



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



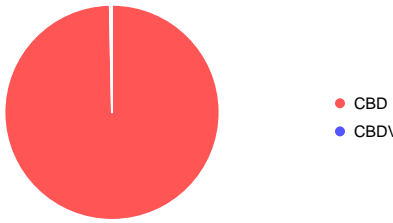
Report Number: 20-007221/D04.R00
Report Date: 07/20/2020
ORELAP#: OR100028
Purchase Order:
Received: 07/13/20 10:33

Customer: Juniper Biolabs
Product identity: JB-7-10-2020_ISO
Client/Metric ID: .
Laboratory ID: 20-007221-0001

Sample Date: 07/10/20 09:00

Summary

Potency:

Analyte	Result (%)		
CBD	> 98.0		CBD-Total > 98.0%
CBDV†	0.333		THC-Total <LOQ (Reported in percent of total sample)

Residual Solvents:

Analyte	Result (µg/g)	Limits (µg/g)	Status
n-Heptane	347	5000	pass

Pesticides:

All analytes passing and less than LOQ.

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.



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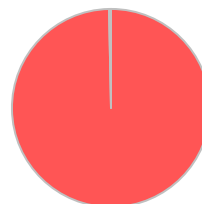
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Customer: Juniper Biolabs
16855 Reed Rd.
La Pine Oregon 97739
United States
Product identity: JB-7-10-2020_ISO
Client/Metric ID: .
Sample Date: 07/10/20 09:00
Laboratory ID: 20-007221-0001
Relinquished by: UPS
Temp: 20.2 °C

Sample Results

Potency Method J AOAC 2015 V98-6 (mod) Batch: 2005893 Analyze: 7/16/20 4:09:00 PM

Analyte	As Received	Dry weight	LOQ	Notes
CBC	< LOQ		0.0864	
CBC-A†	< LOQ		0.0864	
CBC-Total†	< LOQ		0.162	
CBD	> 98.0		0.864	
CBD-A	< LOQ		0.0864	
CBD-Total	> 98.0		0.940	
CBDV†	0.333		0.0864	
CBDV-A†	< LOQ		0.0864	
CBDV-Total†	0.333		0.161	
CBG†	< LOQ		0.0864	
CBG-A†	< LOQ		0.0864	
CBG-Total	< LOQ		0.161	
CBL†	< LOQ		0.0864	
CBN	< LOQ		0.0864	
Δ8-THC†	< LOQ		0.0864	
Δ9-THC	< LOQ		0.0864	
THC-A	< LOQ		0.0864	
THC-Total	< LOQ		0.162	
THCV†	< LOQ		0.0864	
THCV-A†	< LOQ		0.0864	
THCV-Total†	< LOQ		0.161	
Total Cannabinoids†	> 98.0			



● CBD
● CBDV

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
E.coli	< LOQ		cfu/g	10	2005724	07/15/20	AOAC 991.14 (Petrifilm)	X
Total Coliforms	< LOQ		cfu/g	10	2005724	07/15/20	AOAC 991.14 (Petrifilm)	X
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2005725	07/15/20	AOAC 2014.05 (RAPID)	X
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2005725	07/15/20	AOAC 2014.05 (RAPID)	X



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Solvents						Method EPA5021A	Units µg/g	Batch 2005830	Analyze 07/16/20 11:13 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	347	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 2005804 Analyze 07/15/20 01:49 PM										
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status
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	0.0387	2005872	07/16/20	AOAC 2013.06 (mod.)	X		
Cadmium	< LOQ		mg/kg	0.0387	2005872	07/16/20	AOAC 2013.06 (mod.)	X		
Lead	< LOQ		mg/kg	0.0387	2005872	07/16/20	AOAC 2013.06 (mod.)	X		
Mercury	< LOQ		mg/kg	0.0194	2005872	07/16/20	AOAC 2013.06 (mod.)	X		



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Mycotoxins

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Aflatoxin B1†	< LOQ		µg/kg	5.00	2005839	07/16/20	AOAC 2007.01 & EN 15662	
Aflatoxin B2†	< LOQ		µg/kg	5.00	2005839	07/16/20	AOAC 2007.01 & EN 15662	
Aflatoxin G1†	< LOQ		µg/kg	5.00	2005839	07/16/20	AOAC 2007.01 & EN 15662	
Aflatoxin G2†	< LOQ		µg/kg	5.00	2005839	07/16/20	AOAC 2007.01 & EN 15662	
Deoxynivalenol†	< LOQ		µg/kg	200	2005839	07/16/20	AOAC 2007.01 & EN 15662	
Fumonisin B1†	< LOQ		µg/kg	200	2005839	07/16/20	AOAC 2007.01 & EN 15662	
Fumonisin B2†	< LOQ		µg/kg	200	2005839	07/16/20	AOAC 2007.01 & EN 15662	
HT2-Toxin†	< LOQ		µg/kg	40.0	2005839	07/16/20	AOAC 2007.01 & EN 15662	
Nivalenol†	< LOQ		µg/kg	400	2005839	07/16/20	AOAC 2007.01 & EN 15662	
Ochratoxin A†	< LOQ		µg/kg	5.00	2005839	07/16/20	AOAC 2007.01 & EN 15662	
Ochratoxin B†	< LOQ		µg/kg	2.00	2005839	07/16/20	AOAC 2007.01 & EN 15662	
T2-Toxin†	< LOQ		µg/kg	20.0	2005839	07/16/20	AOAC 2007.01 & EN 15662	
Zearalenone†	< LOQ		µg/kg	200	2005839	07/16/20	AOAC 2007.01 & EN 15662	



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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

cfu/g = Colony forming units per gram

µg/g = Microgram per gram

µg/kg = Micrograms per kilogram = parts per billion (ppb)

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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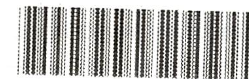
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12423 NE Whitaker Way Portland OR 97230 p.503-254-1794

Cannabis C

JUNIPERBIO 20-007221



Juniper Biolabs

ORELAP ID: OR100028

Company: Juniper Biolabs												Purchase Order Number:					
Contact: Steve Stadlmann												Project Number:					
Address: 16855 Reed Rd., La Pine, OR, 97739												Project Name:					
Email: steves@juniperbiolabs.com												<input type="checkbox"/> Report Instructions:					
Phone: 541-213-1805 Fax:												<input type="checkbox"/> Send to State - METRC					
Processor's / AG-R1058179IHH												<input checked="" type="checkbox"/> Email Final Results:					
License:												<input type="checkbox"/> Fax Final Results					
												<input type="checkbox"/> Cash/Check/CC/Net 30					
												Other:					
Field ID	Date/Time Collected	Pesticides - OR 59 compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Water Activity	Moisture	Terpenes	Micro: Yeast and Mold	Micro: E.Coli and Total Coliform	Heavy Metals	Mycotoxins	Other	Matrix	Weight	Serving size for edibles	Comments/Metric ID
1 JB-7-10-2020_ISO	7/10/20 9:00	X		X	X			X	X	X	X			Isolate	4/0g		
2 JB-6-30-2020_ISO	7/10/20 9:00	X		X	X			X	X	X	X			Isolate	4/0g		

Collected By:	Relinquished By:	Date	Time	Received by:	Date	Time	Lab Use Only:
<input checked="" type="checkbox"/> Standard (5 day)	Steve Stadlmann	7/10/2020	11:00 AM	JMV	7-13-20	10:33	Client Alias:
<input type="checkbox"/> Rush (3-4 day) (1.5x Standard)							Order Number:
<input type="checkbox"/> Priority Rush (2 day) (2x Standard)							Proper Container
							Sample Condition
							Temperature: 20.2
							Shipped Via: UPS
							Evidence of cooling: <input type="checkbox"/> No

SUBMISSION OF SAMPLES WITH TESTING REQUIREMENTS TO PIXIS WILL BE UNDERSTOOD TO BE AN AGREEMENT FOR SERVICES IN ACCORDANCE WITH THE CONDITIONS LISTED ON THE BACK OF THIS FORM

Revision: 2.00 Control#: CF023
Effective 04/29/2019 Revised 04/29/2019

www.pixislabs.com
www.columbiafoodlab.com

Page 1 of 21
JS 7/13/20



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



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Columbia Laboratories
Sample Receipt Form

Revision: 1.01 Document Control: CF015
Revised: 02/25/2020 Effective: 02/25/2020

Job Number: 20-007221

Search Name: Juniper

Package/Cooler Opened on (if different than received date/time) Date: 7/17/20 Time: 10:33

Received By (Initials): JU

- 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 731 312 01 1775

- 6) Was packing material used?
YES NO NA 1006
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 coo?
YES NO NA
- 12) Were correct sample containers used for the tests indicated?
YES NO NA 1/4 7-13-20
- 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)
20.3
- 16) Sample location prior to login: R25 R39 R44 F44 Ambient Shelf Cannabis Table Other: _____

Explain any discrepancies: _____

Page 1 of 1



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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: 2005804				
Method Blank		Laboratory Control Sample						
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Acetate	0.000	< 0.200		1.019	1.000	101.9	69.4 - 126	
Acetaminophen	0.000	< 1.000		3.778	4.000	94.4	79.5 - 122	
Acetamiprid	0.000	< 0.100		0.409	0.400	102.4	82.9 - 117	
Aldicarb	0.000	< 0.200		0.822	0.800	102.8	78.8 - 121	
Abamectin	0.000	< 0.288		1.097	1.000	109.7	72.2 - 129	
Azoxystrobin	0.008	< 0.100		0.399	0.400	99.8	72.9 - 127	
Bifenazate	0.000	< 0.100		0.401	0.400	100.3	77.5 - 120	
Bifenthrin	0.000	< 0.100		0.416	0.400	104.0	77.9 - 123	
Boscalid	0.000	< 0.100		0.712	0.800	89.0	72.3 - 127	
Carbaryl	0.000	< 0.100		0.402	0.400	100.5	80.5 - 119	
Carbofuran	0.000	< 0.100		0.403	0.400	100.6	82.6 - 118	
Chlorantraniliprol	0.000	< 0.100		0.372	0.400	93.0	73.7 - 131	
Chlorfenapyr	0.000	< 1.000		2.061	2.000	103.0	68.6 - 127	
Chlorpyrifos	0.001	< 0.100		0.386	0.400	96.5	73.8 - 118	
Clofentezine	0.000	< 0.100		0.398	0.400	99.5	67.9 - 126	
Cyfluthrin	0.000	< 1.000		2.037	2.000	101.9	72.4 - 132	
Cypermethrin	0.008	< 1.000		2.241	2.000	112.0	80.9 - 122	
Daminozide	0.000	< 1.000		1.935	2.000	96.8	74.0 - 122	
Diazinon	0.000	< 0.100		0.406	0.400	101.4	78.6 - 119	
Dichlorvos	0.000	< 0.500		2.029	2.000	101.4	78.3 - 117	
Dimethoat	0.000	< 0.100		0.408	0.400	102.0	80.6 - 118	
Ethoprophos	0.000	< 0.100		0.398	0.400	99.6	80.8 - 118	
Etofenprox	0.000	< 0.100		0.790	0.800	98.7	82.0 - 117	
Etoxazol	0.001	< 0.100		0.379	0.400	94.7	77.2 - 121	
Fenoxycarb	0.000	< 0.100		0.420	0.400	105.1	82.0 - 118	
Fenpyroximat	0.000	< 0.100		0.789	0.800	98.7	82.6 - 117	
Fipronil	0.017	< 0.100		0.803	0.800	100.3	79.8 - 122	
Flonicamid	0.000	< 0.400		1.075	1.000	107.5	77.7 - 123	
Fludioxonil	0.000	< 0.100		0.803	0.800	100.4	71.4 - 133	
Hexythiazox	0.000	< 0.400		1.032	1.000	103.2	82.2 - 119	
Imazalil	0.000	< 0.100		0.433	0.400	108.2	77.4 - 128	
Imidacloprid	0.000	< 0.200		0.795	0.800	99.4	76.2 - 121	
Kresoxim-Methyl	0.000	< 0.100		0.794	0.800	99.3	75.0 - 126	
Malathion	0.003	< 0.100		0.399	0.400	99.8	77.0 - 121	
Metaxalyl	0.000	< 0.100		0.408	0.400	102.1	75.5 - 123	
Methiocarb	0.009	< 0.100		0.384	0.400	96.0	78.4 - 123	
Methomyl	0.000	< 0.200		0.814	0.800	101.7	73.1 - 125	
MGK 264	0.000	< 0.100		0.416	0.400	104.0	81.3 - 121	
Myclobutanil	0.000	< 0.100		0.385	0.400	96.2	75.8 - 122	
Naled	0.000	< 0.200		0.997	1.000	99.7	74.6 - 124	
Oxamyl	0.000	< 0.400		2.065	2.000	103.2	73.6 - 126	
Paclobutrazol	0.000	< 0.200		0.821	0.800	102.7	78.1 - 120	
Parathion Methyl	0.000	< 0.200		1.051	0.800	131.4	71.3 - 132	
Permethrin	0.012	< 0.100		0.408	0.400	102.0	79.3 - 120	
Phosmet	0.000	< 0.100		0.411	0.400	102.8	78.4 - 121	
Piperonyl butoxide	0.000	< 1.000		2.005	2.000	100.3	83.8 - 122	
Prallethrin	0.001	< 0.200		0.417	0.400	104.3	70.8 - 131	
Propiconazole	0.000	< 0.200		0.816	0.800	102.0	80.2 - 118	
Propoxur	0.000	< 0.100		0.393	0.400	98.3	82.1 - 114	
Pyrethrins	0.065	< 0.500		0.421	0.413	102.0	78.1 - 145	
Pyridaben	0.000	< 0.100		0.540	0.400	135.0	79.7 - 131	Q1
Spinosad	0.000	< 0.100		0.412	0.388	106.1	76.6 - 135	
Spiromesifen	0.000	< 0.100		0.386	0.400	96.4	70.0 - 130	
Spirotetramat	0.000	< 0.100		0.401	0.400	100.2	80.3 - 119	
Spiroxamine	0.000	< 0.100		0.808	0.800	101.1	77.3 - 122	
Tebuconazol	0.000	< 0.200		0.846	0.800	105.8	79.0 - 121	
Thiacloprid	0.000	< 0.100		0.401	0.400	100.2	77.5 - 121	
Thiamethoxam	0.000	< 0.100		0.408	0.400	102.1	70.5 - 130	
Trifloxystrobin	0.002	< 0.100		0.406	0.400	101.5	81.8 - 118	



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



Report Number: 20-007221/D04.R00
Report Date: 07/20/2020
ORELAP#: OR100028
Purchase Order:
Received: 07/13/20 10:33

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: 2005804										
Matrix Spike/Matrix Spike Duplicate Recoveries Sample ID: 20-006965-0001										
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Accephate	0.000	1.056	1.048	1.000	0.8	< 30	105.6	104.8	50 - 150	
Acetaminophen	0.000	4.202	4.780	4.000	12.9	< 30	105.0	119.5	50 - 150	
Acetamiprid	0.000	0.415	0.408	0.400	1.6	< 30	103.7	102.1	50 - 150	
Aldicarb	0.000	0.851	0.824	0.800	3.2	< 30	106.3	103.0	50 - 150	
Abamectin	0.024	1.384	1.369	1.000	1.1	< 30	136.0	134.5	50 - 150	
Azoxystrobin	0.007	0.413	0.424	0.400	2.5	< 30	101.5	104.1	50 - 150	
Bifenazate	0.000	0.434	0.399	0.400	8.4	< 30	108.4	99.7	50 - 150	
Bifenthrin	0.000	0.655	0.650	0.400	0.8	< 30	163.8	162.4	50 - 150	Q1
Boscalid	0.000	0.791	0.805	0.800	1.7	< 30	98.9	100.6	50 - 150	
Carbaryl	0.000	0.416	0.430	0.400	3.3	< 30	104.1	107.6	50 - 150	
Carbofuran	0.000	0.429	0.438	0.400	2.2	< 30	107.2	109.6	50 - 150	
Chlorantraniliprol	0.000	0.392	0.371	0.400	5.5	< 30	98.0	92.7	50 - 150	
Chlorfenapyr	0.000	2.693	2.486	2.000	8.0	< 30	134.6	124.3	50 - 150	
Chlorpyrifos	0.000	0.076	0.071	0.400	6.2	< 30	18.9	17.8	50 - 150	Q
Clofentezine	0.000	0.486	0.481	0.400	0.9	< 30	121.4	120.4	50 - 150	
Cyfluthrin	0.000	3.612	3.621	2.000	0.3	< 30	180.6	181.1	30 - 150	Q1
Cypermethrin	0.000	3.247	3.118	2.000	4.0	< 30	162.4	155.9	50 - 150	Q1
Daminozide	0.000	2.170	2.175	2.000	0.2	< 30	108.5	108.8	30 - 150	
Diazinon	0.000	0.463	0.426	0.400	8.4	< 30	115.8	106.5	50 - 150	
Dichlorvos	0.000	2.112	2.180	2.000	3.2	< 30	105.6	109.0	50 - 150	
Dimethoat	0.000	0.412	0.408	0.400	1.0	< 30	103.1	102.1	50 - 150	
Ethoprophos	0.000	0.409	0.386	0.400	5.8	< 30	102.2	96.4	50 - 150	
Etofenprox	0.000	0.894	0.881	0.800	1.5	< 30	111.7	110.1	50 - 150	
Etoxazol	0.000	0.459	0.454	0.400	1.1	< 30	114.7	113.4	50 - 150	
Fenoxycarb	0.000	0.447	0.451	0.400	0.8	< 30	111.7	112.6	50 - 150	
Fenpyroximat	0.000	0.900	0.912	0.800	1.3	< 30	112.5	114.0	50 - 150	
Fipronil	0.012	1.010	0.916	0.800	9.8	< 30	124.8	113.0	50 - 150	
Flonicamid	0.001	1.008	1.021	1.000	1.3	< 30	100.7	102.0	50 - 150	
Fludioxonil	0.000	0.748	0.750	0.800	0.3	< 30	93.5	93.8	50 - 150	
Hexythiazox	0.000	1.395	1.373	1.000	1.6	< 30	139.5	137.3	50 - 150	
Imazalil	0.000	0.391	0.414	0.400	5.9	< 30	97.6	103.5	50 - 150	
Imidacloprid	0.000	0.828	0.857	0.800	3.4	< 30	103.5	107.1	50 - 150	
Kresoxim-Methyl	0.000	0.885	0.848	0.800	4.2	< 30	110.7	106.1	50 - 150	
Malathion	0.001	0.476	0.475	0.400	0.3	< 30	118.8	118.5	50 - 150	
Metaxyl	0.000	0.425	0.442	0.400	4.0	< 30	106.2	110.5	50 - 150	
Methiocarb	0.000	0.424	0.409	0.400	3.6	< 30	106.0	102.2	50 - 150	
Methomyl	0.000	0.760	0.772	0.800	1.7	< 30	94.9	96.5	50 - 150	
MGK 264	0.000	0.475	0.469	0.400	1.4	< 30	118.8	117.2	50 - 150	
Myclobutanil	0.000	0.429	0.424	0.400	1.1	< 30	107.2	106.0	50 - 150	
Naled	0.000	1.084	1.133	1.000	4.4	< 30	108.4	113.3	50 - 150	
Oxamyl	0.000	1.868	1.998	2.000	6.7	< 30	93.4	99.9	50 - 150	
Paclobutrazol	0.000	0.902	0.863	0.800	4.4	< 30	112.7	107.9	50 - 150	
Parathion Methyl	0.000	0.933	1.149	0.800	20.7	< 30	116.7	143.6	30 - 150	
Permethrin	0.000	0.486	0.512	0.400	5.3	< 30	121.5	128.1	50 - 150	
Phosmet	0.000	0.428	0.431	0.400	0.8	< 30	106.9	107.8	50 - 150	
Piperonyl butoxide	0.000	2.250	2.189	2.000	2.8	< 30	112.5	109.5	50 - 150	
Prallethrin	0.010	0.516	0.510	0.400	1.1	< 30	126.5	125.1	50 - 150	
Propiconazole	0.000	0.892	0.874	0.800	2.0	< 30	111.5	109.2	50 - 150	
Propoxur	0.000	0.403	0.415	0.400	2.9	< 30	100.8	103.8	50 - 150	
Pyrethrins	0.000	0.703	0.705	0.413	0.3	< 30	170.2	170.7	50 - 150	Q1
Pyridaben	0.000	0.714	0.718	0.400	0.6	< 30	178.4	179.5	50 - 150	Q1
Spinosad	0.000	0.399	0.392	0.388	1.9	< 30	102.9	100.9	50 - 150	
Spiromesifen	0.000	0.475	0.483	0.400	1.6	< 30	118.9	120.8	50 - 150	
Spirotetramat	0.000	0.395	0.377	0.400	4.7	< 30	98.8	94.2	50 - 150	
Spiroxamine	0.000	0.800	0.781	0.800	2.3	< 30	100.0	97.6	50 - 150	
Tebuconazole	0.000	0.858	0.870	0.800	1.4	< 30	107.3	108.7	50 - 150	
Thiacloprid	0.000	0.401	0.402	0.400	0.2	< 30	100.2	100.4	50 - 150	
Thiamethoxam	0.000	0.388	0.399	0.400	2.7	< 30	97.1	99.8	50 - 150	
Trifloxystrobin	0.001	0.444	0.449	0.400	0.7	< 30	110.6	111.9	50 - 150	



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



Report Number: 20-007221/D04.R00
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Received: 07/13/20 10:33

Revision 0.00 Control CFL-D26
Revision date: 06/03/2019 Effective Date 06/03/2019

Quality Control Report Summary

LIMS Batch ID: 2005839

Laboratory Control Sample					Method Blank				
Analytes	Results	Assigned	Units	%Recovery	Limits	Recovery	LOQ	Units	MB Check
HT-2-Toxin 1	15.2100	16 ppb		95.1%	70% - 130%	0.00	80	ppb	Acceptable
T2-Toxin 1	7.8500	8 ppb		98.1%	70% - 130%	0.00	20	ppb	Acceptable
Ochratoxin A 1	1.9000	2 ppb		95.0%	70% - 130%	0.00	20	ppb	Acceptable
Ochratoxin B-1	0.72000	1 ppb		90.0%	70% - 130%	0.00	10	ppb	Acceptable
Zearalenone (ZON) 1	81.850	80 ppb		102.3%	70% - 130%	0.00	200	ppb	Acceptable
Fumonisin B1 I	74.100	80 ppb		92.6%	70% - 130%	0.00	200	ppb	Acceptable
Fumonisin B2 IV	79.36	80 ppb		99.2%	70% - 130%	0.00	400	ppb	Acceptable
Deoxynivalenol (DON) 1	87.350	80 ppb		109.2%	70% - 130%	0.00	200	ppb	Acceptable
Aflatoxin B1 1	2.3800	2 ppb		119.0%	70% - 130%	0.00	10	ppb	Acceptable
Aflatoxin B2 1	2.3100	2 ppb		115.5%	70% - 130%	0.00	10	ppb	Acceptable
Aflatoxin G1 1	2.6000	2 ppb		130.0%	70% - 130%	0.00	10	ppb	Acceptable
Aflatoxin G2 1	2.8400	2 ppb		142.0%	70% - 130%	0.00	10	ppb	Acceptable
Nivalenol (M-H)	151.730	160 ppb		94.8%	70% - 130%	0.00	400	ppb	Acceptable
Nivalenol (M-H+HCOOH)-1	115.910	160 ppb		72.4%	70% - 130%	0.00	400	ppb	Acceptable

Matrix Spike Analysis Native Sample: 20-007078-0001									
Analytes	MS	MSD	Sample	Assigned	Limits	Units	%Rec MS	%Rec MSD	RPD
HT-2-Toxin 1	183.6	167.3	29.2	160	50% - 150%	ppb	96.5%	86.3%	11.2%
T2-Toxin 1	81.1	77.0	0.1	80	50% - 150%	ppb	101.3%	96.1%	5.2%
Ochratoxin A 1	26.3	22.0	1.1	20	50% - 150%	ppb	126.2%	104.6%	18.8%
Ochratoxin B-1	9.0	7.7	0.0	8	50% - 150%	ppb	112.3%	96.0%	15.6%
Zearalenone (ZON) 1	729.1	773.1	0.0	800	50% - 150%	ppb	91.1%	96.6%	5.9%
Fumonisin B1 I	974.5	903.1	0.0	800	50% - 150%	ppb	121.8%	112.9%	7.6%
Fumonisin B2 IV	887.4	860.2	0.0	800	50% - 150%	ppb	110.9%	107.5%	3.1%
Deoxynivalenol (DON) 1	922.0	637.5	0.0	800	50% - 150%	ppb	115.2%	79.7%	36.5%
Aflatoxin B1 1	22.7	19.1	0.0	20	50% - 150%	ppb	113.4%	95.3%	17.4%
Aflatoxin B2 1	22.9	19.4	0.0	20	50% - 150%	ppb	114.4%	97.0%	16.4%
Aflatoxin G1 1	26.3	21.6	5.0	20	50% - 150%	ppb	106.6%	83.0%	24.9%
Aflatoxin G2 1	25.9	18.5	0.0	20	50% - 150%	ppb	129.5%	92.4%	33.4%
Nivalenol (M-H)	1177.2	1137.8	234.0	1600	50% - 150%	ppb	58.9%	56.5%	4.3%
Nivalenol (M-H+HCOOH)-1	1285.3	1172.1	0.0	1600	50% - 150%	ppb	80.3%	73.3%	9.2%

$$\%Recovery_{LCS} = \frac{\text{Calculated Result (ppb)}}{\text{Assigned Value (ppb)}} * 100\%$$

$$RPD_{MS/MSD} = \frac{(|\%Recovery_{MS} - \%Recovery_{MSD}|)}{\left(\frac{\%Recovery_{MS} + \%Recovery_{MSD}}{2}\right)}$$

$$\%Recovery_{MS/MSD} = \frac{\text{Calculated Result (ppb)}_{MS/MSD} - \text{Calculated Result (ppb)}_{Sample}}{\text{Assigned Value (ppb)}} * 100\%$$

Definitions & Units

ppb parts per billion
RPD Relative percent difference
LOQ Limit of Quantitation



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



Report Number: 20-007221/D04.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

JAOAC2015 V986 Batch ID: 2005893										
Laboratory Control Sample										
Analyte	Result		Spike	Units	% Rec	Limits			Evaluation	Notes
CBDV-A	0.200		0.2	%	100	85.0	-	115	Acceptable	
CBDV	0.215		0.2	%	108	85.0	-	115	Acceptable	
CBD-A	0.203		0.2	%	101	85.0	-	115	Acceptable	
CBG-A	0.201		0.2	%	101	85.0	-	115	Acceptable	
CBG	0.203		0.2	%	102	85.0	-	115	Acceptable	
CBD	0.186		0.2	%	93.2	85.0	-	115	Acceptable	
THCV	0.193		0.2	%	96.5	85.0	-	115	Acceptable	
THCVA	0.193		0.2	%	96.4	85.0	-	115	Acceptable	
CBN	0.205		0.2	%	103	85.0	-	115	Acceptable	
THC	0.208		0.2	%	104	85.0	-	115	Acceptable	
D8THC	0.183		0.2	%	91.7	85.0	-	115	Acceptable	
CBL	0.192		0.2	%	96.2	85.0	-	115	Acceptable	
CBC	0.209		0.2	%	104	85.0	-	115	Acceptable	
THCA	0.179		0.2	%	89.4	85.0	-	115	Acceptable	
CBCA	0.184		0.2	%	91.8	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



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



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

Laboratory Quality Control Results

JAOAC2015 V986					Batch ID: 2005893			
Sample Duplicate					Sample ID: 20-007221-0001			
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBDV	0.333	0.337	0.1	%	1.15	< 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	>98.0	>98.0	0.1	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.1	%	NA	< 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	<LOQ	<LOQ	0.1	%	NA	< 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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503-254-1794



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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.