0	< 20	Acceptable	
	and the second sec				10/8	0.0	< 20	Acceptable	

Abbreviations

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

\* Screening only

Q1 Quality Control result biased high. Only non detect samples reported

Units of Measure:

ug/g- Microgram per gram or ppm mg/Kg - Miligrams per Kilogram Aw- Water Activity unit

 www.columbialaboratories.com
 Page 9 of 14

 Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.





Report Number:	20-011819/D02.R00
Report Date:	11/06/2020
ORELAP#:	OR100028
Purchase Order:	
Received:	10/30/20 10:50

Revision #: 0.00 Control : CFL-D06

Revision Date: 05/31/2019 Effective Date: 05/31/2019

			Labo	ratory Q	uality Con	ntrol Results									
J AOAC 2015	V98-6				Bato	h ID: 2009201	l.								
Sample Dupli	icate			Sample ID: 20-011819-0001											
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes							
CBDV-A	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
CBDV	0.317	0.334	0.1	%	5.37	< 20	Acceptable								
CBD-A	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
CBG-A	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
CBG	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
CBD	>98.0	>98.0	0.1	%	NA	< 20	Acceptable								
THCV	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
THCVA	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
CBN	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
THC	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
D8THC	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
CBL	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
CBC	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
THCA	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								
CBCA	<loq< td=""><td><loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<></td></loq<>	<loq< td=""><td>0.1</td><td>%</td><td>NA</td><td>&lt; 20</td><td>Acceptable</td><td></td></loq<>	0.1	%	NA	< 20	Acceptable								

#### Abbreviations

- ND None Detected at or above MRL
- RPD Relative Percent Difference
- LOQ Limit of Quantitation
- NA Calculation Not Applicable given non-numerical results

#### Units of Measure:

% - Percent

 www.columbialaboratories.com
 Page 11 of 14

 Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.





Report Number:	20-011819/D02.R00
Report Date:	11/06/2020
ORELAP#:	OR100028
Purchase Order:	
Received:	10/30/20 10:50

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

AOAC 2007.1 & EN 15662	2010	oratory Pesti Units	Batch ID: 2009293						
Analyte	Laboratory Control Sample Blank Result Blank Limits Notes LCS Result LCS Spike LCS % Rec Limits								
Acephate	Blank Result	< 0.200	Notes	LCS Result 0.987	LCS Spike	LCS % Rec 98.7	Limits	Notes	
Acequinocyl	0.040	< 1.000	+	3.987	4.000	99.7	79.8 - 122	-	
Acetamiprid	0.010	< 0.100	+	0.395	0.400	98.8	84.3 - 119	-	
Aldicarb	0.000	< 0.200	+	0.681	0.800	85.1	82.9 - 120	-	
Abamectin	0.003	< 0.288		0.999	1.000	99.9	79.6 - 124	-	
Azoxystrobin	0.009	< 0.100	-	0.406	0.400	101.5	79.6 - 124	-	
Bifenazate	0.009				0,400	101.5		<u> </u>	
Bifenthrin	0.004	< 0.100	+	0.412	0,400	96.2		-	
Boscalid	0.000	< 0.100		0.585	0.400	89.5		_	
				0.379				-	
Carbaryl	0.000	< 0.100		1.00000000	0.400	94.6	82.1 - 121	-	
Carbofuran	0.007	< 0.100		0.392	0.400	97.9	85.1 - 125	_	
Chlorantraniliprol	0.000	< 0.100	-	0.406	0.400	101.5	70.6 - 131		
Chlorfenapyr	0.000	< 1.000	-	2.098	2.000	104.9	71.0 - 132		
Chlorpyrifos	0.000	< 0.100		0.387	0.400	96.8	72.3 - 134		
Clofentezine	0.000	< 0.100		0.369	0.400	92.2	80.1 - 117		
Cyfluthrin	0.000	< 1.000	-	2.052	2.000	102.6	71.8 - 133		
Cypermethrin	0.000	< 1.000		2.043	2.000	102.1	83.1 - 126		
Daminozide	0.037	< 1.000		1.891	2.000	94.6	74.6 - 124		
Diazinon	0.004	< 0.100		0.370	0.400	92.5	78.9 - 126		
Dichlorvos	0.026	< 0.500		1.888	2.000	94.4	76.1 - 124		
Dimethoat	0.000	< 0.100		0.386	0.400	96.6	82.8 - 119		
Ethoprophos	0.000	< 0.100		0.388	0.400	96.9	69.5 - 129		
Etofenprox	0.000	< 0.100	1	0.786	0.800	98.2	85.2 - 128		
Etoxazol	0.006	< 0.100		0.372	0.400	93.0	79.7 - 126		
Fenoxycarb	0.000	< 0.100	1	0.391	0.400	97.7	84.1 - 122		
Fenpyroximat	0.010	< 0.100	1	0.767	0.800	95.9	82.4 - 126		
Fipronil	0.000	< 0.100	1	0.688	0.800	86.0	80.6 - 125		
Flonicamid	0.000	< 0.400	1	0.923	1.000	92.3	80.9 - 119		
Fludioxonil	0.000	< 0.100		0.776	0.800	97.0	73.0 - 136		
Hexythiazox	0.000	< 0.400	1	0.961	1.000	96.1	82.5 - 125		
Imazalil	0.000	< 0.100	1	0.395	0.400	98.7	81.4 - 128		
Imidacloprid	0.003	< 0.200	1	0.773	0.800	96.6	76.9 - 125		
Kresoxim-Methyl	0.000	< 0.100	1	0.799	0.800	99.9	82.6 - 124	-	
Malathion	0.005	< 0.100	1	0.372	0.400	93.0	74.1 - 130		
Metalaxyl	0.000	< 0.100	1	0.394	0.400	98.5	79.7 - 124	-	
Methiocarb	0.008	< 0.100	1	0.370	0.400	92.6	81.0 - 123	-	
Methomyl	0.000	< 0.200	1	0.753	0.800	94.1	79.4 - 118	-	
MGK 264	0.000	< 0.100	1	0.399	0.400	99.7	77.2 - 128	-	
Myclobutanil	0.000	< 0.100	1	0.376	0.400	94.0	80.6 - 123	-	
Naled	0.000	< 0.200	1	0.876	1.000	87.6	80.3 - 126	-	
Oxamyl	0.000	< 0.400	-	1.823	2.000	91.1	80.1 - 117	-	
Paclobutrazol	0.000	< 0.200	1	0.765	0.800	95.6	81.6 - 126		
Parathion Methyl	0.000	< 0.200	+	0.788	0.800	98.5	72.5 - 135	-	
Permethrin	0.000	< 0.100	-	0.387	0.400	96.8	75.0 - 139	-	
Phosmet	0.000	< 0.100	+	0.395	0.400	98.7	82.0 - 122	-	
Piperonyl butoxide	0.002	< 1.000	-	1.906	2.000	95.3	81.3 - 137	-	
Prallethrin	0.029	< 0.200	-	0.378	0.400	95.5	81.3 - 137	-	
Propiconazole	0.029	< 0.200	-	0.803	0.400	100.3	84.7 - 121	-	
	0.010	< 0.100	-	0.803	0.800	94.2		-	
Propoxur	· · · · · · · · · · · · · · · · · · ·		-				84.2 - 121	-	
Pyrethrins	0.001	< 0.500	-	0.401	0.413	97.1	76.1 - 141	-	
Pyridaben	0.000	< 0.100		0.448	0.400	112.1	79.2 - 147	_	
Spinosad	0.000	< 0.100	-	0.381	0.388	98.3	88.4 - 127	_	
Spiromesifen	0.000	< 0.100		0.368	0.400	92.0	79.9 - 127		
Spirotetramat	0.005	< 0.100		0.374	0.400	93.5	81.1 - 121		
Spiroxamine	0.011	< 0.100		0.787	0.800	98.4	78.4 - 133		
Febuconazol	0.000	< 0.200		0.786	0.800	98.3	83.1 - 122		
l'hiacloprid	0.000	< 0.100		0.398	0.400	99.5	84.3 - 120		
Thiamethoxam	0.000	< 0.100		0.386	0.400	96.6	80.1 - 121		
Trifloxystrobin	0.004	< 0.100	1	0.380	0.400	95.0	81.4 - 125		

Page 12 of 14 <u>www.columbialaboratories.com</u> Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made. Testing in accordance with: OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430





Report Number:	20-011819/D02.R00
Report Date:	11/06/2020
ORELAP#:	OR100028
Purchase Order:	
Received:	10/30/20 10:50

Revision: 1.00 Control: CFL-C21

AOAC 2007.1 & EN 15662			mg/Kg	Quality Control Results Batch ID: 2009293							
Matrix Spike/Matrix Spike	Duplicate Recov	eries	onics.				Sample ID:	20-011819-0			
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit		MSD % Rec	Limits	Notes	
Acephate	0.006	1.002	1.026	1.000	2.4%	< 30	99.6%	102.0%	50 - 150	Notes	
Acequinocyl	0.000	4.061	4.039	4.000	0.5%	< 30	101.5%	101.0%	50 - 150	-	
Acetamiprid	0.011	0.383	0.389	0.400	1.8%	< 30	92.8%	94.5%		-	
					and the second se	and the second second				-	
Aldicarb	0.000	0.778	0.711	0.800	9.0%	< 30	97.2%	88.8%	50 - 150	<u> </u>	
Abamectin	0.000	1.293	1.312	1.000	1.5%	< 30	129.3%	131.2%	50 - 150	<u> </u>	
Azoxystrobin	0.007	0.425	0.473	0.400	10.9%	< 30	104.6%	116.6%	50 - 150	<u> </u>	
Bifenazate	0.003	0.415	0.386	0.400	7.5%	< 30	103.1%	95.7%	50 - 150		
Bifenthrin	0.000	0.655	0.631	0.400	3.6%	< 30	163.6%	157.8%	50 - 150	Q1	
Boscalid	0.000	0.765	0.759	0.800	0.8%	< 30	95.6%	94.8%	50 - 150		
Carbaryl	0.000	0.388	0.386	0.400	0.4%	< 30	96.9%	96.5%	50 - 150		
Carbofuran	0.000	0.389	0.380	0.400	2.4%	< 30	97.2%	94.9%	50 - 150		
Chlorantraniliprol	0.000	0.403	0.418	0.400	3.7%	< 30	100.8%	104.6%	50 - 150	8	
Chlorfenapyr	0.000	2.236	2.075	2.000	7.4%	< 30	111.8%	103.8%	50 - 150		
Chlorpyrifos	0.000	0.179	0.182	0.400	1.6%	< 30	44.7%	45.4%	50 - 150	Q	
Clofentezine	0.000	0.404	0.403	0.400	0.3%	< 30	101.1%	100.8%	50 - 150		
Cyfluthrin	0.000	3.289	3.010	2.000	8.9%	< 30	164.4%	150.5%	30 - 150	Q1	
Cypermethrin	0.000	2.227	2.532	2.000	12.8%	< 30	111.4%	126.6%	50 - 150		
Daminozide	0.035	1.652	1.659	2.000	0.4%	< 30	80.8%	81.2%	30 - 150		
Diazinon	0.004	0.456	0.431	0.400	5.6%	< 30	113.1%	106.9%	50 - 150	-	
Dichlorvos	0.023	1.946	1.831	2.000	6.2%	< 30	96.2%	90.4%	50 - 150	-	
Dimethoat	0.000	0.383	0.388	0.400	1.0%	< 30	95.9%	96.9%	50 - 150	-	
Ethoprophos	0.000	0.385	0.369	0.400	1.5%	< 30	93.5%	92.2%		-	
Etofenprox	0.000	0.792	0.686	0.800	14.5%	< 30	99.1%	85.7%	50 - 150		
Etoxazol	0.001	0.406	0.436	0.400	7.1%	< 30	101.4%	108.9%	50 - 150		
Fenoxycarb	0.000	0.410	0.417	0.400	1.8%	< 30	102.5%	104.3%	50 - 150		
Fenpyroximat	0.000	0.867	0.821	0.800	5.4%	< 30	108.4%	102.7%	50 - 150		
Fipronil	0.000	1.079	1.035	0.800	4.1%	< 30	134.8%	129.4%	50 - 150		
Flonicamid	0.000	0.943	1.010	1.000	6.8%	< 30	94.3%	101.0%	50 - 150		
Fludioxonil	0.000	0.702	0.800	0.800	13.0%	< 30	87.7%	99.9%	50 - 150		
Hexythiazox	0.000	0.972	0.986	1.000	1.4%	< 30	97.2%	98.6%	50 - 150		
Imazalil	0.000	0.336	0.336	0.400	0.1%	< 30	84.0%	84.1%	50 - 150		
Imidacloprid	0.002	0.798	0.841	0.800	5.3%	< 30	99.4%	104.9%	50 - 150		
Kresoxim-Methyl	0.000	0.752	0.812	0.800	7.6%	< 30	94.0%	101.5%	50 - 150	-	
Malathion	0.002	0.431	0.432	0.400	0.1%	< 30	107.2%	107.4%	50 - 150		
Metalaxyl	0.000	0.387	0.394	0.400	1.8%	< 30	96.8%	98.6%	50 - 150	-	
Methiocarb	0.007	0.416	0.413	0.400	0.6%	< 30	102.2%	101.5%	50 - 150	-	
Methomyl	0.000	0.711	0.747	0.800	5.0%	< 30	88.8%	93.4%	50 - 150	<u> </u>	
MGK 264	0.000	0.368	0.366	0.400	0.5%	< 30	91.9%	91.5%	50 - 150	<u> </u>	
Myclobutanil	0.000	0.398	0.380	0.400	4.2%	< 30	99.4%	95.3%	50 - 150	-	
Naled	0.000	1.023	1.069	1.000	4.2%	< 30	99.4%	95.3%		-	
										-	
Oxamyl	0.000	1.716	2.019	2.000	16.2%	< 30	85.8%	100.9%	50 - 150		
Paclobutrazol	0.000	0.855	0.847	0.800	1.0%	< 30	106.9%	105.8%	50 - 150		
Parathion Methyl	0.000	0.957	0.835	0.800	13.6%	< 30	119.6%	104.4%	30 - 150		
Permethrin	0.000	0.431	0.400	0.400	7.5%	< 30	107.8%	100.0%	50 - 150		
Phosmet	0.002	0.367	0.368	0.400	0.3%	< 30	91.3%	91.6%	50 - 150	1	
Piperonyl butoxide	0.000	2.185	2.179	2.000	0.3%	< 30	109.3%	109.0%	50 - 150		
Prallethrin	0.031	0.532	0.544	0.400	2.4%	< 30	125.3%	128.3%	50 - 150		
Propiconazole	0.000	0.902	0.911	0.800	1.0%	< 30	112.7%	113.9%	50 - 150		
Propoxur	0.006	0.389	0.375	0.400	3.7%	< 30	95.8%	92.3%	50 - 150		
Pyrethrins	0.005	0.521	0.570	0.413	9.1%	< 30	124.9%	136.8%	50 - 150		
Pyridaben	0.000	0.349	0.379	0.400	8.2%	< 30	87.3%	94.8%	50 - 150		
Spinosad	0.003	0.333	0.346	0.388	3.6%	< 30	85.1%	88.3%	50 - 150		
Spiromesifen	0.000	0.389	0.417	0.400	7.0%	< 30	97.2%	104.3%	50 - 150		
Spirotetramat	0.000	0.368	0.388	0.400	5.5%	< 30	91.9%	97.0%	50 - 150		
Spiroxamine	0.010	0.721	0.366	0.800	6.9%	< 30	88.9%	95.2%	50 - 150	-	
Tebuconazol	0.000	0.950	0.965	0.800	1.5%	< 30	118.8%	120.6%		-	
			0.965								
Thiacloprid	0.000	0.399		0.400	6.5%	< 30	99.7%	93.5%	50 - 150		
Thiamethoxam	0.000	0.369	0.403	0.400	8.8%	< 30	92.4% 101.9%	100.9%	50 - 150 50 - 150		

Revised: 08/12/2019 Effective: 08/15/2019

 www.columbialaboratories.com
 Page 13 of 14

 Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.





Explanation of QC Flag Comments:

Report Number: 20-011819/D02.R00 Report Date: 11/06/2020 ORELAP#: OR100028 Purchase Order: Received:

10/30/20 10:50

Code	Explanation
Q	Matrix interferences affecting spike or surrogate recoveries.
Q1	Quality control result biased high. Only non-detect samples reported.
Q2	Quality control outside QC limits. Data considered estimate.
Q3	Sample concentration greater than four times the amount spiked.
Q4	Non-homogenous sample matrix, affecting RPD result and/or % recoveries.
Q5	Spike results above calibration curve.
Q6	Quality control outside QC limits. Data acceptable based on remaining QC.
R	Relative percent difference (RPD) outside control limit.
R1	RPD non-calculable, as sample or duplicate results are less than five times the LOQ.
R2	Sample replicates RPD non-calculable, as only one replicate is within the analytical range.
LOQ1	Quantitation level raised due to low sample volume and/or dilution.
LOQ2	Quantitaion level raised due to matrix interference.
В	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.

 www.columbialaboratories.com
 Page 14 of 14

 Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.