



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



Report Number: 20-014125/D03.R00
Report Date: 12/31/2020
ORELAP#: OR100028
Purchase Order:
Received: 12/23/20 11:22

Customer: Blissful Plant Co
Product identity: BP_RELIEF Lot#12152003
Client/Metric ID: .
Laboratory ID: 20-014125-0003

Sample Date: 12/21/20

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status	
CBC per 1g	2.67		mg/1g		CBD-Total per 1g 57.2 mg/1g
CBD per 1g	56.2		mg/1g		
CBD-A per 1g	1.13		mg/1g		THC-Total per 1g 2.57 mg/1g
CBDV per 1g	0.407		mg/1g		
CBG per 1g	1.26		mg/1g		(Reported in milligrams per serving)
CBL per 1g	0.0439		mg/1g		
Δ9-THC per 1g	2.57		mg/1g		

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Terpenes:

Analyte	Percent by weight	Percent of Total	Analyte	Percent by weight	Percent of Total
(R)-(+)-Limonene†	1.99	81.56%	β-Caryophyllene†	0.209	8.57%
Sabinene†	0.0619	2.54%	α-Bisabolol†	0.0598	2.45%
α-pinene†	0.0586	2.40%	d-3-Carene†	0.0353	1.45%
(-)-Guaiol†	0.0216	0.89%	Total Terpenes†	2.44	100.00%

Metals:

Less than LOQ for all analytes.



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Received: 12/23/20 11:22

Customer: Blissful Plant Co

Product identity: BP_RELIEF Lot#12152003
Client/Metric ID: .
Sample Date: 12/21/20
Laboratory ID: 20-014125-0003
Relinquished by: FEDEX
Temp: 18.8 °C
Serving Size #1: 1 g

Sample Results

Potency per 1g		Method J AOAC 2015 V98-6 (mod)		Batch: 2010828	Analyze: 12/29/20 11:47:00 A
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	2.67		mg/1g	0.0332	
CBC-A per 1g	< LOQ		mg/1g	0.0332	
CBC-Total per 1g	2.67		mg/1g	0.0623	
CBD per 1g	56.2		mg/1g	0.332	
CBD-A per 1g	1.13		mg/1g	0.0332	
CBD-Total per 1g	57.2		mg/1g	0.361	
CBDV per 1g	0.407		mg/1g	0.0332	
CBDV-A per 1g	< LOQ		mg/1g	0.0332	
CBDV-Total per 1g	0.407		mg/1g	0.0619	
CBG per 1g	1.26		mg/1g	0.0332	
CBG-A per 1g	< LOQ		mg/1g	0.0332	
CBG-Total per 1g	1.26		mg/1g	0.0619	
CBL per 1g	0.0439		mg/1g	0.0332	
CBN per 1g	< LOQ		mg/1g	0.0332	
Δ8-THC per 1g	< LOQ		mg/1g	0.0332	
Δ9-THC per 1g	2.57		mg/1g	0.0332	
THC-A per 1g	< LOQ		mg/1g	0.0332	
THC-Total per 1g	2.57		mg/1g	0.0623	
THCV per 1g	< LOQ		mg/1g	0.0332	
THCV-A per 1g	< LOQ		mg/1g	0.0332	
THCV-Total per 1g	< LOQ		mg/1g	0.0623	
Total Cannabinoids 1g†	64.3		mg/1g		



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Solvents		Method EPA5021A				Units µg/g	Batch 2010741	Analyze 12/28/20 07:41 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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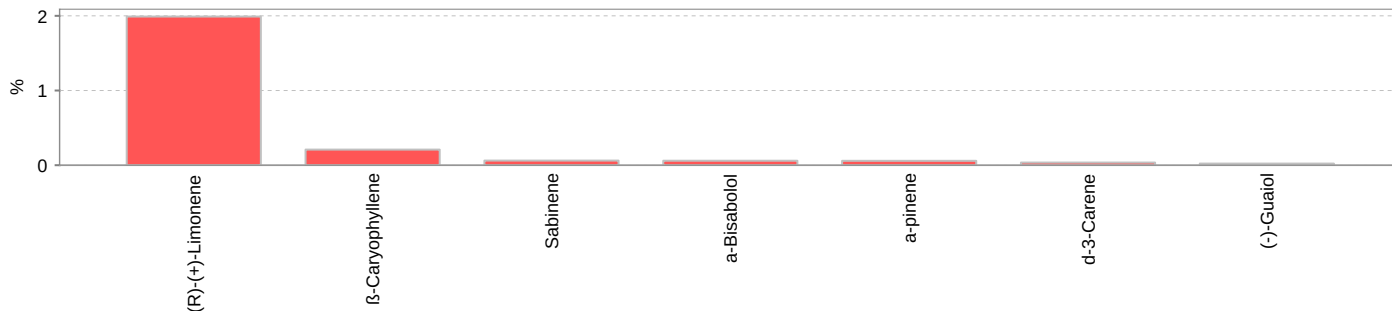


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Pesticides					Method AOAC 2007.01 & EN 15662 (mod)	Units mg/kg	Batch 2010817	Analyze 12/30/20 09:36 AM				
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes	
Abamectin	< LOQ	0.50	0.250	pass		Acephate	< LOQ	0.40	0.250	pass		
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								



Terpenes				Method J AOAC 2015 V98-6	Units %	Batch 2010660	Analyze 12/28/20 08:15 AM		
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
(R)-(+)-Limonene [†]	1.99	0.020	81.56%		β-Caryophyllene [†]	0.209	0.020	8.57%	
Sabinene [†]	0.0619	0.020	2.54%		α-Bisabolol [†]	0.0598	0.020	2.45%	
α-pinene [†]	0.0586	0.020	2.40%		d-3-Carene [†]	0.0353	0.020	1.45%	
(-)-Guaiaol [†]	0.0216	0.020	0.89%		(-)-α-Terpineol [†]	< LOQ	0.020	0.00%	
(-)-caryophyllene oxide [†]	< LOQ	0.020	0.00%		(-)-Isopulegol [†]	< LOQ	0.020	0.00%	
(-)-β-Pinene [†]	< LOQ	0.020	0.00%		(+)-Borneol [†]	< LOQ	0.020	0.00%	
(+)-Cedrol [†]	< LOQ	0.020	0.00%		(+)-fenchol [†]	< LOQ	0.020	0.00%	
(+)-Pulegone [†]	< LOQ	0.020	0.00%		(±)-Camphor [†]	< LOQ	0.020	0.00%	
(±)-cis-Nerolidol [†]	< LOQ	0.020	0.00%		(±)-fenchone [†]	< LOQ	0.020	0.00%	
(±)-trans-Nerolidol [†]	< LOQ	0.020	0.00%		α-cedrene [†]	< LOQ	0.020	0.00%	
α-phellandrene [†]	< LOQ	0.020	0.00%		α-Terpinene [†]	< LOQ	0.020	0.00%	
Camphene [†]	< LOQ	0.020	0.00%		cis-β-Ocimene [†]	< LOQ	0.006	0.00%	
Eucalyptol [†]	< LOQ	0.020	0.00%		farnesene [†]	< LOQ	0.020	0.00%	
gamma-Terpinene [†]	< LOQ	0.020	0.00%		Geraniol [†]	< LOQ	0.020	0.00%	
Geranyl acetate [†]	< LOQ	0.020	0.00%		Humulene [†]	< LOQ	0.020	0.00%	
Isoborneol [†]	< LOQ	0.020	0.00%		Linalool [†]	< LOQ	0.020	0.00%	
Menthol [†]	< LOQ	0.020	0.00%		nerol [†]	< LOQ	0.020	0.00%	
p-Cymene [†]	< LOQ	0.020	0.00%		Sabinene hydrate [†]	< LOQ	0.020	0.00%	
β-Myrcene [†]	< LOQ	0.020	0.00%		Terpinolene [†]	< LOQ	0.020	0.00%	
trans-β-Ocimene [†]	< LOQ	0.013	0.00%		valencene [†]	< LOQ	0.020	0.00%	
Total Terpenes	2.44								



Metals									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes	
Arsenic	< LOQ		mg/kg	0.0413	2010816	12/29/20	AOAC 2013.06 (mod.)	X	
Cadmium	< LOQ		mg/kg	0.0413	2010816	12/29/20	AOAC 2013.06 (mod.)	X	
Lead	< LOQ		mg/kg	0.0413	2010816	12/29/20	AOAC 2013.06 (mod.)	X	
Mercury	< LOQ		mg/kg	0.0207	2010816	12/29/20	AOAC 2013.06 (mod.)	X	



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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

g = Gram

µg/g = Microgram per gram

mg/kg = Milligram per kilogram = parts per million (ppm)

mg/1g = Milligram per 1g

% = Percentage of sample

% wt = µg/g divided by 10,000

Glossary of Qualifiers

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner
General Manager



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20-014125



Hemp Products
Chain of Custody Record
Revision: 0.00 Control#: CF002 Rev: 02/27/2020 Eff: 02/27/2020
ORELAP ID: OR100028

Company: The Blissful Plant Co. LLC Contact: P.Peters Street: 4949 S. Macadam Ave., Suite 108B City: Portland State: OR Zip: 97239 Email Results: pam@agamiholdings.com Ph: (800) 732-0472 Fx Results: () Billing (if different): Please Email			Analysis Requested						PO Number: N/A Project Number: BLISSFUL PLANT 12-15-2020 Project Name: BLISSFUL PLANT 12-15-2020 Custom Reporting: N/A Report to State - ☐ METRC or ☐ Other: N/A Turn-around time: ☒ Standard ☐ Rush * ☐ Priority Rush * *Ask for availability Sampled by: David Jacobs					
Lab ID	Client Sample Identification	Date	POTENCY - STANDARD (H0010)	TERPENES (H0030)	METALS by CP/MS (H0013)	PESTICIDES-OR Compliance (P2120)	RESIDUAL SOLVENTS, USP (H0021)				Sample Type	Report units (potency)	Serving size (edibles)	Comments/Metrc ID
1	BP_DREAM Lot #12152001	12/21/20	✓	✓	✓	✓	✓				T	mg/g		} tincture
2	BP_RELAX Lot #12152002	12/21/20	✓	✓	✓	✓	✓				T	mg/g		
3	BP_RELIEF Lot #12152003	12/21/20	✓	✓	✓	✓	✓				T	mg/g		
4	BP_IMMUNE Lot #12152004	12/21/20	✓	✓	✓	✓	✓				T	mg/g		
Relinquished By: [Signature]			Date: 12/23/20	Time: 3:00 PM	Received by: JB			Date: 12/23/20	Time: 11:22 AM	Lab Use Only: ☒ Shipped Via: FedEx or ☐ Client drop off Evidence of cooling: ☐ yes ☒ No - Temp (°C): 18.8 Sample in good condition: ☒ yes ☐ No ☐ Cash ☐ Check ☐ CC ☐ Net: Prelog storage: _____				

† - Sample type codes: Topicals (T); Edibles (E); Tincture (T); Bath Salts (S); Beverages (B)
Report unit options: %; mg/g; mg/serving

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P: (503) 254-1794 | Fax: (503) 254-1452
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www.columbialaboratories.com



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Columbia Laboratories
Sample Receipt Form

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

Job Number: 20-014125 Search Name: _____

Package/Cooler opened on (if different than received date/time) Date: 12/23 Time: 11:22

Received By (Initials): JB

1) Were custody seals on outside of the package/cooler? YES NO NA
If YES, how many and where? _____

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): 7724 4529 2104

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?

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) 18.8 °C

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

Explain any discrepancies: _____

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Terpenes Quality Control Results

Method Reference: EPA 5035				Batch ID: 2010660					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	LCS	Units	LCS % Rec	Limits	Notes
a-pinene	<LOQ	< 200		587	500	µg/g	117%	70 - 130	
Camphene	<LOQ	< 200		585	500	µg/g	117%	70 - 130	
Sabinene	<LOQ	< 200		562	500	µg/g	112%	70 - 130	
b-Pinene	<LOQ	< 200		650	500	µg/g	130%	70 - 130	
b-Myrcene	<LOQ	< 200		449	500	µg/g	90%	70 - 130	
a-phellandrene	<LOQ	< 200		473	500	µg/g	95%	70 - 130	
d-3-Carene	<LOQ	< 200		466	500	µg/g	93%	70 - 130	
a-Terpinene	<LOQ	< 200		457	500	µg/g	91%	70 - 130	
p-Cymene	<LOQ	< 200		468	500	µg/g	94%	70 - 130	
D-Limonene	<LOQ	< 200		504	500	µg/g	101%	70 - 130	
Eucalyptol	<LOQ	< 200		592	500	µg/g	118%	70 - 130	
b-cis-Ocimene	<LOQ	< 66.7		144	167	µg/g	86%	70 - 130	
b-trans-Ocimene	<LOQ	< 133		293	333	µg/g	88%	70 - 130	
g-Terpinene	<LOQ	< 200		490	500	µg/g	98%	70 - 130	
Sabinene_Hydrate	<LOQ	< 200		517	500	µg/g	103%	70 - 130	
Terpinolene	<LOQ	< 200		443	500	µg/g	89%	70 - 130	
D-Fenchone	<LOQ	< 200		574	500	µg/g	115%	70 - 130	
Linalool	<LOQ	< 200		441	500	µg/g	88%	70 - 130	
Fenchol	<LOQ	< 200		559	500	µg/g	112%	70 - 130	
Camphor	<LOQ	< 200		575	500	µg/g	115%	70 - 130	
Isopulego	<LOQ	< 200		486	500	µg/g	97%	70 - 130	
Isoborneol	<LOQ	< 200		606	500	µg/g	121%	70 - 130	
Borneol	<LOQ	< 200		558	500	µg/g	112%	70 - 130	
DL-Menthol	<LOQ	< 200		562	500	µg/g	112%	70 - 130	
Terpineol	<LOQ	< 200		453	500	µg/g	91%	70 - 130	
Nerol	<LOQ	< 200		455	500	µg/g	91%	70 - 130	
Pulegone	<LOQ	< 200		461	500	µg/g	92%	70 - 130	
Gereniol	<LOQ	< 200		633	500	µg/g	127%	70 - 130	
Geranyl_Acetate	<LOQ	< 200		452	500	µg/g	90%	70 - 130	
a-Cedrene	<LOQ	< 200		559	500	µg/g	112%	70 - 130	
b-Caryophyllene	<LOQ	< 200		575	500	µg/g	115%	70 - 130	
a-Humulene	<LOQ	< 200		582	500	µg/g	116%	70 - 130	
Valenene	<LOQ	< 200		519	500	µg/g	104%	70 - 130	
cis-Nerolidol	<LOQ	< 200		575	500	µg/g	115%	70 - 130	
a-Farnesene	<LOQ	< 200		544	500	µg/g	109%	70 - 130	
trans-Nerolidol	<LOQ	< 200		491	500	µg/g	98%	70 - 130	
Caryophyllene_Oxide	<LOQ	< 200		554	500	µg/g	111%	70 - 130	
Guaiol	<LOQ	< 200		532	500	µg/g	106%	70 - 130	
Cedrol	<LOQ	< 200		568	500	µg/g	114%	70 - 130	
a-Bisabolol	<LOQ	< 200		553	500	µg/g	111%	70 - 130	

Definitions

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

Formulas

$$\text{LCS Percent Recovery} = \frac{\text{LCS Result } \mu\text{g/g}}{\text{Spike } \mu\text{g/g}} * 100\%$$



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Received: 12/23/20 11:22

Terpenes Quality Control Results

Method Reference: EPA 5035			Batch ID: 2010660				
Sample/Sample Duplicate			Sample ID: 20-014071-0001				
Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	1620	1590	200	µg/g	2%	< 20	
Camphene	<LOQ	<LOQ	200	µg/g	0%	< 20	
Sabinene	<LOQ	<LOQ	200	µg/g	0%	< 20	
b-Pinene	1280	1280	200	µg/g	0%	< 20	
b-Myrcene	<LOQ	<LOQ	200	µg/g	0%	< 20	
a-phellandrene	<LOQ	<LOQ	200	µg/g	0%	< 20	
d-3-Carene	<LOQ	<LOQ	200	µg/g	0%	< 20	
a-Terpinene	<LOQ	<LOQ	200	µg/g	0%	< 20	
p-Cymene	2680	2690	200	µg/g	0%	< 20	
D-Limonene	4350	4370	200	µg/g	0%	< 20	
Eucalyptol	<LOQ	<LOQ	200	µg/g	0%	< 20	
b-cis-Öcimene	<LOQ	<LOQ	66.7	µg/g	0%	< 20	
b-trans-Öcimene	<LOQ	<LOQ	133	µg/g	0%	< 20	
g-Terpinene	<LOQ	<LOQ	200	µg/g	0%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	200	µg/g	0%	< 20	
Terpinolene	<LOQ	<LOQ	200	µg/g	0%	< 20	
D-Fenchone	<LOQ	<LOQ	200	µg/g	0%	< 20	
Linalool	2950	2980	200	µg/g	1%	< 20	
Fenchol	2120	2130	200	µg/g	0%	< 20	
Camphor	<LOQ	<LOQ	200	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	200	µg/g	0%	< 20	
Isoborneol	280	281	200	µg/g	0%	< 20	
Borneol	245	238	200	µg/g	3%	< 20	
DL-Menthol	271	272	200	µg/g	0%	< 20	
Terpineol	2720	2710	200	µg/g	0%	< 20	
Nerol	<LOQ	<LOQ	200	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	200	µg/g	0%	< 20	
Geraniol	<LOQ	<LOQ	200	µg/g	0%	< 20	
Geranyl_Acetate	436	438	200	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	200	µg/g	0%	< 20	
b-Caryophyllene	23400	23400	200	µg/g	0%	< 20	
a-Humulene	5980	5910	200	µg/g	1%	< 20	
Valenene	<LOQ	<LOQ	200	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	200	µg/g	0%	< 20	
a-Farnesene	<LOQ	<LOQ	200	µg/g	0%	< 20	
trans-Nerolidol	<LOQ	<LOQ	200	µg/g	0%	< 20	
Caryophyllene_Oxide	904	882	200	µg/g	2%	< 20	
Guaiol	<LOQ	<LOQ	200	µg/g	0%	< 20	
Cedrol	<LOQ	<LOQ	200	µg/g	0%	< 20	
a-Bisabolol	<LOQ	<LOQ	200	µg/g	0%	< 20	

Definitions

RPD Relative Percent Difference

Formulas

Relative Percent Difference

$$= \frac{[\text{Sample Result } \mu\text{g/g} - \text{Duplicate Result } \mu\text{g/g}]}{\frac{(\text{Sample Results } \mu\text{g/g} + \text{Duplicate Result } \mu\text{g/g})}{2}} * 100\%$$



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



Report Number: 20-014125/D03.R00
Report Date: 12/31/2020
ORELAP#: OR100028
Purchase Order:
Received: 12/23/20 11:22

Laboratory Quality Control Results										
Residual Solvents				Batch ID: 2010741						
Method Blank				Laboratory Control Sample						
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes	
Propane	ND	< 200		533	595	µg/g	89.6	70 - 130		
Isobutane	ND	< 200		710	761	µg/g	93.3	70 - 130		
Butane	ND	< 200		717	761	µg/g	94.2	70 - 130		
2,2-Dimethylpropane	ND	< 200		836	955	µg/g	87.5	70 - 130		
Methanol	ND	< 200		1510	1610	µg/g	93.8	70 - 130		
Ethylene Oxide	ND	< 30		50.1	58.3	µg/g	85.9	70 - 130		
2-Methylbutane	ND	< 200		1210	1600	µg/g	75.6	70 - 130		
Pentane	ND	< 200		1250	1610	µg/g	77.6	70 - 130		
Ethanol	ND	< 200		1470	1610	µg/g	91.3	70 - 130		
Ethyl Ether	ND	< 200		1470	1610	µg/g	91.3	70 - 130		
2,2-Dimethylbutane	ND	< 30		152	168	µg/g	90.5	70 - 130		
Acetone	ND	< 200		1480	1610	µg/g	91.9	70 - 130		
2-Propanol	ND	< 200		1540	1600	µg/g	96.3	70 - 130		
Ethyl Formate	ND	< 500		1430	1710	µg/g	83.6	70 - 130		
Acetonitrile	ND	< 100		431	486	µg/g	88.7	70 - 130		
Methyl Acetate	ND	< 500		1390	1610	µg/g	86.3	70 - 130		
2,3-Dimethylbutane	ND	< 30		170	162	µg/g	104.9	70 - 130		
Dichloromethane	ND	< 200		461	490	µg/g	94.1	70 - 130		
2-Methylpentane	ND	< 30		142	164	µg/g	86.6	70 - 130		
MTBE	ND	< 500		1420	1620	µg/g	87.7	70 - 130		
3-Methylpentane	ND	< 30		147	166	µg/g	88.6	70 - 130		
Hexane	ND	< 30		152	167	µg/g	91.0	70 - 130		
1-Propanol	ND	< 500		1450	1600	µg/g	90.6	70 - 130		
Methylethylketone	ND	< 500		1420	1610	µg/g	88.2	70 - 130		
Ethyl acetate	ND	< 200		1510	1610	µg/g	93.8	70 - 130		
2-Butanol	ND	< 200		1580	1610	µg/g	98.1	70 - 130		
Tetrahydrofuran	ND	< 100		459	484	µg/g	94.8	70 - 130		
Cyclohexane	ND	< 200		1560	1610	µg/g	96.9	70 - 130		
2-methyl-1-propanol	ND	< 500		1610	1610	µg/g	100.0	70 - 130		
Benzene	ND	< 1		19.7	24.5	µg/g	80.4	70 - 130		
Isopropyl Acetate	ND	< 200		1510	1620	µg/g	93.2	70 - 130		
Heptane	ND	< 200		1430	1610	µg/g	88.8	70 - 130		
1-Butanol	ND	< 500		1550	1600	µg/g	96.9	70 - 130		
Propyl Acetate	ND	< 500		1490	1620	µg/g	92.0	70 - 130		
1,4-Dioxane	ND	< 100		490	484	µg/g	101.2	70 - 130		
2-Ethoxyethanol	ND	< 30		156	186	µg/g	83.9	70 - 130		
Methylisobutylketone	ND	< 500		1330	1610	µg/g	82.6	70 - 130		
3-Methyl-1-butanol	ND	< 500		1390	1610	µg/g	86.3	70 - 130		
Ethylene Glycol	ND	< 200		501	509	µg/g	98.4	70 - 130		
Toluene	ND	< 200		442	492	µg/g	89.8	70 - 130		
Isobutyl Acetate	ND	< 500		1500	1610	µg/g	93.2	70 - 130		
1-Pentanol	ND	< 500		1490	1620	µg/g	92.0	70 - 130		
Butyl Acetate	ND	< 500		1480	1610	µg/g	91.9	70 - 130		
Ethylbenzene	ND	< 200		909	971	µg/g	93.6	70 - 130		
m,p-Xylene	ND	< 200		918	975	µg/g	94.2	70 - 130		
o-Xylene	ND	< 200		900	966	µg/g	93.2	70 - 130		
Cumene	ND	< 30		162	167	µg/g	97.0	70 - 130		
Anisole	ND	< 500		1540	1610	µg/g	95.7	70 - 130		
DMSO	ND	< 500		1510	1650	µg/g	91.5	70 - 130		
1,2-dimethoxyethane	ND	< 50		150	170	µg/g	88.2	70 - 130		
Triethylamine	ND	< 500		1400	1610	µg/g	87.0	70 - 130		
N,N-dimethylformamide	ND	< 150		457	490	µg/g	93.3	70 - 130		
N,N-dimethylacetamide	ND	< 150		402	485	µg/g	82.9	70 - 130		
Pyridine	ND	< 50		158	167	µg/g	94.6	70 - 130		



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



Report Number: 20-014125/D03.R00
Report Date: 12/31/2020
ORELAP#: OR100028
Purchase Order:
Received: 12/23/20 11:22

QC - Sample Duplicate						Sample ID: 20-014125-0001		
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/Fail	Notes
Propane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
MTBE	ND	ND	500	µg/g	0.0	< 20	Acceptable	
3-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
1-Propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Methylethylketone	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Butanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Tetrahydrofuran	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-methyl-1-propanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
1-Butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Propyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,4-Dioxane	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Methylisobutylketone	ND	ND	500	µg/g	0.0	< 20	Acceptable	
3-Methyl-1-butanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Toluene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1-Pentanol	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Butyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Ethylbenzene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
m,p-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
o-Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Cumene	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Anisole	ND	ND	500	µg/g	0.0	< 20	Acceptable	
DMSO	ND	ND	500	µg/g	0.0	< 20	Acceptable	
1,2-dimethoxyethane	ND	ND	50	µg/g	0.0	< 20	Acceptable	
Triethylamine	ND	ND	500	µg/g	0.0	< 20	Acceptable	
N,N-dimethylformamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
N,N-dimethylacetamide	ND	ND	150	µg/g	0.0	< 20	Acceptable	
Pyridine	ND	ND	50	µg/g	0.0	< 20	Acceptable	

Abbreviations

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

Units of Measure:

µg/g - Microgram per gram or ppm



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



Report Number: 20-014125/D03.R00
Report Date: 12/31/2020
ORELAP#: OR100028
Purchase Order:
Received: 12/23/20 11:22

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: 2010817				
Matrix Spike/Matrix Spike Duplicate Recoveries							Sample ID: 20-014125-0001				
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes	
Acephate	0.008	0.804	0.792	1.000	1.5%	< 30	79.5%	78.4%	50 - 150		
Acequinocyl	0.000	4.820	4.510	4.000	6.6%	< 30	120.5%	112.8%	50 - 150		
Acetamiprid	0.000	0.384	0.374	0.400	2.7%	< 30	96.1%	93.5%	50 - 150		
Aldicarb	0.000	0.816	0.635	0.800	25.0%	< 30	102.0%	79.3%	50 - 150		
Abamectin	0.000	1.203	1.256	1.000	4.3%	< 30	120.3%	125.6%	50 - 150		
Azoxystrobin	0.002	0.429	0.391	0.400	9.4%	< 30	106.8%	97.2%	50 - 150		
Bifenazate	0.000	0.397	0.384	0.400	3.2%	< 30	99.2%	96.1%	50 - 150		
Bifenthrin	0.000	0.931	0.950	0.400	2.1%	< 30	232.7%	237.6%	50 - 150	Q1	
Boscalid	0.028	0.751	0.696	0.800	7.8%	< 30	90.4%	83.5%	50 - 150		
Carbaryl	0.000	0.396	0.380	0.400	4.1%	< 30	99.0%	95.0%	50 - 150		
Carbofuran	0.000	0.394	0.348	0.400	12.4%	< 30	98.4%	87.0%	50 - 150		
Chlorantraniliprol	0.000	0.411	0.429	0.400	4.1%	< 30	102.9%	107.2%	50 - 150		
Chlorfenapyr	0.000	2.150	2.033	2.000	5.6%	< 30	107.5%	101.6%	50 - 150		
Chlorpyrifos	0.000	0.496	0.504	0.400	1.6%	< 30	124.0%	126.1%	50 - 150		
Clofentezine	0.000	0.426	0.431	0.400	1.1%	< 30	106.5%	107.7%	50 - 150		
Cyfluthrin	0.127	2.931	2.963	2.000	1.1%	< 30	140.2%	141.8%	30 - 150		
Cypermethrin	0.000	2.408	2.160	2.000	10.8%	< 30	120.4%	108.0%	50 - 150		
Daminozide	0.086	1.413	1.406	2.000	0.5%	< 30	66.3%	66.0%	30 - 150		
Diazinon	0.000	0.431	0.423	0.400	2.0%	< 30	107.8%	105.7%	50 - 150		
Dichlorvos	0.000	1.951	1.867	2.000	4.4%	< 30	97.6%	93.4%	50 - 150		
Dimethoat	0.000	0.380	0.377	0.400	0.7%	< 30	95.0%	94.4%	50 - 150		
Ethoprophos	0.015	0.400	0.412	0.400	3.2%	< 30	96.2%	99.3%	50 - 150		
Etofenprox	0.000	0.743	0.691	0.800	7.2%	< 30	92.9%	86.4%	50 - 150		
Etoxazol	0.016	0.425	0.442	0.400	4.1%	< 30	102.3%	106.5%	50 - 150		
Fenoxycarb	0.000	0.394	0.403	0.400	2.1%	< 30	98.6%	100.7%	50 - 150		
Fenpyroximat	0.014	0.792	0.842	0.800	6.1%	< 30	97.4%	103.5%	50 - 150		
Fipronil	0.000	0.959	0.930	0.800	3.1%	< 30	119.9%	116.3%	50 - 150		
Flonicamid	0.000	0.993	0.995	1.000	0.2%	< 30	99.3%	99.5%	50 - 150		
Fludioxonil	0.000	0.796	0.653	0.800	19.8%	< 30	99.6%	81.6%	50 - 150		
Hexythiazox	0.000	1.294	1.248	1.000	3.6%	< 30	129.4%	124.8%	50 - 150		
Imazalil	0.000	0.408	0.405	0.400	0.8%	< 30	102.0%	101.2%	50 - 150		
Imidacloprid	0.000	0.809	0.832	0.800	2.8%	< 30	101.1%	104.0%	50 - 150		
Kresoxim-Methyl	0.000	0.835	0.772	0.800	7.8%	< 30	104.4%	96.6%	50 - 150		
Malathion	0.000	0.390	0.385	0.400	1.5%	< 30	97.6%	96.1%	50 - 150		
Metaxalyl	0.008	0.247	0.255	0.400	3.3%	< 30	59.8%	61.8%	50 - 150		
Methiocarb	0.000	0.381	0.387	0.400	1.6%	< 30	95.4%	96.9%	50 - 150		
Methomyl	0.000	0.813	0.813	0.800	0.0%	< 30	101.6%	101.6%	50 - 150		
M/GK 264	0.000	0.440	0.440	0.400	0.2%	< 30	109.9%	110.1%	50 - 150		
Myclobutanil	0.006	0.387	0.395	0.400	2.0%	< 30	95.3%	97.2%	50 - 150		
Naled	0.000	0.379	0.381	1.000	0.4%	< 30	37.9%	38.1%	50 - 150	Q1	
Oxamyl	0.000	2.031	1.885	2.000	7.5%	< 30	101.6%	94.3%	50 - 150		
Paclobutrazol	0.000	0.572	0.556	0.800	2.8%	< 30	71.5%	69.5%	50 - 150		
Parathion Methyl	0.000	0.846	0.727	0.800	15.1%	< 30	105.7%	90.9%	30 - 150		
Permethrin	0.000	0.437	0.422	0.400	3.6%	< 30	109.3%	105.4%	50 - 150		
Phosmet	0.000	0.369	0.365	0.400	1.2%	< 30	92.3%	91.2%	50 - 150		
Piperonyl butoxide	0.000	2.164	2.071	2.000	4.4%	< 30	108.2%	103.6%	50 - 150		
Prallethrin	0.000	0.431	0.413	0.400	4.3%	< 30	107.8%	103.2%	50 - 150		
Propiconazole	0.000	0.819	0.813	0.800	0.7%	< 30	102.3%	101.6%	50 - 150		
Propoxur	0.000	0.376	0.368	0.400	2.1%	< 30	94.0%	92.0%	50 - 150		
Pyrethrins	4.784	5.521	5.485	0.413	5.0%	< 30	178.4%	169.6%	50 - 150	Q1	
Pyridaben	0.009	0.471	0.465	0.400	1.4%	< 30	115.6%	113.9%	50 - 150		
Spinosad	0.000	0.402	0.406	0.388	0.8%	< 30	103.7%	104.6%	50 - 150		
Spiromesifen	0.000	0.539	0.458	0.400	16.1%	< 30	134.6%	114.5%	50 - 150		
Spirotetramat	0.000	0.362	0.358	0.400	1.1%	< 30	90.5%	89.5%	50 - 150		
Spiroxamine	0.000	0.766	0.774	0.800	1.1%	< 30	95.7%	96.8%	50 - 150		
Tebuconazol	0.000	0.811	0.782	0.800	3.7%	< 30	101.4%	97.7%	50 - 150		
Thiadoprid	0.000	0.400	0.396	0.400	1.2%	< 30	100.0%	98.9%	50 - 150		
Thiamethoxam	0.000	0.421	0.385	0.400	9.0%	< 30	105.3%	96.2%	50 - 150		
Trifloxystrobin	0.000	0.368	0.381	0.400	3.5%	< 30	92.0%	95.3%	50 - 150		



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



Report Number: 20-014125/D03.R00
Report Date: 12/31/2020
ORELAP#: OR100028
Purchase Order:
Received: 12/23/20 11:22

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: 2010817				
Method Blank		Laboratory Control Sample						
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Acephate	0.003	< 0.200		0.995	1.000	99.5	72.4 - 126	
Acequinocyl	0.000	< 1.000		3.517	4.000	87.9	79.8 - 122	
Acetamiprid	0.000	< 0.100		0.377	0.400	94.4	84.3 - 119	
Aldicarb	0.000	< 0.200		0.721	0.800	90.1	82.9 - 120	
Abamectin	0.000	< 0.288		0.902	1.000	90.2	79.6 - 124	
Azoxystrobin	0.000	< 0.100		0.392	0.400	98.0	79.4 - 127	
Bifenazate	0.000	< 0.100		0.373	0.400	93.2	81.6 - 124	
Bifenthrin	0.000	< 0.100		0.370	0.400	92.4	71.5 - 133	
Boscalid	0.000	< 0.100		0.740	0.800	92.5	74.0 - 131	
Carbaryl	0.000	< 0.100		0.388	0.400	96.9	82.1 - 121	
Carbofuran	0.000	< 0.100		0.381	0.400	95.3	85.1 - 125	
Chlorantraniliprol	0.000	< 0.100		0.387	0.400	96.8	70.6 - 131	
Chlorfenapyr	0.000	< 1.000		1.981	2.000	99.0	71.0 - 132	
Chlorpyrifos	0.001	< 0.100		0.403	0.400	100.7	72.3 - 134	
Clofentezine	0.000	< 0.100		0.386	0.400	96.5	80.1 - 117	
Cyfluthrin	0.077	< 1.000		1.852	2.000	92.6	71.8 - 133	
Cypermethrin	0.000	< 1.000		1.866	2.000	93.3	83.1 - 126	
Daminozide	0.033	< 1.000		1.894	2.000	94.7	74.6 - 124	
Diazinon	0.000	< 0.100		0.391	0.400	97.8	78.9 - 126	
Dichlorvos	0.000	< 0.500		1.897	2.000	94.8	76.1 - 124	
Dimethoat	0.000	< 0.100		0.395	0.400	98.8	82.8 - 119	
Ethoprophos	0.000	< 0.100		0.393	0.400	98.3	69.5 - 129	
Etofenprox	0.000	< 0.100		0.761	0.800	95.1	85.2 - 128	
Etoxazol	0.018	< 0.100		0.382	0.400	95.5	79.7 - 126	
Fenoxycarb	0.000	< 0.100		0.387	0.400	96.9	84.1 - 122	
Fenpyroximat	0.010	< 0.100		0.756	0.800	94.5	82.4 - 126	
Fipronil	0.000	< 0.100		0.807	0.800	100.9	80.6 - 125	
Flonicamid	0.000	< 0.400		1.046	1.000	104.6	80.9 - 119	
Fludioxonil	0.000	< 0.100		0.812	0.800	101.4	73.0 - 136	
Hexythiazox	0.000	< 0.400		0.938	1.000	93.8	82.5 - 125	
Imazalil	0.000	< 0.100		0.409	0.400	102.2	81.4 - 128	
Imidacloprid	0.000	< 0.200		0.831	0.800	103.9	76.9 - 125	
Kresoxim-Methyl	0.000	< 0.100		0.786	0.800	98.2	82.6 - 124	
Malathion	0.003	< 0.100		0.394	0.400	98.4	74.1 - 130	
Metaxalyl	0.000	< 0.100		0.391	0.400	97.7	79.7 - 124	
Methiocarb	0.000	< 0.100		0.274	0.400	68.5	81.0 - 123	Q6
Methomyl	0.000	< 0.200		0.800	0.800	100.0	79.4 - 118	
M/GK 264	0.000	< 0.100		0.391	0.400	97.7	77.2 - 128	
Myclobutanil	0.000	< 0.100		0.409	0.400	102.3	80.6 - 123	
Naled	0.000	< 0.200		0.933	1.000	93.3	80.3 - 126	
Oxamyl	0.000	< 0.400		2.094	2.000	104.7	80.1 - 117	
Paclobutrazol	0.000	< 0.200		0.795	0.800	99.4	81.6 - 126	
Parathion Methyl	0.097	< 0.200		0.924	0.800	115.5	72.5 - 135	
Permethrin	0.000	< 0.100		0.404	0.400	101.1	75.0 - 139	
Phosmet	0.000	< 0.100		0.398	0.400	99.6	82.0 - 122	
Piperonyl butoxide	0.040	< 1.000		1.823	2.000	91.2	81.3 - 137	
Prallethrin	0.000	< 0.200		0.372	0.400	93.0	81.3 - 127	
Propiconazole	0.000	< 0.200		0.795	0.800	99.4	84.7 - 121	
Propoxur	0.000	< 0.100		0.374	0.400	93.5	84.2 - 121	
Pyrethrins	0.021	< 0.500		0.371	0.413	89.9	76.1 - 141	
Pyridaben	0.000	< 0.100		0.445	0.400	111.2	79.2 - 147	
Spinosad	0.000	< 0.100		0.411	0.388	105.9	88.4 - 127	
Spiromesifen	0.000	< 0.100		0.385	0.400	96.3	79.9 - 127	
Spirotetramat	0.000	< 0.100		0.387	0.400	96.8	81.1 - 121	
Spiroxamine	0.000	< 0.100		0.774	0.800	96.8	78.4 - 133	
Tebuconazol	0.000	< 0.200		0.791	0.800	98.8	83.1 - 122	
Thiadoprid	0.000	< 0.100		0.407	0.400	101.8	84.3 - 120	
Thiamethoxam	0.000	< 0.100		0.400	0.400	99.9	80.1 - 121	
Trifloxystrobin	0.000	< 0.100		0.385	0.400	96.3	81.4 - 125	



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



Report Number: 20-014125/D03.R00
Report Date: 12/31/2020
ORELAP#: OR100028
Purchase Order:
Received: 12/23/20 11:22

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: 2010828				
Laboratory Control Sample								
Analyte	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDV-A	0.00963	0.01	%	96.3	85.0	- 115	Acceptable	
CBDV	0.0101	0.01	%	101	85.0	- 115	Acceptable	
CBD-A	0.0100	0.01	%	100	85.0	- 115	Acceptable	
CBG-A	0.00948	0.01	%	94.8	85.0	- 115	Acceptable	
CBG	0.00966	0.01	%	96.6	85.0	- 115	Acceptable	
CBD	0.00978	0.01	%	97.8	85.0	- 115	Acceptable	
THCV	0.00976	0.01	%	97.6	85.0	- 115	Acceptable	
THCVA	0.00916	0.01	%	91.6	85.0	- 115	Acceptable	
CBN	0.0103	0.01	%	103	85.0	- 115	Acceptable	
THC	0.0104	0.01	%	104	85.0	- 115	Acceptable	
D8THC	0.00957	0.01	%	95.7	85.0	- 115	Acceptable	
CBL	0.00963	0.01	%	96.3	85.0	- 115	Acceptable	
CBC	0.00987	0.01	%	98.7	85.0	- 115	Acceptable	
THCA	0.0101	0.01	%	101	85.0	- 115	Acceptable	
CBCA	0.00940	0.01	%	94.0	85.0	- 115	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes	
CBDV-A	<LOQ	0.003	%	< 0.003	Acceptable		
CBDV	<LOQ	0.003	%	< 0.003	Acceptable		
CBD-A	<LOQ	0.003	%	< 0.003	Acceptable		
CBG-A	<LOQ	0.003	%	< 0.003	Acceptable		
CBG	<LOQ	0.003	%	< 0.003	Acceptable		
CBD	<LOQ	0.003	%	< 0.003	Acceptable		
THCV	<LOQ	0.003	%	< 0.003	Acceptable		
THCVA	<LOQ	0.003	%	< 0.003	Acceptable		
CBN	<LOQ	0.003	%	< 0.003	Acceptable		
THC	<LOQ	0.003	%	< 0.003	Acceptable		
D8THC	<LOQ	0.003	%	< 0.003	Acceptable		
CBL	<LOQ	0.003	%	< 0.003	Acceptable		
CBC	<LOQ	0.003	%	< 0.003	Acceptable		
THCA	<LOQ	0.003	%	< 0.003	Acceptable		
CBCA	<LOQ	0.003	%	< 0.003	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: 20-014125/D03.R00
Report Date: 12/31/2020
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Received: 12/23/20 11:22

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: 2010828				
Sample Duplicate				Sample ID: 20-014077-0004				
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	0.00900	0.00890	0.003	%	1.15	< 20	Acceptable	
CBD-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0133	0.0133	0.003	%	0.162	< 20	Acceptable	
CBD	0.351	0.350	0.003	%	0.0491	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	0.0172	0.0173	0.003	%	0.610	< 20	Acceptable	
THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
D8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	0.0446	0.0447	0.003	%	0.233	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.003	%	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.