Ionization Labs

Certification of Analysis

labservices@ionizationlabs.com
737.231.0772

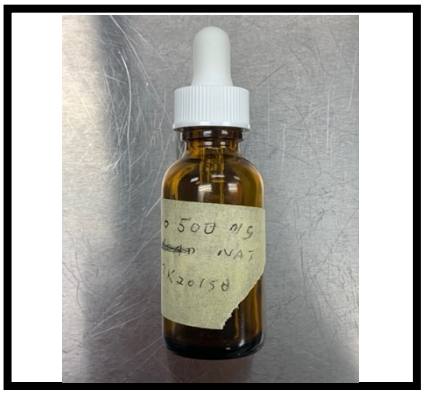
Prepared For: Whole Organix LLC
Houston, Texas 77018

Sample Information

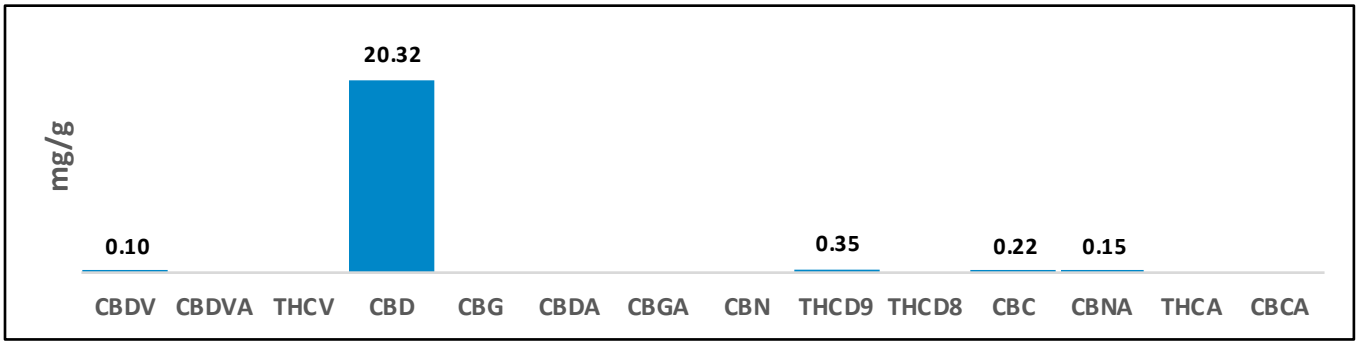
Test Date:	Dec 3, 2020, 11:28 AM	**Sample Type:**	Tincture
Sample / Strain Name:	WO 500 mg FS Nat	**IL Unique ID:**	ILCTS561-2
Lot # / Batch ID:	27K20158		
Sample Description:	Clear tincture oil		
Notes:	Unit weight is 1 bottle = 28 grams		
Analyst Name:	Enrique Orci IV	**Reviewer Name:**	Ted Barton
Analyst Signature:	Enrique Orci IV	**Reviewer Signature:**	Ted Barton

Cannabinoid Potency and Profile

Cannabinoid	Result (%)	Result (mg/g)	mg / jar
CBDV	0.01%	0.10	2.80
CBDVA	N/D	N/D	N/D
THCV	N/D	N/D	N/D
CBD	2.03%	20.32	568.96
CBG	N/D	N/D	N/D
CBDA	N/D	N/D	N/D
CBGA	N/D	N/D	N/D
CBN	N/D	N/D	N/D
THCD9	0.03%	0.35	9.80
THCD8	N/D	N/D	N/D
CBC	0.02%	0.22	6.16
CBNA	0.01%	0.15	4.20
THCA	N/D	N/D	N/D
CBCA	N/D	N/D	N/D
Totals	**2.10%**	**21.14**	**591.92**



Total THC %	**0.03%**
Total THC mg / jar	**9.80**
Total CBD %	**2.03%**
Total CBD mg / jar	**568.96**



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

ISO 17025 Accredited
A2LA Certificate #: 5756.01
Texas Dept of Ag Account #: TL2020003

Columbia LABORATORIES
A Tentamus Company

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

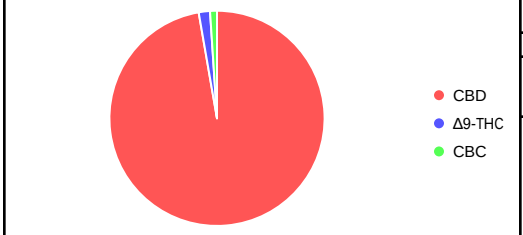
Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

Customer: Deschutes Labs
Product identity: 1060418-2020-WHO-Full Spec MCT-01
Client/Metrc ID: .
Laboratory ID: 20-010216-0003 **Sample Date:** 09/21/20 15:24

Summary

Potency:

Analyte	Result (%)
CBD	12.1
Δ9-THC	0.211
CBC	0.129



CBD-Total 12.1%

THC-Total 0.211%

(Reported in percent of total sample)

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Metals:

Less than LOQ for all analytes.

Testing in accordance with: OAR 333-007-0430

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

Customer: Deschutes Labs

Product identity: 1060418-2020-WHO-Full Spec MCT-01
Client/Metrc ID: .
Sample Date: 09/21/20 15:24
Laboratory ID: 20-010216-0003
Relinquished by: Received By Mail
Temp: 22.2 °C

Sample Results

Potency **Method** J AOAC 2015 V98-6 (mod) **Batch:** 2007964 **Analyze:** 9/26/20 12:29:00 AM

Analyte	As Received	Dry weight	LOQ	Notes
CBC	0.129		0.0914	
CBC-A†	< LOQ		0.0914	
CBC-Total†	< LOQ		0.172	
CBD	12.1		0.0914	
CBD-A	< LOQ		0.0914	
CBD-Total	12.1		0.172	
CBDV†	< LOQ		0.0914	
CBDV-A†	< LOQ		0.0914	
CBDV-Total†	< LOQ		0.171	
CBG†	< LOQ		0.0914	
CBG-A†	< LOQ		0.0914	
CBG-Total	< LOQ		0.171	
CBL†	< LOQ		0.0914	
CBN	< LOQ		0.0914	
Δ8-THC†	< LOQ		0.0914	
Δ9-THC	0.211		0.0914	
THC-A	< LOQ		0.0914	
THC-Total	0.211		0.172	
THCV†	< LOQ		0.0914	
THCV-A†	< LOQ		0.0914	
THCV-Total†	< LOQ		0.171	
Total Cannabinoids†	12.4			

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

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

Solvents **Method** EPA5021A **Units** µg/g **Batch** 2007813 **Analyze** 09/23/20 01:18 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	< 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	
Total Xylenes	< LOQ		400			Total Xylenes and Ethyl	< LOQ	2170	600	pass	

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

Columbia LABORATORIES
A Tentamus Company

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Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

Pesticides

Method AOAC 2007.01 & EN 15662 (mod) **Units** mg/kg **Batch** 2007914 **Analyze** 09/25/20 04:20 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.50	0.250	pass		Acephate	< LOQ	0.40	0.250	pass	
Acequinocyl	< LOQ	2.0	1.00	pass		Acetamiprid	< LOQ	0.20	0.100	pass	
Aldicarb	< LOQ	0.40	0.200	pass		Azoxystrobin	< LOQ	0.20	0.100	pass	
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	0.0353	2007930	09/25/20	AOAC 2013.06 (mod.)	X
Cadmium	< LOQ		mg/kg	0.0353	2007930	09/25/20	AOAC 2013.06 (mod.)	X
Lead	< LOQ		mg/kg	0.0353	2007930	09/25/20	AOAC 2013.06 (mod.)	X
Mercury	< LOQ		mg/kg	0.0176	2007930	09/25/20	AOAC 2013.06 (mod.)	X

Columbia LABORATORIES
A Tentamus Company

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

Report Number:	20-010216/D02.R00
Report Date:	09/28/2020
ORELAP#:	OR100028
Purchase Order:	
Received:	09/23/20 10:20

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.

† = 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

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

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 20-010216/D02.R00
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ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

Columbia LABORATORIES
A Tentamus Company

Hemp / Cannabis Usable / Extract
Chain of Custody Record

Revision: 3.01 Control#: CF023 Rev 02/26/2020 Eff: 02/27/2020
ORELAP ID: **OR100028**

20-010216

Company: Deschutes Labs
Contact: Drew Van Roekel
Street: 2020 NW Industrial Park Rd
City: Prineville State: OR Zip: 97754
☑ Email Results: Drew@Deschuteslabs.com
Ph: (503)809-9798 ☐ Fx Results: (___)_____
Billing (if different):_____

PO Number: _____
Project Number: _____
Project Name: _____
Custom Reporting: _____
Report to State - ☐ METRC or ☐ Other: _____
Turnaround time: ☐ Standard ☐ Rush * ☐ Priority Rush *
**Ask for availability*
Sampled by: _____

Lab ID	Client Sample Identification	Date	Time	Potency	Pesticides	Residual Solvents	Heavy Metals	Sample Type †	Weight (Units)	Comments/Metrc ID
1	1060418-2020-TF-03-DIS-01	9/21/20	1344	✓	✓	✓	✓			
2	1060418-2020-TS-25-ISO-01	9/21/20	1521	✓	✓	✓	✓			
3	1060418-2020-WHO-Full Spec MCT 01 ~~WHO~~ DWL 092220	9/21/20	1524	✓	✓	✓	✓			
		9/21/20								
		9/21/20								
		9/21/20								
		9/21/20								
		9/21/20								
		9/21/20								
		9/21/20								
		9/21/20								

Relinquished By:	Date	Time	Received By:	Date	Time
Drew Van Roekel	09/21/20	1335		9-23-1020	

Lab Use Only:
☐ Shipped Via: _____ or ☐ Client drop
Evidence of cooling: ☐ Yes | ☐ No - Temp (°C): 22.2
Sample in good condition: ☐Yes| ☐ No _____
☐ Cash | ☐ Check | ☐ CC | ☐ Net: _____
Prelog storage: _____

† - Sample Type Codes: Vegitation (V) ; Isolates (S) ; Extract/Concentrate (C)

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms

12423 NE Whitaker Way
Portland, OR 97230
P: (503) 254-1794 | Fax: (503) 254-1452
info@columbialaboratories.com
Page 1 of 1
www.columbialaboratories.com

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

Columbia LABORATORIES
A Tentamus Company

12423 NE Whitaker Way
Portland, OR 97230
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ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

Columbia LABORATORIES A Tentamus Company

Columbia Laboratories
Sample Receipt Form

Revision: 1.01 Document Control: CF015
Revised: 02/28/2020 Effective: 02/28/2020

Job Number: 20-010216 Search Name: _____

Package/Cooler opened on (if different than received date/time) Date: 9.23 Time: 1020

Received By (Initials): _____

1) Were custody seals on outside of the package/cooler? If YES, how many and where? _____	YES	NO	NA
Were signature and date correct? ----------	YES	NO	NA
2) Were custody papers included in the package/cooler?	YES	NO	NA
3) Were custody papers properly filled out (ink, sign, date)?	YES	NO	NA
4) Did you sign custody papers in the appropriate place?	YES	NO	NA

5) How was the package/cooler delivered?

UPS FEDEX USPS CLIENT COURIER OTHER: _____

Tracking Number (written in or copy of shipping label): 1Z104E6401938250 32

6) Was packing material used?	YES	NO	NA

Peanuts Bubble Wrap Foam Paper Other:

7) Was sufficient ice used (if appropriate)? What kind?	YES	NO	NA

Blue Ice Ice Cooler Packs Dry Ice

8) Were all sample containers sealed in separate plastic bags?	YES	NO	NA
9) Did all sample containers arrive in good condition?	YES	NO	NA
10) Were all sample container labels complete?	YES	NO	NA
11) Did all sample container labels and tags agree with the coc?	YES	NO	NA
12) Were correct sample containers used for the tests indicated?	YES	NO	NA
13) Were VOA vials checked for absence of air bubbles (note if found)?	YES	NO	NA
14) Was a sufficient amount of sample sent in each sample container?	YES	NO	NA
15) Temperature of the samples upon receipt (See SOP for proper temps)	22.2 °C		

16) Sample location prior to login: R25 R39 R44 F44 Ambient Shelf Cannabis Table Other: _____

Explain any discrepancies: _____

Page 2 of 2

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Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

Laboratory Quality Control Results

EPA 5021 **Batch ID:** 2007813

Method Blank					Laboratory Control Sample							
Analyte	**Result**		**LOQ**	**Notes**	**Result**	**Spike**	**Units**	**% Rec**	**Limits**			**Notes**
Propane	ND	<	200		1020	1,190	µg/g	85.7	70	-	130	
Isobutane	ND	<	200		1250	1,520	µg/g	82.2	70	-	130	
Butane	ND	<	200		1260	1,520	µg/g	82.9	70	-	130	
2,2-Dimethylpropane	ND	<	200		1620	1,910	µg/g	84.8	70	-	130	
Methanol	ND	<	200		2730	3,240	µg/g	84.3	70	-	130	
Ethylene Oxide	ND	<	30		100	117	µg/g	85.5	70	-	130	
2-Methylbutane	ND	<	200		2760	3,220	µg/g	85.7	70	-	130	
Pentane	ND	<	200		2730	3,210	µg/g	85.0	70	-	130	
Ethanol	ND	<	200		2590	3,220	µg/g	80.4	70	-	130	
Ethyl Ether	ND	<	200		2720	3,260	µg/g	83.4	70	-	130	
2,2-Dimethylbutane	ND	<	30		341	431	µg/g	79.1	70	-	130	
Acetone	ND	<	200		2820	3,210	µg/g	87.9	70	-	130	
2-Propanol	ND	<	200		2550	3,180	µg/g	80.2	70	-	130	
Acetonitrile	ND	<	100		844	983	µg/g	85.9	70	-	130	
2,3-Dimethylbutane	ND	<	30		268	373	µg/g	71.8	70	-	130	
Dichloromethane	ND	<	200		840	1,010	µg/g	83.2	70	-	130	
2-Methylpentane	ND	<	30		268	330	µg/g	81.2	70	-	130	
3-Methylpentane	ND	<	30		272	342	µg/g	79.5	70	-	130	
Hexane	ND	<	30		258	321	µg/g	80.4	70	-	130	
Ethyl acetate	ND	<	200		2770	3,260	µg/g	85.0	70	-	130	
2-Butanol	ND	<	200		2490	3,210	µg/g	77.6	70	-	130	
Tetrahydrofuran	ND	<	100		773	982	µg/g	78.7	70	-	130	
Cyclohexane	ND	<	200		2630	3,210	µg/g	81.9	70	-	130	
Benzene	ND	<	1		42.4	55.4	µg/g	76.5	70	-	130	
Isopropyl Acetate	ND	<	200		2620	3,200	µg/g	81.9	70	-	130	
Heptane	ND	<	200		2840	3,210	µg/g	88.5	70	-	130	
1,4-Dioxane	ND	<	100		783	1,010	µg/g	77.5	70	-	130	
2-Ethoxyethanol	ND	<	30		488	681	µg/g	71.7	70	-	130	
Ethylene Glycol	ND	<	200		838	1,170	µg/g	71.6	70	-	130	
Toluene	ND	<	200		774	980	µg/g	79.0	70	-	130	
Ethylbenzene	ND	<	200		1530	1,970	µg/g	77.7	70	-	130	
m,p-Xylene	ND	<	200		1560	1,950	µg/g	80.0	70	-	130	
o-Xylene	ND	<	200		1580	1,940	µg/g	81.4	70	-	130	
Cumene	ND	<	30		276	336	µg/g	82.1	70	-	130	

Columbia LABORATORIES
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503-254-1794

Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

QC - Sample Duplicate **Sample ID: 20-009946-0004**

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/Fail	Notes
Propane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
3-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Butanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Tetrahydrofuran	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
1,4-Dioxane	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Toluene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylbenzene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
m,p-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
o-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Cumene	ND	ND	30	µg/g	0.0	< 20	Acceptable	

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation
* Screening only
Q1 Quality Control result biased high. Only non detect samples reported.

Units of Measure:

µg/g- Microgram per gram or ppm
mg/Kg - Milligrams per Kilogram
Aw- Water Activity unit

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

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

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

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662	Units: mg/Kg						Batch ID: 2007914	
Method Blank				Laboratory Control Sample				
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Acephate	0.026	< 0.200		0.950	1.000	95.0	68.1 - 126	
Acequinocyl	0.000	< 1.000		3.976	4.000	99.4	69.5 - 129	
Acetamiprid	0.000	< 0.100		0.389	0.400	97.2	69.0 - 128	
Aldicarb	0.000	< 0.200		0.832	0.800	104.0	67.7 - 126	
Abamectin	0.000	< 0.288		1.055	1.000	105.5	69.1 - 128	
Azoxystrobin	0.012	< 0.100		0.356	0.400	89.0	69.0 - 128	
Bifenazate	0.018	< 0.100		0.394	0.400	98.5	68.1 - 126	
Bifenthrin	0.087	< 0.100		0.357	0.400	89.3	71.2 - 132	
Boscalid	0.076	< 0.100		0.951	0.800	118.9	68.3 - 127	
Carbaryl	0.020	< 0.100		0.391	0.400	97.7	69.5 - 129	
Carbofuran	0.010	< 0.100		0.385	0.400	96.3	69.1 - 128	
Chlorantraniliprol	0.008	< 0.100		0.328	0.400	82.0	69.7 - 129	
Chlorfenapyr	0.000	< 1.000		2.104	2.000	105.2	67.9 - 126	
Chlorpyrifos	0.025	< 0.100		0.388	0.400	96.9	68.7 - 128	
Clofentezine	0.005	< 0.100		0.375	0.400	93.8	67.0 - 124	
Cyfluthrin	0.138	< 1.000		2.072	2.000	103.6	71.3 - 132	
Cypermethrin	0.000	< 1.000		1.810	2.000	90.5	71.4 - 133	
Daminozide	0.047	< 1.000		1.840	2.000	92.0	66.1 - 123	
Diazinon	0.009	< 0.100		0.386	0.400	96.5	68.3 - 127	
Dichlorvos	0.000	< 0.500		2.032	2.000	101.6	67.9 - 126	
Dimethoat	0.006	< 0.100		0.385	0.400	96.3	68.6 - 127	
Ethoprophos	0.000	< 0.100		0.329	0.400	82.3	68.0 - 126	
Etofenprox	0.030	< 0.100		0.752	0.800	94.1	68.8 - 128	
Etoxazol	0.000	< 0.100		0.375	0.400	93.8	68.4 - 127	
Fenoxycarb	0.000	< 0.100		0.391	0.400	97.8	68.8 - 128	
Fenpyroximat	0.015	< 0.100		0.783	0.800	97.9	70.3 - 131	
Fipronil	0.000	< 0.100		0.827	0.800	103.4	71.3 - 132	
Flonicamid	0.020	< 0.400		0.891	1.000	89.1	69.5 - 129	
Fludioxonil	0.000	< 0.100		0.926	0.800	115.7	69.0 - 128	
Hexythiazox	0.025	< 0.400		0.998	1.000	99.8	71.0 - 132	
Imazalil	0.003	< 0.100		0.385	0.400	96.3	71.6 - 133	
Imidacloprid	0.000	< 0.200		0.706	0.800	88.3	67.9 - 126	
Kresoxim-Methyl	0.000	< 0.100		0.759	0.800	94.9	69.2 - 128	
Malathion	0.014	< 0.100		0.375	0.400	93.7	69.0 - 128	
Metalaxyl	0.013	< 0.100		0.387	0.400	96.7	68.3 - 127	
Methiocarb	0.000	< 0.100		0.391	0.400	97.8	68.7 - 128	
Methomyl	0.000	< 0.200		0.768	0.800	96.0	67.6 - 126	
MGK 264	0.000	< 0.100		0.387	0.400	96.6	69.8 - 130	
Myclobutanil	0.015	< 0.100		0.383	0.400	95.7	67.8 - 126	
Naled	0.031	< 0.200		0.998	1.000	99.8	68.8 - 128	
Oxamyl	0.000	< 0.400		1.783	2.000	89.1	67.7 - 126	
Paclobutrazol	0.000	< 0.200		0.724	0.800	90.5	67.6 - 126	
Parathion Methyl	0.000	< 0.200		0.721	0.800	90.1	71.2 - 132	
Permethrin	0.002	< 0.100		0.418	0.400	104.4	70.1 - 130	
Phosmet	0.019	< 0.100		0.381	0.400	95.2	69.2 - 129	
Piperonyl butoxide	0.000	< 1.000		2.073	2.000	103.6	69.8 - 130	
Prallethrin	0.000	< 0.200		0.332	0.400	83.0	70.8 - 131	
Propiconazole	0.001	< 0.200		0.773	0.800	96.7	68.7 - 128	
Propoxur	0.003	< 0.100		0.399	0.400	99.8	67.9 - 126	
Pyrethrins	0.008	< 0.500		0.390	0.413	94.3	70.0 - 130	
Pyridaben	0.000	< 0.100		0.432	0.400	108.0	74.6 - 139	
Spinosad	0.000	< 0.100		0.394	0.388	101.5	75.9 - 141	
Spiromesifen	0.004	< 0.100		0.394	0.400	98.4	69.1 - 128	
Spirotetramat	0.000	< 0.100		0.391	0.400	97.7	69.0 - 128	
Spiroxamine	0.021	< 0.100		0.762	0.800	95.2	68.9 - 128	
Tebuconazol	0.028	< 0.200		0.771	0.800	96.3	68.3 - 127	
Thiacloprid	0.000	< 0.100		0.375	0.400	93.7	68.3 - 127	
Thiamethoxam	0.000	< 0.100		0.371	0.400	92.7	68.0 - 126	
Trifloxystrobin	0.002	< 0.100		0.394	0.400	98.6	69.4 - 129	

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

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

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

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662			Units: mg/Kg					Batch ID: 2007914		
Matrix Spike/Matrix Spike Duplicate Recoveries							Sample ID: 20-009946-0004			
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Acephate	0.024	0.923	0.926	1.000	0.4	< 30	89.9	90.2	50 - 150	
Acequinocyl	0.000	3.884	3.383	4.000	13.8	< 30	97.1	84.6	50 - 150	
Acetamiprid	0.000	0.368	0.370	0.400	0.5	< 30	91.9	92.4	50 - 150	
Aldicarb	0.000	0.761	0.718	0.800	5.7	< 30	95.1	89.8	50 - 150	
Abamectin	0.000	1.524	1.656	1.000	8.3	< 30	***152.4***	***165.6***	50 - 150	Q1
Azoxystrobin	0.012	0.447	0.433	0.400	3.2	< 30	108.8	105.2	50 - 150	
Bifenazate	0.016	0.372	0.390	0.400	4.5	< 30	89.1	93.4	50 - 150	
Bifenthrin	0.000	0.676	1.212	0.400	***56.9***	< 30	***168.9***	***303.1***	50 - 150	R,Q1
Boscalid	0.063	0.838	0.777	0.800	7.5	< 30	96.8	89.2	50 - 150	
Carbaryl	0.019	0.384	0.384	0.400	0.0	< 30	91.3	91.2	50 - 150	
Carbofuran	0.009	0.372	0.374	0.400	0.4	< 30	90.8	91.1	50 - 150	
Chlorantraniliprol	0.008	0.400	0.398	0.400	0.3	< 30	98.0	97.7	50 - 150	
Chlorfenapyr	0.000	2.043	2.059	2.000	0.7	< 30	102.2	102.9	50 - 150	
Chlorpyrifos	0.007	0.479	0.459	0.400	4.3	< 30	118.1	113.0	50 - 150	
Clofentezine	0.004	0.412	0.412	0.400	0.2	< 30	101.9	102.1	50 - 150	
Cyfluthrin	0.068	3.246	3.138	2.000	3.4	< 30	***158.9***	***153.5***	30 - 150	Q1
Cypermethrin	0.000	1.707	1.776	2.000	3.9	< 30	85.4	88.8	50 - 150	
Daminozide	0.018	0.574	0.601	2.000	4.7	< 30	***27.8***	***29.1***	30 - 150	Q
Diazinon	0.007	0.414	0.411	0.400	0.7	< 30	101.7	101.0	50 - 150	
Dichlorvos	0.000	1.843	1.829	2.000	0.8	< 30	92.2	91.4	50 - 150	
Dimethoat	0.008	0.378	0.373	0.400	1.1	< 30	92.3	91.3	50 - 150	
Ethoprophos	0.000	0.344	0.327	0.400	5.1	< 30	86.1	81.8	50 - 150	
Etofenprox	0.085	0.837	0.878	0.800	4.8	< 30	94.0	99.1	50 - 150	
Etoxazol	0.000	0.365	0.383	0.400	5.0	< 30	91.2	95.8	50 - 150	
Fenoxycarb	0.000	0.381	0.382	0.400	0.1	< 30	95.3	95.4	50 - 150	
Fenpyroximat	0.003	0.776	0.797	0.800	2.7	< 30	96.6	99.3	50 - 150	
Fipronil	0.000	0.873	0.970	0.800	10.5	< 30	109.1	121.2	50 - 150	
Flonicamid	0.015	0.881	0.910	1.000	3.3	< 30	86.6	89.5	50 - 150	
Fludioxonil	0.000	0.648	0.816	0.800	22.9	< 30	81.0	101.9	50 - 150	
Hexythiazox	0.000	1.535	1.558	1.000	1.5	< 30	***153.5***	***155.8***	50 - 150	Q1
Imazalil	0.003	0.360	0.397	0.400	9.9	< 30	89.2	98.6	50 - 150	
Imidacloprid	0.000	0.706	0.707	0.800	0.2	< 30	88.3	88.4	50 - 150	
Kresoxim-Methyl	0.000	0.640	0.715	0.800	11.1	< 30	80.0	89.3	50 - 150	
Malathion	0.010	0.408	0.417	0.400	2.2	< 30	99.5	101.7	50 - 150	
Metalaxyl	0.012	0.385	0.372	0.400	3.6	< 30	93.3	89.9	50 - 150	
Methiocarb	0.000	0.390	0.384	0.400	1.5	< 30	97.4	96.0	50 - 150	
Methomyl	0.000	0.737	0.734	0.800	0.5	< 30	92.2	91.7	50 - 150	
MGK 264	0.000	0.351	0.355	0.400	1.3	< 30	87.7	88.8	50 - 150	
Myclobutanil	0.012	0.380	0.401	0.400	5.5	< 30	92.0	97.3	50 - 150	
Naled	0.028	0.942	0.985	1.000	4.4	< 30	91.5	95.7	50 - 150	
Oxamyl	0.000	1.821	1.788	2.000	1.8	< 30	91.1	89.4	50 - 150	
Paclobutrazol	0.000	0.711	0.730	0.800	2.6	< 30	88.9	91.2	50 - 150	
Parathion Methyl	0.000	0.745	0.798	0.800	6.9	< 30	93.1	99.8	30 - 150	
Permethrin	0.005	0.403	0.368	0.400	8.9	< 30	99.3	90.7	50 - 150	
Phosmet	0.017	0.389	0.372	0.400	4.5	< 30	92.9	88.6	50 - 150	
Piperonyl butoxide	0.000	2.111	2.104	2.000	0.3	< 30	105.5	105.2	50 - 150	
Prallethrin	0.000	0.387	0.405	0.400	4.6	< 30	96.7	101.2	50 - 150	
Propiconazole	0.000	0.825	0.833	0.800	1.1	< 30	103.1	104.2	50 - 150	
Propoxur	0.002	0.371	0.362	0.400	2.6	< 30	92.3	89.9	50 - 150	
Pyrethrins	0.000	0.369	0.385	0.413	4.4	< 30	89.3	93.3	50 - 150	
Pyridaben	0.000	0.276	0.274	0.400	0.6	< 30	68.9	68.5	50 - 150	
Spinosad	0.000	0.450	0.459	0.388	2.0	< 30	115.9	118.2	50 - 150	
Spiromesifen	0.000	0.402	0.382	0.400	5.1	< 30	100.4	95.4	50 - 150	
Spirotetramat	0.000	0.356	0.367	0.400	3.0	< 30	88.9	91.6	50 - 150	
Spiroxamine	0.019	0.741	0.765	0.800	3.2	< 30	90.2	93.2	50 - 150	
Tebuconazol	0.000	0.757	0.708	0.800	6.8	< 30	94.7	88.5	50 - 150	
Thiacloprid	0.000	0.377	0.367	0.400	2.8	< 30	94.3	91.7	50 - 150	
Thiamethoxam	0.000	0.333	0.349	0.400	4.7	< 30	83.2	87.2	50 - 150	
Trifloxystrobin	0.001	0.420	0.436	0.400	2.6	< 30	104.6	108.8	50 - 150	

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

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

Revision #: 0.00 Control : CFL-D06
Revision Date: 05/31/2019 Effective Date: 05/31/2019

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2007964**

Laboratory Control Sample

Analyte	Result		Spike	Units	% Rec	Limits	Evaluation	Notes
CBDV-A	0.204		0.2	%	102	85.0 - 115	Acceptable	
CBDV	0.203		0.2	%	101	85.0 - 115	Acceptable	
CBD-A	0.207		0.2	%	103	85.0 - 115	Acceptable	
CBG-A	0.201		0.2	%	100	85.0 - 115	Acceptable	
CBG	0.199		0.2	%	99.3	85.0 - 115	Acceptable	
CBD	0.217		0.2	%	108	85.0 - 115	Acceptable	
THCV	0.205		0.2	%	103	85.0 - 115	Acceptable	
THCVA	0.193		0.2	%	96.7	85.0 - 115	Acceptable	
CBN	0.205		0.2	%	102	85.0 - 115	Acceptable	
THC	0.207		0.2	%	104	85.0 - 115	Acceptable	
D8THC	0.189		0.2	%	94.4	85.0 - 115	Acceptable	
CBL	0.194		0.2	%	97.0	85.0 - 115	Acceptable	
CBC	0.202		0.2	%	101	85.0 - 115	Acceptable	
THCA	0.189		0.2	%	94.3	85.0 - 115	Acceptable	
CBCA	0.195		0.2	%	97.5	85.0 - 115	Acceptable	

Method Blank

Analyte	Result		LOQ	Units		Limits	Evaluation	Notes
CBDV-A	<LOQ		0.1	%		< 0.1	Acceptable	
CBDV	<LOQ		0.1	%		< 0.1	Acceptable	
CBD-A	<LOQ		0.1	%		< 0.1	Acceptable	
CBG-A	<LOQ		0.1	%		< 0.1	Acceptable	
CBG	<LOQ		0.1	%		< 0.1	Acceptable	
CBD	<LOQ		0.1	%		< 0.1	Acceptable	
THCV	<LOQ		0.1	%		< 0.1	Acceptable	
THCVA	<LOQ		0.1	%		< 0.1	Acceptable	
CBN	<LOQ		0.1	%		< 0.1	Acceptable	
THC	<LOQ		0.1	%		< 0.1	Acceptable	
D8THC	<LOQ		0.1	%		< 0.1	Acceptable	
CBL	<LOQ		0.1	%		< 0.1	Acceptable	
CBC	<LOQ		0.1	%		< 0.1	Acceptable	
THCA	<LOQ		0.1	%		< 0.1	Acceptable	
CBCA	<LOQ		0.1	%		< 0.1	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent

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

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/23/20 10:20

Revision #: 0.00 Control : CFL-D06
Revision Date: 05/31/2019 Effective Date: 05/31/2019

Laboratory Quality Control Results

J AOAC 2015 V98-6					Batch ID: 2007964			
Sample Duplicate					Sample ID: **20-009968-0003**			
Analyte	**Result**	**Org. Result**	**LOQ**	**Units**	**RPD**	**Limits**	**Evaluation**	**Notes**
CBDV-A	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBD-A	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBG-A	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBG	**0.762**	**0.758**	0.1	%	0.588	< 20	Acceptable	
CBD	**0.114**	**0.106**	0.1	%	7.42	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBN	**0.143**	**0.141**	0.1	%	1.84	< 20	Acceptable	
THC	**14.8**	**14.7**	0.1	%	0.414	< 20	Acceptable	
D8THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBC	**0.389**	**0.396**	0.1	%	1.73	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBCA	<LOQ	<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

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

Columbia LABORATORIES
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Report Number: 20-010216/D02.R00
Report Date: 09/28/2020
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Explanation of QC Flag Comments:

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