

labservices@ionizationlabs.com
512.277.3290



Prepared For: RAZAD Enterprises LLC
Plano, TX 75024



Sample Information

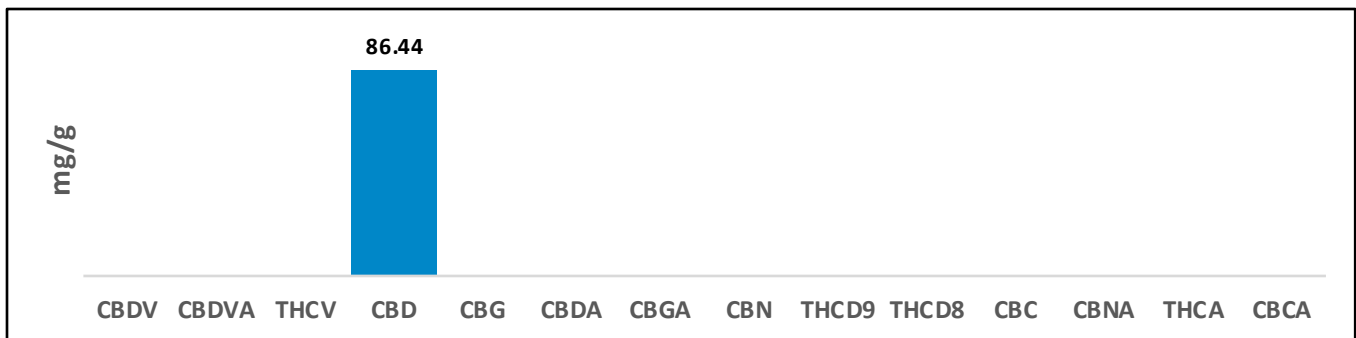
Test Date:	Oct 6, 2020, 1:02 PM	Sample Type:	Tincture
Sample / Strain Name:	ZAR 2000 mg Tincture	IL Unique ID:	ILCTS354-1
Lot # / Batch ID:	05J0130		
Sample Description:	Clear tincture oil		
Notes:	Unit weight is 28.4 grams per 1 oz bottle		
Analyst Name:	Enrique Orci IV	Reviewer Name:	Ted Barton
Analyst Signature:	<i>Enrique Orci IV</i>	Reviewer Signature:	<i>Ted Barton</i>

Cannabinoid Potency and Profile

Cannabinoid	Result (%)	Result (mg/g)	mg / oz
CBDV	N/D	N/D	N/D
CBDVA	N/D	N/D	N/D
THCV	N/D	N/D	N/D
CBD	8.64%	86.44	2454.90
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	N/D	N/D	N/D
THCD8	N/D	N/D	N/D
CBC	N/D	N/D	N/D
CBNA	N/D	N/D	N/D
THCA	N/D	N/D	N/D
CBCA	N/D	N/D	N/D
Totals	8.64%	86.44	2454.90



Total THC %	0.00%
Total THC mg / oz	0.00
Total CBD %	8.64%
Total CBD mg / oz	2454.90



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

Testing results are based solely upon the samples submitted to Ionization Labs, LLC. Ionization Labs warrants that all analytical work is conducted in accordance with all applicable standard laboratory practices using validated methods. This report may not be reproduced without the written consent of Ionization Labs.

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



12423 NE Whitaker Way
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 503-254-1794



Report Number: 20-010425/D03.R00
Report Date: 10/02/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/28/20 10:43

Customer: Deschutes Labs
Product identity: 1060418-2020-NT-59-ISO-01
Client/Metric ID: .
Laboratory ID: 20-010425-0001

Sample Date: 09/25/20 13:57

Summary

Potency:

Analyte	Result (%)		
CBD	> 98.0		
CBDV†	0.276		
			CBD-Total > 98.0% ----- THC-Total < LOQ ----- (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.

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Customer: Deschutes Labs

Product identity: 1060418-2020-NT-59-ISO-01
Client/Metric ID: .
Sample Date: 09/25/20 13:57
Laboratory ID: 20-010425-0001
Relinquished by: Received By Mail
Temp: 20 °C

Sample Results

Potency **Method J AOAC 2015 V98-6 (mod)** **Batch: 2008111** **Analyze: 10/1/20 7:15:00 PM**

Analyte	As Received	Dry weight	LOQ	Notes
CBC	< LOQ		0.0927	
CBC-A†	< LOQ		0.0927	
CBC-Total†	< LOQ		0.174	
CBD	> 98.0		0.927	
CBD-A	< LOQ		0.0927	
CBD-Total	> 98.0		1.01	
CBDV†	0.276		0.0927	
CBDV-A†	< LOQ		0.0927	
CBDV-Total†	0.276		0.173	
CBG†	< LOQ		0.0927	
CBG-A†	< LOQ		0.0927	
CBG-Total	< LOQ		0.173	
CBL†	< LOQ		0.0927	
CBN	< LOQ		0.0927	
Δ8-THC†	< LOQ		0.0927	
Δ9-THC	< LOQ		0.0927	
THC-A	< LOQ		0.0927	
THC-Total	< LOQ		0.174	
THCV†	< LOQ		0.0927	
THCV-A†	< LOQ		0.0927	
THCV-Total†	< LOQ		0.173	
Total Cannabinoids†	> 98.0			



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Solvents						Method EPA5021A		Units µg/g		Batch 2007980		Analyze 09/29/20 09:59 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	< 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			

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Pesticides											
Method AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 2008049 Analyze 09/30/20 04:56 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		Fonicamid	< LOQ	1.0	0.400	pass	
Fludioxonil	< LOQ	0.40	0.200	pass		Hexythiazox	< LOQ	1.0	0.400	pass	
Imazalil	< LOQ	0.20	0.100	pass		Imidacloprid	< LOQ	0.40	0.200	pass	
Kresoxim-methyl	< LOQ	0.40	0.200	pass		Malathion	< LOQ	0.20	0.100	pass	
Metalaxyl	< LOQ	0.20	0.100	pass		Methiocarb	< LOQ	0.20	0.100	pass	
Methomyl	< LOQ	0.40	0.200	pass		MGK-264	< LOQ	0.20	0.100	pass	
Myclobutanil	< LOQ	0.20	0.100	pass		Naled	< LOQ	0.50	0.250	pass	
Oxamyl	< LOQ	1.0	0.500	pass		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	0.0411	2008092	10/01/20	AOAC 2013.06 (mod.)	X	
Cadmium	< LOQ		mg/kg	0.0411	2008092	10/01/20	AOAC 2013.06 (mod.)	X	
Lead	< LOQ		mg/kg	0.0411	2008092	10/01/20	AOAC 2013.06 (mod.)	X	
Mercury	< LOQ		mg/kg	0.0205	2008092	10/01/20	AOAC 2013.06 (mod.)	X	

Purity									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes	
Chemical Purity	98.8		%		2008035	09/30/20	Purity by FID		

Mass-balance purity assay performed by GC-FID. The reported result is accurate within an expanded uncertainty of ± 0.3% (w/w).

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Received: 09/28/20 10:43

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



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Hemp / Cannabis Usable / Extract
 Chain of Custody Record

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

20-010425

Company: Deschutes Labs Contact: Drew Van Roekel Street: 2020 NW Industrial Park Rd City: Prineville State: OR Zip: 97754 <input checked="" type="checkbox"/> Email Results: Drew@Deschuteslabs.com Ph: (503) 809-9798 <input type="checkbox"/> Fx Results: () Billing (if different):				Analysis Requested <input type="checkbox"/> Potency <input checked="" type="checkbox"/> Pesticides <input checked="" type="checkbox"/> Residual Solvents <input checked="" type="checkbox"/> Heavy Metals <input checked="" type="checkbox"/> High Purity Single Analyte CBD					PO Number: _____ Project Number: _____ Project Name: _____ Custom Reporting: _____ Report to State - <input type="checkbox"/> METRC or <input type="checkbox"/> Other: _____ Turnaround time: <input type="checkbox"/> Standard <input type="checkbox"/> Rush * <input type="checkbox"/> Priority Rush * <small>*Ask for availability</small>		
Relinquished By: <u>Drew Van Roekel</u> <u>Drew Van Roekel</u>				Date: 09/25/20 Time: 1405		Received By: <u>Jmv</u>		Date: 9-28-20 Time: 10:43		Lab Use Only: <input type="checkbox"/> Shipped Via: _____ or <input type="checkbox"/> Client drop Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No - Temp (°C): <u>20.0</u> Sample in good condition: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Cash <input type="checkbox"/> Check <input type="checkbox"/> CC <input type="checkbox"/> Net: Prelog storage: _____	

† - Sample Type Codes: Vegetation (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.
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Report Number: 20-010425/D03.R00
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Received: 09/28/20 10:43



Columbia Laboratories
Sample Receipt Form

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

Job Number: 20-010425 Search Name: _____

Package/Cooler opened on (if different than received date/time) Date: 9-24-20 Time: 10:43

Received By (Initials): JV

- 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): 1Z 104 E64 03 9794

6) Was packing material used? YES NO NA 5366
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) 20.0°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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Laboratory Quality Control Results

EPA 5021				Batch ID: 2007980					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		1100	1,190	µg/g	92.4	70 - 130	
Isobutane	ND	< 200		1390	1,520	µg/g	91.4	70 - 130	
Butane	ND	< 200		1410	1,520	µg/g	92.8	70 - 130	
2,2-Dimethylpropane	ND	< 200		1720	1,910	µg/g	90.1	70 - 130	
Methanol	ND	< 200		3000	3,240	µg/g	92.6	70 - 130	
Ethylene Oxide	ND	< 30		113	117	µg/g	96.6	70 - 130	
2-Methylbutane	ND	< 200		2990	3,220	µg/g	92.9	70 - 130	
Pentane	ND	< 200		2960	3,210	µg/g	92.2	70 - 130	
Ethanol	ND	< 200		2850	3,220	µg/g	88.5	70 - 130	
Ethyl Ether	ND	< 200		3010	3,260	µg/g	92.3	70 - 130	
2,2-Dimethylbutane	ND	< 30		380	431	µg/g	88.2	70 - 130	
Acetone	ND	< 200		3040	3,210	µg/g	94.7	70 - 130	
2-Propanol	ND	< 200		2780	3,180	µg/g	87.4	70 - 130	
Acetonitrile	ND	< 100		920	983	µg/g	93.6	70 - 130	
2,3-Dimethylbutane	ND	< 30		307	373	µg/g	82.3	70 - 130	
Dichloromethane	ND	< 200		926	1,010	µg/g	91.7	70 - 130	
2-Methylpentane	ND	< 30		285	330	µg/g	86.4	70 - 130	
3-Methylpentane	ND	< 30		303	342	µg/g	88.6	70 - 130	
Hexane	ND	< 30		287	321	µg/g	89.4	70 - 130	
Ethyl acetate	ND	< 200		3000	3,260	µg/g	92.0	70 - 130	
2-Butanol	ND	< 200		2720	3,210	µg/g	84.7	70 - 130	
Tetrahydrofuran	ND	< 100		878	982	µg/g	89.4	70 - 130	
Cyclohexane	ND	< 200		2950	3,210	µg/g	91.9	70 - 130	
Benzene	ND	< 1		47.3	55.4	µg/g	85.4	70 - 130	
Isopropyl Acetate	ND	< 200		2810	3,200	µg/g	87.8	70 - 130	
Heptane	ND	< 200		3080	3,210	µg/g	96.0	70 - 130	
1,4-Dioxane	ND	< 100		871	1,010	µg/g	86.2	70 - 130	
2-Ethoxyethanol	ND	< 30		496	681	µg/g	72.8	70 - 130	
Ethylene Glycol	ND	< 200		965	1,170	µg/g	82.5	70 - 130	
Toluene	ND	< 200		867	980	µg/g	88.5	70 - 130	
Ethylbenzene	ND	< 200		1660	1,970	µg/g	84.3	70 - 130	
m,p-Xylene	ND	< 200		1700	1,950	µg/g	87.2	70 - 130	
o-Xylene	ND	< 200		1700	1,940	µg/g	87.6	70 - 130	
Cumene	ND	< 30		298	336	µg/g	88.7	70 - 130	

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QC - Sample Duplicate

Sample ID: 20-010197-0001

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/Fail	Notes
Propane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	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

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



Report Number: 20-010425/D03.R00
Report Date: 10/02/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/28/20 10:43

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		Laboratory Control Sample			Batch ID: 2008049	
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Acetate	0.025	< 0.200		0.935	1.000	93.5	68.1 - 126	
Acetaminocyl	0.041	< 1.000		3.664	4.000	91.6	69.5 - 129	
Acetamidiprid	0.000	< 0.100		0.374	0.400	93.6	69.0 - 128	
Aldicarb	0.000	< 0.200		0.705	0.800	88.1	67.8 - 126	
Abamectin	0.000	< 0.288		0.774	1.000	77.4	69.1 - 128	
Azoxystrobin	0.012	< 0.100		0.362	0.400	90.5	68.9 - 128	
Bifenazate	0.009	< 0.100		0.378	0.400	94.6	68.1 - 126	
Bifenthrin	0.019	< 0.100		0.376	0.400	94.1	71.1 - 132	
Boscalid	0.084	< 0.100		0.735	0.800	91.8	68.5 - 127	
Carbaryl	0.013	< 0.100		0.383	0.400	95.9	69.4 - 129	
Carbofuran	0.017	< 0.100		0.380	0.400	95.0	69.1 - 128	
Chlorantraniliprol	0.022	< 0.100		0.370	0.400	92.4	69.5 - 129	
Chlorfenapyr	0.000	< 1.000		1.714	2.000	85.7	68.1 - 126	
Chlorpyrifos	0.000	< 0.100		0.375	0.400	93.6	68.9 - 128	
Clofentezine	0.019	< 0.100		0.370	0.400	92.5	67.0 - 124	
Cyfluthrin	0.000	< 1.000		1.530	2.000	76.5	71.1 - 132	
Cypermethrin	0.004	< 1.000		1.794	2.000	89.7	71.3 - 132	
Daminozide	0.046	< 1.000		1.835	2.000	91.8	66.0 - 123	
Diazinon	0.008	< 0.100		0.382	0.400	95.6	68.3 - 127	
Dichlorvos	0.045	< 0.500		1.824	2.000	91.2	68.0 - 126	
Dimethoat	0.007	< 0.100		0.382	0.400	95.5	68.6 - 127	
Ethoprophos	0.000	< 0.100		0.361	0.400	90.4	67.9 - 126	
Etofenprox	0.017	< 0.100		0.752	0.800	94.0	68.9 - 128	
Etoxazol	0.000	< 0.100		0.371	0.400	92.8	68.3 - 127	
Fenoxycarb	0.009	< 0.100		0.380	0.400	94.9	68.8 - 128	
Fenpyroximat	0.008	< 0.100		0.794	0.800	99.2	70.2 - 130	
Fipronil	0.014	< 0.100		0.720	0.800	90.0	71.4 - 133	
Flonicamid	0.000	< 0.400		0.936	1.000	93.6	69.4 - 129	
Fludioxonil	0.000	< 0.100		0.914	0.800	114.3	69.2 - 128	
Hexythiazox	0.021	< 0.400		0.982	1.000	98.2	71.0 - 132	
Imazalil	0.006	< 0.100		0.408	0.400	102.1	71.6 - 133	
Imidacloprid	0.003	< 0.200		0.728	0.800	91.0	67.8 - 126	
Kresoxim-Methyl	0.034	< 0.100		0.726	0.800	90.7	69.1 - 128	
Malathion	0.008	< 0.100		0.377	0.400	94.3	68.8 - 128	
Metaxalyl	0.010	< 0.100		0.351	0.400	87.8	68.2 - 127	
Methiocarb	0.062	< 0.100		0.407	0.400	101.7	68.7 - 128	
Methomyl	0.091	< 0.200		0.790	0.800	98.7	67.7 - 126	
MKG 264	0.009	< 0.100		0.366	0.400	91.5	69.8 - 130	
Myclobutanil	0.020	< 0.100		0.389	0.400	97.3	67.7 - 126	
Naled	0.034	< 0.200		0.967	1.000	96.7	68.7 - 128	
Oxamyl	0.000	< 0.400		1.838	2.000	91.9	67.7 - 126	
Paclobutrazol	0.036	< 0.200		0.751	0.800	93.9	67.5 - 125	
Parathion Methyl	0.000	< 0.200		0.849	0.800	106.2	71.4 - 133	
Permethrin	0.023	< 0.100		0.372	0.400	93.1	70.2 - 130	
Phosmet	0.004	< 0.100		0.397	0.400	99.3	69.2 - 128	
Piperonyl butoxide	0.125	< 1.000		1.916	2.000	95.8	69.9 - 130	
Prallethrin	0.146	< 0.200		0.450	0.400	112.4	70.5 - 131	
Propiconazole	0.008	< 0.200		0.791	0.800	98.9	68.8 - 128	
Propoxur	0.017	< 0.100		0.381	0.400	95.3	68.0 - 126	
Pyrethrins	0.174	< 0.500		0.408	0.413	98.8	69.9 - 130	
Pyridaben	0.000	< 0.100		0.397	0.400	99.2	74.7 - 139	
Spinosad	0.000	< 0.100		0.410	0.388	105.6	75.8 - 141	
Spiromesifen	0.035	< 0.100		0.381	0.400	95.4	69.2 - 129	
Spirotetramat	0.009	< 0.100		0.375	0.400	93.8	69.0 - 128	
Spiroxamine	0.021	< 0.100		0.759	0.800	94.9	68.8 - 128	
Tebuconazol	0.009	< 0.200		0.733	0.800	91.6	68.3 - 127	
Thiacloprid	0.000	< 0.100		0.371	0.400	92.7	68.3 - 127	
Thiamethoxam	0.000	< 0.100		0.404	0.400	100.9	67.9 - 126	
Trifloxystrobin	0.004	< 0.100		0.394	0.400	98.6	69.3 - 129	

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Portland, OR 97230
503-254-1794

Report Number: 20-010425/D03.R00
Report Date: 10/02/2020
ORELAP#: OR100028
Purchase Order:
Received: 09/28/20 10:43



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: 2008049			
Matrix Spike/Matrix Spike Duplicate Recoveries		Sample ID: 20-010263-0004									
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes	
Acephate	0.019	1.001	0.890	1.000	11.8	< 30	98.2	87.0	50 - 150		
Acetamiprid	0.000	3.878	1.997	4.000	64.0	< 30	96.9	49.9	50 - 150	R,Q	
Aldicarb	0.000	0.371	0.330	0.400	11.6	< 30	92.6	82.5	50 - 150		
Aldicarb	0.000	0.582	0.332	0.800	54.8	< 30	72.8	41.5	50 - 150	R,Q	
Abamectin	0.000	1.499	1.403	1.000	6.6	< 30	149.9	140.3	50 - 150		
Azoxystrobin	0.010	0.494	0.472	0.400	4.5	< 30	120.9	115.5	50 - 150		
Bifenazate	0.000	0.373	0.353	0.400	5.5	< 30	93.1	88.2	50 - 150		
Bifenthrin	0.000	0.733	0.850	0.400	14.8	< 30	183.2	212.6	50 - 150	Q1	
Boscalid	0.063	0.952	0.721	0.800	27.5	< 30	111.1	82.3	50 - 150		
Carbaryl	0.012	0.396	0.336	0.400	16.3	< 30	96.0	81.1	50 - 150		
Carbofuran	0.014	0.419	0.359	0.400	15.3	< 30	101.3	86.4	50 - 150		
Chlorantraniliprol	0.020	0.425	0.416	0.400	1.9	< 30	101.2	99.2	50 - 150		
Chlorfenapyr	0.000	2.047	2.119	2.000	3.4	< 30	102.3	105.9	50 - 150		
Chlorpyrifos	0.000	0.413	0.473	0.400	13.6	< 30	103.3	118.4	50 - 150		
Glofentazine	0.016	0.438	0.430	0.400	1.7	< 30	105.4	103.5	50 - 150		
Cyfluthrin	0.000	3.845	3.370	2.000	13.2	< 30	192.3	168.5	30 - 150	Q1	
Cypermethrin	0.003	1.802	1.824	2.000	1.2	< 30	89.9	91.0	50 - 150		
Daminozide	0.126	1.905	1.694	2.000	11.8	< 30	89.0	78.4	30 - 150		
Diazinon	0.007	0.428	0.436	0.400	2.0	< 30	105.2	107.3	50 - 150		
Dichlorvos	0.040	1.933	1.846	2.000	4.6	< 30	94.7	90.3	50 - 150		
Dimethoat	0.007	0.365	0.332	0.400	9.4	< 30	89.6	81.3	50 - 150		
Ethoprophos	0.000	0.320	0.275	0.400	15.0	< 30	79.9	68.7	50 - 150		
Etofenprox	0.000	0.872	1.347	0.800	42.8	< 30	109.0	168.4	50 - 150	R,Q1	
Etoxazol	0.002	0.398	0.428	0.400	7.4	< 30	98.8	106.5	50 - 150		
Fenoxycarb	0.000	0.397	0.373	0.400	6.3	< 30	99.2	93.1	50 - 150		
Fenpyroximat	0.000	0.763	0.781	0.800	2.3	< 30	95.4	97.7	50 - 150		
Fipronil	0.008	1.036	0.837	0.800	21.3	< 30	128.4	103.6	50 - 150		
Fonicamid	0.006	0.950	0.867	1.000	9.2	< 30	94.4	86.1	50 - 150		
Fludioxonil	0.000	0.509	0.707	0.800	32.7	< 30	63.6	88.4	50 - 150		
Hexythiazox	0.000	1.675	1.662	1.000	0.8	< 30	167.5	166.2	50 - 150	Q1	
Imazalil	0.005	0.314	0.303	0.400	3.3	< 30	77.1	74.5	50 - 150		
Imidacloprid	0.002	0.771	0.716	0.800	7.3	< 30	96.1	89.3	50 - 150		
Kresoxim-Methyl	0.000	0.698	0.700	0.800	0.3	< 30	87.3	87.5	50 - 150		
Malathion	0.006	0.431	0.406	0.400	6.0	< 30	106.3	100.0	50 - 150		
Metaxaryl	0.008	0.375	0.367	0.400	2.2	< 30	91.7	89.7	50 - 150		
Methiocarb	0.049	0.375	0.310	0.400	18.8	< 30	81.4	65.3	50 - 150		
Methomyl	0.000	0.673	0.722	0.800	7.1	< 30	84.1	90.3	50 - 150		
MKG 264	0.000	0.393	0.394	0.400	0.3	< 30	98.3	98.5	50 - 150		
Myclobutanil	0.016	0.355	0.383	0.400	7.5	< 30	84.9	91.8	50 - 150		
Naled	0.029	1.020	0.933	1.000	8.8	< 30	99.1	90.4	50 - 150		
Oxaryl	0.000	1.890	1.648	2.000	13.7	< 30	94.5	82.4	50 - 150		
Paclobutrazol	0.030	0.784	0.729	0.800	7.3	< 30	94.3	87.4	50 - 150		
Parathion Methyl	0.000	0.980	0.783	0.800	22.4	< 30	122.4	97.8	30 - 150		
Permethrin	0.015	0.378	0.378	0.400	0.2	< 30	90.7	90.8	50 - 150		
Phosmet	0.007	0.393	0.334	0.400	16.2	< 30	96.5	81.8	50 - 150		
Piperonyl butoxide	0.077	2.068	2.079	2.000	0.5	< 30	99.6	100.1	50 - 150		
Prallethrin	0.064	0.564	0.616	0.400	8.8	< 30	125.1	138.1	50 - 150		
Propiconazole	0.005	0.839	0.807	0.800	3.9	< 30	104.3	100.3	50 - 150		
Propoxur	0.013	0.384	0.325	0.400	16.6	< 30	92.7	78.0	50 - 150		
Pyrethrins	0.003	0.378	0.375	0.413	0.9	< 30	90.9	90.0	50 - 150		
Pyridaben	0.004	0.260	0.258	0.400	0.7	< 30	63.9	63.4	50 - 150		
Spinosad	0.000	0.413	0.418	0.388	1.3	< 30	106.5	107.8	50 - 150		
Spiromesifen	0.037	0.398	0.391	0.400	1.8	< 30	90.5	88.7	50 - 150		
Spirotetramat	0.007	0.354	0.336	0.400	5.3	< 30	86.7	82.1	50 - 150		
Spiroxamine	0.018	0.731	0.713	0.800	2.5	< 30	89.0	86.8	50 - 150		
Tebuconazol	0.000	0.698	0.695	0.800	0.4	< 30	87.3	86.9	50 - 150		
Thiacloprid	0.000	0.374	0.343	0.400	8.5	< 30	93.4	85.8	50 - 150		
Thiamethoxam	0.000	0.372	0.337	0.400	10.0	< 30	93.1	84.3	50 - 150		
Trifloxystrobin	0.000	0.457	0.436	0.400	3.0	< 30	114.1	109.0	50 - 150		

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503-254-1794

Report Number: 20-010425/D03.R00
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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: 2008087/2008111**

Laboratory Control Sample

Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDV-A	0.196	0.2	%	98.0	85.0 - 115	Acceptable	
CBDV	0.203	0.2	%	102	85.0 - 115	Acceptable	
CBD-A	0.199	0.2	%	99.6	85.0 - 115	Acceptable	
CBG-A	0.191	0.2	%	95.3	85.0 - 115	Acceptable	
CBG	0.199	0.2	%	99.6	85.0 - 115	Acceptable	
CBD	0.219	0.2	%	110	85.0 - 115	Acceptable	
THCV	0.196	0.2	%	98.0	85.0 - 115	Acceptable	
THCVA	0.178	0.2	%	88.9	85.0 - 115	Acceptable	
CBN	0.199	0.2	%	99.3	85.0 - 115	Acceptable	
THC	0.187	0.2	%	93.5	85.0 - 115	Acceptable	
D8THC	0.196	0.2	%	97.9	85.0 - 115	Acceptable	
CBL	0.183	0.2	%	91.6	85.0 - 115	Acceptable	
CBC	0.201	0.2	%	101	85.0 - 115	Acceptable	
THCA	0.180	0.2	%	89.9	85.0 - 115	Acceptable	
CBCA	0.183	0.2	%	91.6	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



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Report Number: 20-010425/D03.R00
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Received: 09/28/20 10:43

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: 2008087/2008111							
Sample Duplicate		Sample ID: 20-010325-0001							
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes	
CBDV-A	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable		
CBDV	0.147	0.147	0.1	%	0.188	< 20	Acceptable		
CBD-A	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable		
CBG-A	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable		
CBG	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable		
CBD	36.4	36.5	0.1	%	0.357	< 20	Acceptable		
THCV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable		
THCVA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable		
CBN	0.210	0.210	0.1	%	0.0903	< 20	Acceptable		
THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable		
D8THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable		
CBL	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable		
CBC	0.294	0.294	0.1	%	0.131	< 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

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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.