



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



Report Number: 21-010318/D002.R000
Report Date: 09/10/2021
ORELAP#: OR100028
Purchase Order:
Received: 09/02/21 16:07

Customer: IHC LLC
Product identity: M010307BDR0806
Client/Metric ID: .
Laboratory ID: 21-010318-0001

Summary

Potency:

Analyte	Result (%)			
CBN	42.7			
Δ8-THC†	32.4		CBD-Total	19.2%
CBD	15.2		THC-Total	0.204%
CBD-A	4.53		(Reported in percent of total sample)	
CBC-A†	0.327			
THC-A	0.233			
CBDV-A†	0.128			
CBT†	0.103			
CBDV†	0.0895			

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Microbiology:

Less than LOQ for all analytes.



Customer: IHC LLC
825 NW 16th Ave
Portland Oregon 97209
United States of America (USA)

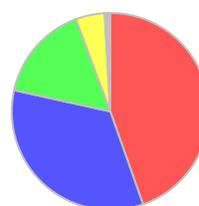
Product identity: M010307BDR0806
Client/Metric ID: .
Sample Date: .
Laboratory ID: 21-010318-0001
Evidence of Cooling: No
Temp: 31.3 °C
Relinquished by: Client



**THE HEMP
COLLECT**

Sample Results

Potency	Method J AOAC 2015 V98-6 (mod)	Units %	Batch: 2108060	Analyze: 9/8/21 4:37:00 PM
Analyte	As Received	Dry weight	LOQ	Notes
CBC	< LOQ		0.0854	
CBC-A†	0.327		0.0854	
CBC-Total†	0.287		0.160	
CBD	15.2		0.0854	
CBD-A	4.53		0.0854	
CBD-Total	19.2		0.160	
CBDV†	0.0895		0.0854	
CBDV-A†	0.128		0.0854	
CBDV-Total†	0.200		0.159	
CBE†	< LOQ		0.0854	
CBG†	< LOQ		0.0854	
CBG-A†	< LOQ		0.0854	
CBG-Total	< LOQ		0.159	
CBL†	< LOQ		0.0854	
CBL-A†	< LOQ		0.0854	
CBL-Total†	< LOQ		0.160	
CBN	42.7		0.854	
CBT†	0.103		0.0854	
Δ8-THC†	32.4		0.854	
Δ8-THCV	< LOQ		0.0854	
Δ9-THC	< LOQ		0.0854	
THC-A	0.233		0.0854	
THC-Total	0.204		0.160	
THCV†	< LOQ		0.0854	
THCV-A†	< LOQ		0.0854	
THCV-Total†	< LOQ		0.159	
Total Cannabinoids†	95.7			



- CBN
- Δ8-THC
- CBD
- CBD-A
- CBC-A
- THC-A
- CBDV-A
- CBT
- CBDV



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2107961	09/07/21	AOAC 2014.05 (RAPID)		X, I
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2107961	09/07/21	AOAC 2014.05 (RAPID)		X, I

Solvents		Method Residual Solvents by GC/MS				Units µg/g	Batch 2107966	Analyze 09/07/21 09:08 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	20.0	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	60.0	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 2108049 Analyze 09/08/21 04:58 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							



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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

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

% = Percentage of sample

% wt = µg/g divided by 10,000

Glossary of Qualifiers

I: Insufficient sample received to meet method requirements.

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner
General Manager



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**Hemp / Cannabis Usable / Extract / Finished Products
 Chain of Custody Record**

Revision: 4.00 Control#: CF023 Rev 02/24/2021 Eff: 03/04/2021
 ORELAP ID: OR100028

Company: <u>IHC</u> Contact: <u>Kyle Farook</u> Street: <u>431 NW Flanders st.</u> City: <u>Portland</u> State: <u>OR</u> Zip: <u>97209</u> <input type="checkbox"/> Email Results: <u>Dropbox</u> Ph: (<u>503</u>) <u>608164</u> <input type="checkbox"/> Fx Results: () Billing (if different): <u>beth@thehempcollect.com</u>				Analysis Requested										PO Number: _____ Project Number: _____ Project Name: _____ Custom Reporting: _____ Report to State - <input type="checkbox"/> METRC or <input type="checkbox"/> Other: _____ Turnaround time: <input checked="" type="checkbox"/> 5 Business Day Standard Turnaround <input type="checkbox"/> 3 Business Day Rush Turnaround* <input type="checkbox"/> 2 Business Day Rush Turnaround* <i>*Check for availability</i>			
Lab ID	Client Sample Identification	Date	Time	Pesticides - OR 59 compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Moisture & Water Activity	Terpenes	Micro: Yeast and Mold	Micro: E.Coli and Total Coliform	Heavy Metals	Mycotoxins	Other:	Sample Type †	Weight (Units)	Comments/Metric ID
1	M010307BDR0806	9/2		X	X	X			X						C		3 day Hush on potency only, but standard turnaround on the rest
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
Relinquished By:		Date	Time	Received By:		Date	Time	Lab Use Only:									
Kyle Farook		9/2	4:00	BD		9/2/21	16:07	<input type="checkbox"/> Shipped Via: _____ or <input checked="" type="checkbox"/> Client drop Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No - Temp (°C): <u>31.3</u> Sample in good condition: <input 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) ; Tincture/Topical (T) ; Edible (E) ; Beverage (B)

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms
 12423 NE Whitaker Way P: (503) 254-1794 | Fax: (503) 254-1452 Page _____ of _____
 Portland, OR 97230 info@columbiaboratories.com www.columbiaboratories.com



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Laboratory Quality Control Results

Residual Solvents				Batch ID: 2107966					
Method Blank			Laboratory Control Sample						
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		583	595	µg/g	98.0	70 - 130	
Isobutane	ND	< 200		754	761	µg/g	99.1	70 - 130	
Butane	ND	< 200		763	761	µg/g	100.3	70 - 130	
2,2-Dimethylpropane	ND	< 200		1020	955	µg/g	106.6	70 - 130	
Methanol	ND	< 200		1630	1610	µg/g	101.2	70 - 130	
Ethylene Oxide	ND	< 30		61.1	58.3	µg/g	104.6	70 - 130	
2-Methylbutane	ND	< 200		1430	1610	µg/g	88.8	70 - 130	
Pentane	ND	< 200		1480	1620	µg/g	91.4	70 - 130	
Ethanol	ND	< 200		1770	1610	µg/g	109.9	70 - 130	
Ethyl Ether	ND	< 200		1670	1610	µg/g	103.7	70 - 130	
2,2-Dimethylbutane	ND	< 30		130	172	µg/g	80.8	70 - 130	
Acetone	ND	< 200		1600	1600	µg/g	100.0	70 - 130	
2-Propanol	ND	< 200		1850	1620	µg/g	114.2	70 - 130	
Ethyl Formate	ND	< 500		1440	1610	µg/g	89.4	70 - 130	
Acetonitrile	ND	< 100		495	501	µg/g	98.8	70 - 130	
Methyl Acetate	ND	< 500		1730	1610	µg/g	107.5	70 - 130	
2,3-Dimethylbutane	ND	< 30		148	163	µg/g	90.8	70 - 130	
2-Methylpentane	ND	< 30		180	164	µg/g	109.8	70 - 130	
MTE	ND	< 500		1710	1600	µg/g	106.9	70 - 130	
3-Methylpentane	ND	< 30		186	164	µg/g	113.4	70 - 130	
Hexane	ND	< 30		181	163	µg/g	111.0	70 - 130	
1-Propanol	ND	< 500		1740	1620	µg/g	107.4	70 - 130	
Methylethylketone	ND	< 500		1520	1610	µg/g	94.4	70 - 130	
Ethyl acetate	ND	< 200		1740	1610	µg/g	108.1	70 - 130	
2-Butanol	ND	< 200		1850	1620	µg/g	114.2	70 - 130	
Tetrahydrofuran	ND	< 100		598	500	µg/g	119.6	70 - 130	
Cyclohexane	ND	< 200		1550	1610	µg/g	96.3	70 - 130	
2-methyl-1-propanol	ND	< 500		1640	1610	µg/g	101.9	70 - 130	
Benzene	ND	< 1		4.97	5.42	µg/g	91.7	70 - 130	
Isopropyl Acetate	ND	< 200		1870	1600	µg/g	116.9	70 - 130	
Heptane	ND	< 200		1630	1600	µg/g	101.9	70 - 130	
1-Butanol	ND	< 500		1940	1620	µg/g	119.8	70 - 130	
Propyl Acetate	ND	< 500		1810	1610	µg/g	112.4	70 - 130	
1,4-Dioxane	ND	< 100		587	490	µg/g	119.6	70 - 130	
2-Ethoxyethanol	ND	< 30		168	163	µg/g	103.1	70 - 130	
Methylisobutylketone	ND	< 500		1710	1620	µg/g	105.6	70 - 130	
3-Methyl-1-butanol	ND	< 500		1600	1610	µg/g	99.4	70 - 130	
Ethylene Glycol	ND	< 200		473	484	µg/g	97.7	70 - 130	
Toluene	ND	< 200		568	482	µg/g	118.0	70 - 130	
Isobutyl Acetate	ND	< 500		1590	1620	µg/g	98.1	70 - 130	
1-Pentanol	ND	< 500		1160	1620	µg/g	71.6	70 - 130	
Butyl Acetate	ND	< 500		1890	1620	µg/g	116.7	70 - 130	
Ethylbenzene	ND	< 200		1120	970	µg/g	115.6	70 - 130	
m,p-Xylene	ND	< 200		955	991	µg/g	96.4	70 - 130	
o-Xylene	ND	< 200		1160	967	µg/g	120.0	70 - 130	
Cumene	ND	< 30		214	169	µg/g	126.6	70 - 130	
Anisole	ND	< 500		1810	1640	µg/g	110.4	70 - 130	
DMSO	ND	< 500		1870	1620	µg/g	115.4	70 - 130	
1,2-dimethoxyethane	ND	< 50		150	163	µg/g	92.0	70 - 130	
Triethylamine	ND	< 500		1780	1610	µg/g	110.6	70 - 130	
N,N-dimethylformamide	ND	< 150		481	487	µg/g	98.8	70 - 130	
N,N-dimethylacetamide	ND	< 150		517	492	µg/g	105.1	70 - 130	
Pyridine	ND	< 50		121	165	µg/g	73.3	70 - 130	
1,2-Dichloroethane	ND	< 1		1.05	1	µg/g	105.0	70 - 130	
Chloroform	ND	< 1		1.04	1	µg/g	104.0	70 - 130	
Tetrachloroethylene	ND	< 1		1.04	1	µg/g	104.0	70 - 130	
Ethylene Oxide	ND	< 1		1.15	1	µg/g	115.0	70 - 130	
Dichloromethane	ND	< 1		1	1	µg/g	100.0	70 - 130	



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CC - Sample Duplicate Sample ID: 21-010318-0001

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	200	220	200	µg/g	9.5	< 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	
2-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
MTEE	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	
Methylisobutylketone	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	
1,2-Dichloroethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Trichloroethylene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	

Abbreviations
ND - None Detected at or above MFL
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: 21-010318/D002.R000
Report Date: 09/10/2021
ORELAP#: OR100028
Purchase Order:
Received: 09/02/21 16:07

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: 2108049				
Method Blank		Laboratory Control Sample						
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Accephate	0.000	< 0.250		0.845	1.000	84.5	69.7 - 129	
Acequinocyl	0.000	< 1.000		2.352	4.000	58.8	71.1 - 132	Q6
Acetamiprid	0.000	< 0.100		0.390	0.400	97.5	70.4 - 131	
Aldicarb	0.000	< 0.200		0.757	0.800	94.7	73.7 - 137	
Abamectin	0.000	< 0.250		1.208	1.000	120.8	70.8 - 132	
Azoxystrobin	0.000	< 0.100		0.403	0.400	100.8	69.7 - 129	
Bifenazate	0.000	< 0.100		0.465	0.400	116.3	74.1 - 138	
Bifenthrin	0.000	< 0.100		0.387	0.400	96.7	69.5 - 129	
Boscalid	0.000	< 0.200		0.866	0.800	108.3	69.6 - 129	
Carbaryl	0.000	< 0.100		0.434	0.400	108.4	69.7 - 129	
Carbofuran	0.000	< 0.100		0.517	0.400	129.2	71.2 - 132	
Chlorantraniliprol	0.000	< 0.100		0.344	0.400	86.1	70.6 - 131	
Chlorfenapyr	0.000	< 0.500		2.550	2.000	127.5	70.4 - 131	
Chlorpyrifos	0.000	< 0.100		0.313	0.400	78.3	68.6 - 127	
Clofentezine	0.000	< 0.100		0.396	0.400	99.1	69.5 - 129	
Cyfluthrin	0.000	< 0.500		3.262	2.000	163.1	70.8 - 132	Q1
Cypermethrin	0.000	< 0.500		2.122	2.000	106.1	70.7 - 131	
Daminozide	0.101	< 0.500		1.745	2.000	87.3	71.7 - 133	
Diazinon	0.000	< 0.100		0.411	0.400	102.7	69.3 - 129	
Dichlorvos	0.000	< 0.500		1.802	2.000	90.1	68.3 - 127	
Dimethoat	0.000	< 0.100		0.393	0.400	98.2	70.2 - 130	
Ethoprophos	0.000	< 0.100		0.361	0.400	90.1	69.1 - 128	
Etofenprox	0.000	< 0.200		1.486	0.800	185.7	70.3 - 131	Q1
Etoxazol	0.000	< 0.100		0.447	0.400	111.7	70.0 - 130	
Fenoxycarb	0.000	< 0.100		0.433	0.400	108.2	69.4 - 129	
Fenpyroximat	0.000	< 0.200		1.061	0.800	132.6	70.0 - 130	Q1
Fipronil	0.000	< 0.200		0.991	0.800	123.9	71.4 - 133	
Flonicamid	0.000	< 0.250		0.933	1.000	93.3	70.3 - 131	
Fludioxonil	0.000	< 0.200		1.475	0.800	184.4	72.0 - 134	Q1
Hexythiazox	0.000	< 0.250		1.015	1.000	101.5	68.6 - 127	
Imazalil	0.000	< 0.100		0.494	0.400	123.4	71.9 - 133	
Imidacloprid	0.000	< 0.200		0.794	0.800	99.2	69.5 - 129	
Kresoxim-Methyl	0.000	< 0.200		0.876	0.800	109.5	69.7 - 129	
Malathion	0.000	< 0.100		0.430	0.400	107.5	69.3 - 129	
Metaxalyl	0.000	< 0.100		0.411	0.400	102.7	70.2 - 130	
Methiocarb	0.000	< 0.100		0.449	0.400	112.4	70.1 - 130	
Methomyl	0.000	< 0.200		0.696	0.800	87.0	69.6 - 129	
MGK 264	0.000	< 0.100		0.413	0.400	103.3	69.2 - 129	
Myclobutanil	0.000	< 0.100		0.411	0.400	102.7	69.7 - 129	
Naled	0.000	< 0.250		1.014	1.000	101.4	71.5 - 133	
Oxamyl	0.000	< 0.500		1.852	2.000	92.6	70.5 - 131	
Paclobutrazol	0.000	< 0.200		0.908	0.800	113.5	70.3 - 131	
Parathion Methyl	0.000	< 0.200		0.983	0.800	122.9	71.4 - 133	
Permethrin	0.000	< 0.100		0.468	0.400	117.1	69.5 - 129	
Phosmet	0.000	< 0.100		0.426	0.400	106.4	69.4 - 129	
Piperonyl butoxide	0.000	< 0.500		5.459	2.000	272.9	70.7 - 131	Q1
Prallethrin	0.000	< 0.100		0.539	0.400	134.8	70.2 - 130	Q1
Propiconazole	0.000	< 0.200		0.825	0.800	103.1	69.9 - 130	
Propoxur	0.000	< 0.100		0.439	0.400	109.8	69.5 - 129	
Pyrethrins	0.000	< 0.100		0.418	0.413	101.3	68.5 - 127	
Pyridaben	0.000	< 0.100		0.398	0.400	99.6	69.4 - 129	
Spinosad	0.000	< 0.100		0.435	0.388	112.2	72.4 - 134	
Spiromesifen	0.000	< 0.100		0.470	0.400	117.6	70.7 - 131	
Spirotetramat	0.000	< 0.100		0.408	0.400	102.1	70.0 - 130	
Spiroxamine	0.000	< 0.200		0.836	0.800	104.5	68.1 - 127	
Tebuconazol	0.000	< 0.200		0.883	0.800	110.4	69.7 - 130	
Thiadoprid	0.000	< 0.100		0.395	0.400	98.8	69.5 - 129	
Thiamethoxam	0.000	< 0.100		0.371	0.400	92.7	69.6 - 129	
Trifloxystrobin	0.000	< 0.100		0.463	0.400	115.8	70.0 - 130	



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Received: 09/02/21 16:07



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: 2108049				
Matrix Spike/Matrix Spike Duplicate Recoveries		Sample ID: 21-010306-0004									
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes	
Acephate	0.000	0.795	0.923	1.000	15.0%	< 30	79.5%	92.3%	50 - 150		
Acequinocyl	0.000	2.734	2.026	4.000	29.7%	< 30	68.4%	50.7%	50 - 150		
Acetamiprid	0.000	0.382	0.398	0.400	4.1%	< 30	95.4%	99.4%	50 - 150		
Aldicarb	0.000	0.716	0.673	0.800	6.2%	< 30	89.5%	84.1%	50 - 150		
Abamectin	0.000	1.218	1.245	1.000	2.2%	< 30	121.8%	124.5%	50 - 150		
Azoxystrobin	0.000	0.351	0.388	0.400	9.9%	< 30	87.8%	96.9%	50 - 150		
Bifenazate	0.000	0.465	0.466	0.400	0.2%	< 30	116.2%	116.5%	50 - 150		
Bifenthrin	0.000	0.301	0.317	0.400	5.2%	< 30	75.3%	79.3%	50 - 150		
Boscalid	0.000	0.751	0.832	0.800	10.2%	< 30	93.9%	104.0%	50 - 150		
Carbaryl	0.000	0.410	0.394	0.400	3.8%	< 30	102.4%	98.6%	50 - 150		
Carbofuran	0.000	0.522	0.393	0.400	28.1%	< 30	130.4%	98.3%	50 - 150		
Chlorantraniliprol	0.000	0.448	0.516	0.400	14.0%	< 30	112.0%	128.9%	50 - 150		
Chlorfenapyr	0.000	2.231	2.622	2.000	16.1%	< 30	111.6%	131.1%	50 - 150		
Chlorpyrifos	0.000	0.050	0.057	0.400	14.0%	< 30	12.4%	14.3%	50 - 150	Q	
Clofentezine	0.000	0.365	0.375	0.400	2.7%	< 30	91.2%	93.7%	50 - 150		
Cyfluthrin	0.000	2.963	2.803	2.000	5.5%	< 30	148.2%	140.2%	30 - 150		
Cypermethrin	0.000	2.780	2.859	2.000	2.8%	< 30	139.0%	142.9%	50 - 150		
Daminozide	0.000	1.955	2.504	2.000	24.6%	< 30	97.8%	125.2%	30 - 150		
Diazinon	0.000	0.390	0.427	0.400	8.9%	< 30	97.5%	106.6%	50 - 150		
Dichlorvos	0.000	1.897	1.955	2.000	3.0%	< 30	94.9%	97.8%	50 - 150		
Dimethoat	0.000	0.398	0.379	0.400	4.7%	< 30	99.5%	94.9%	50 - 150		
Ethoprophos	0.000	0.383	0.414	0.400	7.7%	< 30	95.8%	103.5%	50 - 150		
Etofenprox	0.000	1.185	1.266	0.800	6.6%	< 30	148.1%	158.3%	50 - 150	Q1	
Etoxazol	0.000	0.371	0.373	0.400	0.4%	< 30	92.8%	93.2%	50 - 150		
Fenoxycarb	0.000	0.399	0.394	0.400	1.3%	< 30	99.7%	98.4%	50 - 150		
Fenpyroximat	0.000	0.929	0.875	0.800	6.0%	< 30	116.1%	109.3%	50 - 150		
Fipronil	0.000	0.808	0.798	0.800	1.3%	< 30	101.0%	99.7%	50 - 150		
Fonicamid	0.000	0.851	0.968	1.000	12.9%	< 30	85.1%	96.8%	50 - 150		
Fludoxonil	0.000	1.316	1.353	0.800	2.8%	< 30	164.5%	169.2%	50 - 150	Q1	
Hexythiazox	0.000	0.217	0.277	1.000	24.4%	< 30	21.7%	27.7%	50 - 150	Q	
Imazalil	0.000	0.435	0.437	0.400	0.5%	< 30	108.7%	109.2%	50 - 150		
Imidacloprid	0.000	0.796	0.791	0.800	0.6%	< 30	99.5%	98.9%	50 - 150		
Kresoxim-Methyl	0.000	0.817	0.852	0.800	4.2%	< 30	102.1%	106.5%	50 - 150		
Malathion	0.000	0.415	0.442	0.400	6.3%	< 30	103.8%	110.6%	50 - 150		
Metaxalyl	0.000	0.487	0.399	0.400	19.9%	< 30	121.9%	99.8%	50 - 150		
Methiocarb	0.000	0.401	0.416	0.400	3.6%	< 30	100.3%	103.9%	50 - 150		
Methomyl	0.000	0.742	0.791	0.800	6.3%	< 30	92.8%	98.8%	50 - 150		
MGK 264	0.000	0.449	0.425	0.400	5.4%	< 30	112.2%	106.3%	50 - 150		
Myclobutanil	0.000	0.410	0.419	0.400	2.1%	< 30	102.5%	104.6%	50 - 150		
Naled	0.000	0.689	0.889	1.000	25.3%	< 30	68.9%	88.9%	50 - 150		
Oxamyl	0.000	1.813	2.183	2.000	18.6%	< 30	90.6%	109.2%	50 - 150		
Paclobutrazol	0.000	0.829	0.902	0.800	8.4%	< 30	103.7%	112.8%	50 - 150		
Parathion Methyl	0.000	1.001	0.897	0.800	11.0%	< 30	125.2%	112.2%	30 - 150		
Permethrin	0.000	0.609	0.618	0.400	1.5%	< 30	152.3%	154.5%	50 - 150	Q1	
Phosmet	0.000	0.508	0.406	0.400	22.3%	< 30	127.1%	101.6%	50 - 150		
Piperonyl butoxide	0.000	3.724	4.412	2.000	16.9%	< 30	186.2%	220.6%	50 - 150	Q1	
Prallethrin	0.000	0.299	0.290	0.400	2.8%	< 30	74.7%	72.6%	50 - 150		
Propiconazole	0.000	0.738	0.921	0.800	22.1%	< 30	92.2%	115.1%	50 - 150		
Propoxur	0.000	0.403	0.351	0.400	13.7%	< 30	100.6%	87.8%	50 - 150		
Pyrethrins	0.000	0.769	0.773	0.413	0.5%	< 30	186.2%	187.1%	50 - 150	Q1	
Pyridaben	0.000	0.457	0.437	0.400	4.5%	< 30	114.4%	109.3%	50 - 150		
Spinosad	0.000	0.412	0.446	0.388	7.9%	< 30	106.3%	115.0%	50 - 150		
Spiromesifen	0.000	0.397	0.410	0.400	3.2%	< 30	99.3%	102.5%	50 - 150		
Spirotetramat	0.000	0.420	0.404	0.400	4.0%	< 30	105.0%	100.9%	50 - 150		
Spiroxamine	0.000	0.899	0.777	0.800	14.5%	< 30	112.4%	97.2%	50 - 150		
Tebuconazol	0.000	0.840	0.895	0.800	6.4%	< 30	105.0%	111.9%	50 - 150		
Thiadoprid	0.000	0.369	0.381	0.400	3.3%	< 30	92.2%	95.3%	50 - 150		
Thiamethoxam	0.000	0.329	0.430	0.400	26.5%	< 30	82.3%	107.5%	50 - 150		
Trifloxystrobin	0.000	0.386	0.385	0.400	0.3%	< 30	96.6%	96.3%	50 - 150		

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

Testing in accordance with: OAR 333-007-0390 OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



12423 NE Whitaker Way
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503-254-1794



Report Number: 21-010318/D002.R000
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Purchase Order:
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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: 2108041/2108060

Laboratory Control Sample							
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	0.194	0.2	%	97.0	85.0 - 115	Acceptable	
CBDV	0.207	0.2	%	103	85.0 - 115	Acceptable	
CBE	0.206	0.2	%	103	85.0 - 115	Acceptable	
CEDA	0.197	0.2	%	98.3	85.0 - 115	Acceptable	
CEGA	0.194	0.2	%	97.0	85.0 - 115	Acceptable	
CEG	0.207	0.2	%	103	85.0 - 115	Acceptable	
CEB	0.201	0.2	%	100	85.0 - 115	Acceptable	
THCV	0.205	0.2	%	102	85.0 - 115	Acceptable	
d8THCV	0.197	0.2	%	98.3	85.0 - 115	Acceptable	
THCVA	0.185	0.2	%	92.5	85.0 - 115	Acceptable	
CBN	0.210	0.2	%	105	85.0 - 115	Acceptable	
exo-THC	0.187	0.2	%	93.5	85.0 - 115	Acceptable	
d8THC	0.205	0.2	%	102	85.0 - 115	Acceptable	
d8THC	0.201	0.2	%	101	85.0 - 115	Acceptable	
CBL	0.182	0.2	%	91.2	85.0 - 115	Acceptable	
CEC	0.207	0.2	%	103	85.0 - 115	Acceptable	
THCA	0.194	0.2	%	97.0	85.0 - 115	Acceptable	
CECA	0.186	0.2	%	93.2	85.0 - 115	Acceptable	
CBLA	0.202	0.2	%	101	85.0 - 115	Acceptable	
CBF	0.216	0.2	%	108	85.0 - 115	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.01	%	< 0.01	Acceptable	
CBDV	<LOQ	0.01	%	< 0.01	Acceptable	
CBE	<LOQ	0.01	%	< 0.01	Acceptable	
CEDA	<LOQ	0.01	%	< 0.01	Acceptable	
CEGA	<LOQ	0.01	%	< 0.01	Acceptable	
CEG	<LOQ	0.01	%	< 0.01	Acceptable	
CEB	<LOQ	0.01	%	< 0.01	Acceptable	
THCV	<LOQ	0.01	%	< 0.01	Acceptable	
d8THCV	<LOQ	0.01	%	< 0.01	Acceptable	
THCVA	<LOQ	0.01	%	< 0.01	Acceptable	
CBN	<LOQ	0.01	%	< 0.01	Acceptable	
exo-THC	<LOQ	0.01	%	< 0.01	Acceptable	
d8THC	<LOQ	0.01	%	< 0.01	Acceptable	
d8THC	<LOQ	0.01	%	< 0.01	Acceptable	
CBL	<LOQ	0.01	%	< 0.01	Acceptable	
CEC	<LOQ	0.01	%	< 0.01	Acceptable	
THCA	<LOQ	0.01	%	< 0.01	Acceptable	
CECA	<LOQ	0.01	%	< 0.01	Acceptable	
CBLA	<LOQ	0.01	%	< 0.01	Acceptable	
CBF	<LOQ	0.01	%	< 0.01	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: 21-010318/D002.R000
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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: 2108041/2108060						
Sample Duplicate		Sample ID: 21-009903-0001-01						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBDA	0.467	0.556	0.1	%	17.4	< 20	Acceptable	
CBDA	0.837	0.993	0.1	%	17.1	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBDA	0.275	0.327	0.1	%	17.3	< 20	Acceptable	
CBDA	>98.0	>98.0	0.1	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBN	0.509	0.607	0.1	%	17.5	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBG	0.866	1.03	0.1	%	17.3	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBF	0.872	0.908	0.1	%	4.06	< 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.