



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



Report Number: 21-005045/D04.R00
Report Date: 05/13/2021
ORELAP#: OR100028
Purchase Order:
Received: 05/06/21 11:10

Customer: Treehouse Biotech
Product identity: 0161-01-001
Client/Metric ID: .
Laboratory ID: 21-005045-0001

Summary

Potency:

Analyte	Result (%)	<ul style="list-style-type: none"> ● CBD ● CBG ● CBC ● CBN ● CBDV 		
CBD	91.5		CBD-Total	91.5%
CBG [†]	1.07		THC-Total	<LOQ
CBC	1.03		(Reported in percent of total sample)	
CBN	0.440			
CBDV [†]	0.375			

Residual Solvents:

All analytes passing and less than LOQ.

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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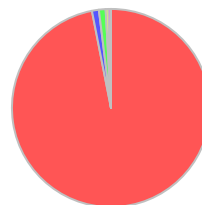
Customer: Treehouse Biotech

Product identity: 0161-01-001
Client/Metric ID: .
Sample Date:
Laboratory ID: 21-005045-0001
Evidence of Cooling: No
Temp: 21.2 °C

Sample Results

Potency **Method** J AOAC 2015 V98-6 (mod) **Units %** **Batch:** 2104171 **Analyze:** 5/7/21 10:41:00 PM

Analyte	As Received	Dry weight	LOQ	Notes
CBC	1.03		0.0878	
CBC-A†	< LOQ		0.0878	
CBC-Total†	1.03		0.165	
CBD	91.5		0.878	
CBD-A	< LOQ		0.0878	
CBD-Total	91.5		0.955	
CBDV†	0.375		0.0878	
CBDV-A†	< LOQ		0.0878	
CBDV-Total†	0.375		0.164	
CBG†	1.07		0.0878	
CBG-A†	< LOQ		0.0878	
CBG-Total	1.07		0.164	
CBL†	< LOQ		0.0878	
CBN	0.440		0.0878	
Δ8-THC†	< LOQ		0.0878	
Δ9-THC	< LOQ		0.0878	
THC-A	< LOQ		0.0878	
THC-Total	< LOQ		0.165	
THCV†	< LOQ		0.0878	
THCV-A†	< LOQ		0.0878	
THCV-Total†	< LOQ		0.164	
Total Cannabinoids†	94.4			



- CBD
- CBG
- CBC
- CBN
- CBDV

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Aerobic Plate Count	< LOQ		cfu/g	10	2104082	05/08/21	AOAC 990.12 (Petrifilm)	X, I
E.coli	< LOQ		cfu/g	10	2104081	05/08/21	AOAC 991.14 (Petrifilm)	X, I
Total Coliforms	< LOQ		cfu/g	10	2104081	05/08/21	AOAC 991.14 (Petrifilm)	X, I
Staphylococcus aureus	< LOQ		cfu/g	10	2104083	05/07/21	AOAC 2003.07	X, I
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2104080	05/08/21	AOAC 2014.05 (RAPID)	X, I
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2104080	05/08/21	AOAC 2014.05 (RAPID)	X, I
Salmonella spp. by PCR	Negative		/10g		2104058	05/07/21	AOAC 2020.02	X, I



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Solvents						Residual Solvents by GC/MS					Units µg/g	Batch 2104086	Analyze 05/06/21 03:05 PM				
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes						
1,4-Dioxane	< LOQ	380	100	pass		2-Butanol	< LOQ	5000	200	pass							
2-Ethoxyethanol	< LOQ	160	30.0	pass		2-Methylbutane	< LOQ		200								
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass							
2,2-Dimethylbutane	< LOQ		30.0			2,2-Dimethylpropane	< LOQ		200								
2,3-Dimethylbutane	< LOQ		30.0			3-Methylpentane	< LOQ		30.0								
Acetone	< LOQ	5000	200	pass		Acetonitrile	< LOQ	410	100	pass							
Benzene	< LOQ	2.00	1.00	pass		Butanes (sum)	< LOQ	5000	400	pass							
Cyclohexane	< LOQ	3880	200	pass		Ethanol ¹	< LOQ		200								
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 2104199 Analyze 05/10/21 04:29 PM											
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.50	0.250	pass		Acephate	< LOQ	0.40	0.250	pass	
Acequinocyl	< LOQ	2.0	1.00	pass		Acetamiprid	< LOQ	0.20	0.100	pass	
Aldicarb	< LOQ	0.40	0.200	pass		Azoxystrobin	< LOQ	0.20	0.100	pass	
Bifenazate	< LOQ	0.20	0.100	pass		Bifenthrin	< LOQ	0.20	0.100	pass	
Boscalid	< LOQ	0.40	0.200	pass		Carbaryl	< LOQ	0.20	0.100	pass	
Carbofuran	< LOQ	0.20	0.100	pass		Chlorantraniliprole	< LOQ	0.20	0.100	pass	
Chlorfenapyr	< LOQ	1.0	0.500	pass		Chlorpyrifos	< LOQ	0.20	0.100	pass	
Clofentezine	< LOQ	0.20	0.100	pass		Cyfluthrin	< LOQ	1.0	0.500	pass	
Cypermethrin	< LOQ	1.0	0.500	pass		Daminozide	< LOQ	1.0	0.500	pass	
Diazinon	< LOQ	0.20	0.100	pass		Dichlorvos	< LOQ	1.0	0.500	pass	
Dimethoate	< LOQ	0.20	0.100	pass		Ethoprophos	< LOQ	0.20	0.100	pass	
Etofenprox	< LOQ	0.40	0.200	pass		Etoxazole	< LOQ	0.20	0.100	pass	
Fenoxycarb	< LOQ	0.20	0.100	pass		Fenpyroximate	< LOQ	0.40	0.200	pass	
Fipronil	< LOQ	0.40	0.200	pass		Fonicamid	< LOQ	1.0	0.400	pass	
Fludioxonil	< LOQ	0.40	0.200	pass		Hexythiazox	< LOQ	1.0	0.400	pass	
Imazalil	< LOQ	0.20	0.100	pass		Imidacloprid	< LOQ	0.40	0.200	pass	
Kresoxim-methyl	< LOQ	0.40	0.200	pass		Malathion	< LOQ	0.20	0.100	pass	
Metalaxyl	< LOQ	0.20	0.100	pass		Methiocarb	< LOQ	0.20	0.100	pass	
Methomyl	< LOQ	0.40	0.200	pass		MGK-264	< LOQ	0.20	0.100	pass	
Myclobutanil	< LOQ	0.20	0.100	pass		Naled	< LOQ	0.50	0.250	pass	
Oxamyl	< LOQ	1.0	0.500	pass		Paclobutrazole	< LOQ	0.40	0.200	pass	
Parathion-Methyl	< LOQ	0.20	0.200	pass		Permethrin	< LOQ	0.20	0.100	pass	
Phosmet	< LOQ	0.20	0.100	pass		Piperonyl butoxide	< LOQ	2.0	1.00	pass	
Prallethrin	< LOQ	0.20	0.200	pass		Propiconazole	< LOQ	0.40	0.200	pass	
Propoxur	< LOQ	0.20	0.100	pass		Pyrethrin I (total)	< LOQ	1.0	0.500	pass	
Pyridaben	< LOQ	0.20	0.100	pass		Spinosad	< LOQ	0.20	0.100	pass	
Spiromesifen	< LOQ	0.20	0.100	pass		Spirotetramat	< LOQ	0.20	0.100	pass	
Spiroxamine	< LOQ	0.40	0.200	pass		Tebuconazole	< LOQ	0.40	0.200	pass	
Thiacloprid	< LOQ	0.20	0.100	pass		Thiamethoxam	< LOQ	0.20	0.100	pass	
Trifloxystrobin	< LOQ	0.20	0.100	pass							

Metals										
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes		
Arsenic	< LOQ		mg/kg	0.0370	2104130	05/07/21	AOAC 2013.06 (mod.)	X		
Cadmium	< LOQ		mg/kg	0.0370	2104130	05/07/21	AOAC 2013.06 (mod.)	X		
Lead	< LOQ		mg/kg	0.0370	2104130	05/07/21	AOAC 2013.06 (mod.)	X		
Mercury	< LOQ		mg/kg	0.0185	2104130	05/07/21	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

cfu/g = Colony forming units per gram

µg/g = Microgram per gram

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

/10g = Per 10 grams

% = 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
 Chain of Custody Record**

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

21-005045

Company: Treehouse Contact: Sean Colvin Street: 4472 Hilltop Rd Unit A City: Longmont State: CO Zip: 80504 <input checked="" type="checkbox"/> Email Results: sean@treehousebiotech.com Ph: (541) 968-2867 <input type="checkbox"/> Fx Results: () Billing (if different): accounting@treehousebiotech.com				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"/> Standard <input type="checkbox"/> Rush * <input type="checkbox"/> Priority Rush * <i>*Check for availability</i> Sampled by: _____			
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: Micro Panel G	Sample Type †	Weight (Units)	Comments/Metrc ID
1	0161-01-001			✓		✓	✓					✓	✓	✓	C		For Res. Solv. testing, please include ethanol.
2	0163-01-001			✓		✓	✓					✓	✓	✓	C		
3	8376			✓		✓	✓					✓	✓	✓	S		
Relinquished By:			Date	Time	Received By:			Date	Time	Lab Use Only:							
[Signature]			5/5	2:00	[Signature]			5/6/21	11:10	<input type="checkbox"/> Shipped Via: UPS or <input type="checkbox"/> Client drop Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No - Temp (°C): 21.2 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)

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



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Columbia Laboratories
Sample Receipt Form

Revision: 2.00 Document Control: CF015
Revised: 01/11/2021 Effective: 05/16/2021

Job Number: 21-005045 Search Name: _____

Package/Cooler opened on (if different than received date/time) Date: 5/6/21 Time: 11:10

Received By (Initials): JU Logged in by (Initials): _____ Date: _____ Time: _____

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

Does date match collection date on COC? _____ YES NO NA

2) Was Chain of Custody (COC) included in the package/cooler? YES NO NA JU

3) Was COC signed when relinquished and received? (time, date)? YES NO NA 5/6/21

4) How was the package/cooler delivered?
UPS FEDEX USPS CLIENT COURIER OTHER: _____

Tracking Number (written in or copy of shipping label): 1Z 52W 404 01 4608

5) Was packing material used? YES NO NA 3086

Peanuts Bubble Wrap Foam Paper Other: _____

6) Was temperature upon receipt 4°C+ 2°C (if appropriate)? YES NO NA
If not, client contacted: _____

Proceed? YES NO

7) Was there evidence of cooling? 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

16) Sample location prior to login: R99 R39 R44 F44 Ambient Shelf Cannabis Table Other: _____

Explain any discrepancies: _____

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Laboratory Quality Control Results

Batch ID: 2104086

Method Blank		Laboratory Control Sample							
Analyte	Result	LOQ	Notes	Result	Spike	Units	%Rec	Limits	Notes
Propane	ND	< 200		452	595	µg/g	76.0	70 - 130	
Isobutane	ND	< 200		590	761	µg/g	77.5	70 - 130	
Butane	ND	< 200		596	761	µg/g	78.3	70 - 130	
2,2-Dimethylpropane	ND	< 200		734	955	µg/g	76.9	70 - 130	
Methanol	ND	< 200		1490	1620	µg/g	92.0	70 - 130	
Ethylene Oxide	ND	< 30		44.2	58.3	µg/g	75.9	70 - 130	
2-Methylbutane	ND	< 200		1490	1620	µg/g	92.0	70 - 130	
Hexane	ND	< 200		1550	1610	µg/g	96.3	70 - 130	
Ethanol	ND	< 200		1470	1620	µg/g	90.7	70 - 130	
Ethyl Ether	ND	< 200		1480	1600	µg/g	92.5	70 - 130	
2,2-Dimethylbutane	ND	< 30		160	182	µg/g	87.9	70 - 130	
Acetone	ND	< 200		1450	1600	µg/g	90.6	70 - 130	
2-Propanol	ND	< 200		1500	1670	µg/g	89.8	70 - 130	
Ethyl Formate	ND	< 500		1180	1610	µg/g	73.3	70 - 130	
Acetonitrile	ND	< 100		453	490	µg/g	92.4	70 - 130	
Methyl Acetate	ND	< 500		1580	1600	µg/g	98.8	70 - 130	
2,3-Dimethylbutane	ND	< 30		139	165	µg/g	84.2	70 - 130	
Dichloromethane	ND	< 200		483	481	µg/g	100.4	70 - 130	
2-Methylpentane	ND	< 30		137	171	µg/g	80.1	70 - 130	
MTBE	ND	< 500		1540	1610	µg/g	95.7	70 - 130	
3-Methylpentane	ND	< 30		158	171	µg/g	92.4	70 - 130	
Hexane	ND	< 30		165	168	µg/g	98.2	70 - 130	
1-Propanol	ND	< 500		1470	1600	µg/g	91.9	70 - 130	
Methyl ethyl ketone	ND	< 500		1620	1620	µg/g	100.0	70 - 130	
Ethyl acetate	ND	< 200		1560	1660	µg/g	94.0	70 - 130	
2-Butanol	ND	< 200		1510	1630	µg/g	92.6	70 - 130	
Tetrahydrofuran	ND	< 100		435	485	µg/g	89.7	70 - 130	
Cyclohexane	ND	< 200		1500	1610	µg/g	93.2	70 - 130	
2-methyl-1-propanol	ND	< 500		1330	1610	µg/g	82.6	70 - 130	
Benzene	ND	< 1		4.65	5.62	µg/g	82.7	70 - 130	
Isopropyl Acetate	ND	< 200		1460	1610	µg/g	90.7	70 - 130	
Heptane	ND	< 200		1460	1610	µg/g	90.7	70 - 130	
1-Butanol	ND	< 500		1290	1610	µg/g	80.1	70 - 130	
Propyl Acetate	ND	< 500		1680	1610	µg/g	104.3	70 - 130	
1,4-Dioxane	ND	< 100		476	511	µg/g	93.2	70 - 130	
2-Ethoxyethanol	ND	< 30		156	168	µg/g	92.9	70 - 130	
Methylisobutylketone	ND	< 500		1570	1650	µg/g	95.2	70 - 130	
3-Methyl-1-butanol	ND	< 500		1420	1610	µg/g	88.2	70 - 130	
Ethylene Glycol	ND	< 200		429	530	µg/g	80.9	70 - 130	
Toluene	ND	< 200		479	487	µg/g	98.4	70 - 130	
Isobutyl Acetate	ND	< 500		1520	1610	µg/g	94.4	70 - 130	
1-Pentanol	ND	< 500		1420	1610	µg/g	88.2	70 - 130	
Butyl Acetate	ND	< 500		1480	1620	µg/g	91.4	70 - 130	
Ethylbenzene	ND	< 200		974	989	µg/g	98.6	70 - 130	
m,p-Xylene	ND	< 200		922	978	µg/g	94.3	70 - 130	
o-Xylene	ND	< 200		998	1040	µg/g	96.0	70 - 130	
Cumene	ND	< 30		156	177	µg/g	88.1	70 - 130	
Anisole	ND	< 500		1600	1620	µg/g	98.8	70 - 130	
DMSD	ND	< 500		1680	1640	µg/g	102.4	70 - 130	
1,2-dimethoxyethane	ND	< 50		150	164	µg/g	91.5	70 - 130	
Trimethylamine	ND	< 500		1680	1600	µg/g	105.0	70 - 130	
N,N-dimethylformamide	ND	< 150		517	518	µg/g	99.8	70 - 130	
N,N-dimethylacetamide	ND	< 150		550	488	µg/g	112.7	70 - 130	
Pyridine	ND	< 50		150	172	µg/g	87.2	70 - 130	



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QC - Sample Duplicate Sample ID: 21-004742-0003

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	43.3	48.2	30	µg/g	10.7	< 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	
Methyl ethyl ketone	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



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Report Number: 21-005045/D04.R00
Report Date: 05/13/2021
ORELAP#: OR100028
Purchase Order:
Received: 05/06/21 11:10

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

Laboratory Quality Control Results

JAOAC2015 V986									
Batch ID: 2104171									
Laboratory Control Sample									
Analyte	Result	Spike	Units	% Rec	Limits		Evaluation	Notes	
CBDV-A	0.211	0.2	%	105	85.0	- 115	Acceptable		
CBDV	0.220	0.2	%	110	85.0	- 115	Acceptable		
CBD-A	0.195	0.2	%	97.3	85.0	- 115	Acceptable		
CBG-A	0.211	0.2	%	105	85.0	- 115	Acceptable		
CBG	0.218	0.2	%	109	85.0	- 115	Acceptable		
CBD	0.210	0.2	%	105	85.0	- 115	Acceptable		
THCV	0.215	0.2	%	107	85.0	- 115	Acceptable		
THCVA	0.201	0.2	%	100	85.0	- 115	Acceptable		
CBN	0.219	0.2	%	110	85.0	- 115	Acceptable		
THC	0.206	0.2	%	103	85.0	- 115	Acceptable		
D8THC	0.206	0.2	%	103	85.0	- 115	Acceptable		
CBL	0.205	0.2	%	103	85.0	- 115	Acceptable		
CBC	0.214	0.2	%	107	85.0	- 115	Acceptable		
THCA	0.174	0.2	%	87.1	85.0	- 115	Acceptable		
CBCA	0.200	0.2	%	100	85.0	- 115	Acceptable		

Method Blank

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

Abbreviations

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

Units of Measure:

% - Percent



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Report Number: 21-005045/D04.R00
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Received: 05/06/21 11:10

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

Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 2104171						
Sample Duplicate		Sample ID: 21-004729-0004-01						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBDV	0.151	0.152	0.1	%	0.639	< 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	34.8	35.5	0.1	%	1.81	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBN	0.226	0.226	0.1	%	0.0610	< 20	Acceptable	
THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
D8THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBC	0.375	0.368	0.1	%	2.01	< 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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Report Number: 21-005045/D04.R00
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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: 2104199				
Matrix Spike/Matrix Spike Duplicate Recoveries		Sample ID: 21-005067-0008									
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes	
Acephate	0.000	0.840	0.811	1.000	3.6%	< 30	84.0%	81.1%	50 - 150		
Acequinocyl	0.000	3.430	3.104	4.000	10.0%	< 30	85.8%	77.6%	50 - 150		
Acetamidiprid	0.000	0.362	0.373	0.400	3.0%	< 30	90.5%	93.3%	50 - 150		
Aldicarb	0.000	0.723	0.803	0.800	10.4%	< 30	90.4%	100.3%	50 - 150		
Abamectin	0.000	0.856	0.813	1.000	5.2%	< 30	85.6%	81.3%	50 - 150		
Azoxystrobin	0.000	0.354	0.332	0.400	6.4%	< 30	88.6%	83.1%	50 - 150		
Bifenazate	0.000	0.327	0.344	0.400	5.1%	< 30	81.8%	86.1%	50 - 150		
Bifenthrin	0.000	0.221	0.206	0.400	7.1%	< 30	55.3%	51.6%	50 - 150		
Boscalid	0.000	0.681	0.871	0.800	24.4%	< 30	85.1%	108.9%	50 - 150		
Carbaryl	0.000	0.330	0.340	0.400	3.0%	< 30	82.6%	85.1%	50 - 150		
Carbofuran	0.000	0.343	0.366	0.400	6.5%	< 30	85.7%	91.5%	50 - 150		
Chlorantraniliprol	0.000	0.369	0.398	0.400	7.6%	< 30	92.3%	99.6%	50 - 150		
Chlorfenapyr	0.000	2.738	2.607	2.000	4.9%	< 30	136.9%	130.4%	50 - 150		
Chlorpyrifos	0.000	0.400	0.329	0.400	19.5%	< 30	99.9%	82.1%	50 - 150		
Clofentezine	0.000	0.288	0.324	0.400	11.7%	< 30	72.0%	80.9%	50 - 150		
Cyfluthrin	0.000	1.441	1.725	2.000	18.0%	< 30	72.0%	86.3%	30 - 150		
Cypermethrin	0.000	2.028	2.067	2.000	1.9%	< 30	101.4%	103.4%	50 - 150		
Daminozide	0.001	1.512	1.485	2.000	1.8%	< 30	75.5%	74.2%	30 - 150		
Diazinon	0.000	0.404	0.342	0.400	16.7%	< 30	101.1%	85.5%	50 - 150		
Dichlorvos	0.000	1.707	1.579	2.000	7.8%	< 30	85.4%	79.0%	50 - 150		
Dimethoat	0.000	0.352	0.393	0.400	11.1%	< 30	87.9%	98.3%	50 - 150		
Ethoprophos	0.000	0.346	0.339	0.400	2.1%	< 30	86.5%	84.7%	50 - 150		
Etofenprox	0.000	0.744	0.745	0.800	0.1%	< 30	93.0%	93.1%	50 - 150		
Etoxazol	0.000	0.321	0.342	0.400	6.5%	< 30	80.2%	85.6%	50 - 150		
Fenoxycarb	0.000	0.365	0.320	0.400	13.1%	< 30	91.2%	80.0%	50 - 150		
Fenpyroximat	0.000	0.697	0.651	0.800	7.0%	< 30	87.2%	81.3%	50 - 150		
Fipronil	0.000	0.476	0.458	0.800	3.9%	< 30	59.5%	57.2%	50 - 150		
Fonicamid	0.000	0.870	0.873	1.000	0.4%	< 30	87.0%	87.3%	50 - 150		
Fludioxonil	0.000	0.816	0.727	0.800	11.5%	< 30	102.0%	90.9%	50 - 150		
Hexythiazox	0.000	1.151	1.003	1.000	13.7%	< 30	115.1%	100.3%	50 - 150		
Imazalil	0.000	0.371	0.334	0.400	10.5%	< 30	92.7%	83.4%	50 - 150		
Imidacloprid	0.000	0.709	0.706	0.800	0.4%	< 30	88.7%	88.3%	50 - 150		
Kresoxim-Methyl	0.000	0.649	0.585	0.800	10.3%	< 30	81.1%	73.1%	50 - 150		
Malathion	0.000	0.350	0.350	0.400	0.1%	< 30	87.6%	87.6%	50 - 150		
Metaxyl	0.000	0.375	0.364	0.400	2.9%	< 30	93.8%	91.1%	50 - 150		
Methiocarb	0.102	0.452	0.485	0.400	9.0%	< 30	87.6%	95.8%	50 - 150		
Methomyl	0.000	0.788	0.666	0.800	16.8%	< 30	98.5%	83.2%	50 - 150		
MGK 264	0.000	0.360	0.351	0.400	2.5%	< 30	89.9%	87.7%	50 - 150		
Myclobutanil	0.000	0.272	0.303	0.400	10.8%	< 30	67.9%	75.7%	50 - 150		
Naled	0.000	0.720	0.941	1.000	26.5%	< 30	72.0%	94.1%	50 - 150		
Oxamyl	0.000	1.891	1.888	2.000	0.1%	< 30	94.5%	94.4%	50 - 150		
Paclobutrazol	0.000	0.645	0.738	0.800	13.5%	< 30	80.6%	92.3%	50 - 150		
Parathion Methyl	0.000	0.480	0.530	0.800	10.0%	< 30	60.0%	66.3%	30 - 150		
Permethrin	0.000	0.393	0.427	0.400	8.1%	< 30	98.3%	106.7%	50 - 150		
Phosmet	0.000	0.305	0.367	0.400	18.6%	< 30	76.3%	91.9%	50 - 150		
Piperonyl butoxide	0.000	1.708	1.604	2.000	6.3%	< 30	85.4%	80.2%	50 - 150		
Prallethrin	0.000	0.331	0.361	0.400	8.6%	< 30	82.8%	90.2%	50 - 150		
Propiconazole	0.000	0.624	0.577	0.800	7.7%	< 30	77.9%	72.1%	50 - 150		
Propoxur	0.000	0.340	0.353	0.400	3.8%	< 30	85.0%	88.4%	50 - 150		
Pyrethrins	0.000	0.327	0.326	0.413	0.3%	< 30	79.2%	79.0%	50 - 150		
Pyridaben	0.000	0.376	0.490	0.400	26.3%	< 30	94.1%	122.6%	50 - 150		
Spinosad	0.000	0.422	0.381	0.388	10.1%	< 30	108.7%	98.3%	50 - 150		
Spiromesifen	0.000	0.367	0.357	0.400	2.7%	< 30	91.7%	89.3%	50 - 150		
Spirotetramat	0.000	0.375	0.375	0.400	0.0%	< 30	93.7%	93.7%	50 - 150		
Spiroxamine	0.000	0.674	0.709	0.800	5.0%	< 30	84.3%	88.6%	50 - 150		
Tebuconazol	0.000	0.549	0.504	0.800	8.6%	< 30	68.6%	63.0%	50 - 150		
Thiadoprid	0.000	0.349	0.364	0.400	4.1%	< 30	87.4%	91.0%	50 - 150		
Thiamethoxam	0.000	0.367	0.377	0.400	2.9%	< 30	91.6%	94.3%	50 - 150		
Trifloxystrobin	0.000	0.321	0.353	0.400	9.6%	< 30	80.2%	88.3%	50 - 150		



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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: 2104199				
Method Blank		Laboratory Control Sample						
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Acephate	0.000	< 0.200		1.005	1.000	100.5	72.4 - 126	
Acequinocyl	0.000	< 1.000		4.135	4.000	103.4	79.8 - 122	
Acetamiprid	0.000	< 0.100		0.411	0.400	102.6	84.3 - 119	
Aldicarb	0.000	< 0.200		0.691	0.800	86.3	82.9 - 120	
Abamectin	0.000	< 0.288		0.982	1.000	98.2	79.6 - 124	
Azoxystrobin	0.000	< 0.100		0.403	0.400	100.7	79.4 - 127	
Bifenazate	0.000	< 0.100		0.351	0.400	87.8	81.6 - 124	
Bifenthrin	0.000	< 0.100		0.454	0.400	113.6	71.5 - 133	
Boscalid	0.000	< 0.100		0.622	0.800	77.7	74.0 - 131	
Carbaryl	0.000	< 0.100		0.387	0.400	96.7	82.1 - 121	
Carbofuran	0.002	< 0.100		0.396	0.400	99.1	85.1 - 125	
Chlorantraniliprol	0.000	< 0.100		0.414	0.400	103.4	70.6 - 131	
Chlorfenapyr	0.000	< 1.000		1.910	2.000	95.5	71.0 - 132	
Chlorpyrifos	0.000	< 0.100		0.415	0.400	103.7	72.3 - 134	
Clofentezine	0.000	< 0.100		0.380	0.400	94.9	80.1 - 117	
Cyfluthrin	0.000	< 1.000		2.154	2.000	107.7	71.8 - 133	
Cypermethrin	0.000	< 1.000		2.240	2.000	112.0	83.1 - 126	
Daminozide	0.000	< 1.000		2.019	2.000	101.0	74.6 - 124	
Diazinon	0.000	< 0.100		0.494	0.400	123.5	78.9 - 126	
Dichlorvos	0.000	< 0.500		1.766	2.000	88.3	76.1 - 124	
Dimethoat	0.000	< 0.100		0.442	0.400	110.5	82.8 - 119	
Ethoprophos	0.000	< 0.100		0.371	0.400	92.7	69.5 - 129	
Etofenprox	0.000	< 0.100		0.711	0.800	88.9	85.2 - 128	
Etoxazol	0.000	< 0.100		0.354	0.400	88.6	79.7 - 126	
Fenoxycarb	0.000	< 0.100		0.430	0.400	107.5	84.1 - 122	
Fenpyroximat	0.000	< 0.100		0.880	0.800	110.1	82.4 - 126	
Fipronil	0.000	< 0.100		0.883	0.800	110.3	80.6 - 125	
Flonicamid	0.000	< 0.400		0.988	1.000	98.8	80.9 - 119	
Fludoxonil	0.000	< 0.100		0.821	0.800	102.6	73.0 - 136	
Hexythiazox	0.000	< 0.400		0.977	1.000	97.7	82.5 - 125	
Imazalil	0.000	< 0.100		0.353	0.400	88.2	81.4 - 128	
Imidacloprid	0.000	< 0.200		0.753	0.800	94.1	76.9 - 125	
Kresoxim-Methyl	0.000	< 0.100		0.714	0.800	89.3	82.6 - 124	
Malathion	0.000	< 0.100		0.402	0.400	100.5	74.1 - 130	
Metaxalyl	0.000	< 0.100		0.399	0.400	99.7	79.7 - 124	
Methiocarb	0.002	< 0.100		0.426	0.400	106.6	81.0 - 123	
Methomyl	0.000	< 0.200		0.736	0.800	92.0	79.4 - 118	
MGK 264	0.000	< 0.100		0.361	0.400	90.3	77.2 - 128	
Myclobutanil	0.000	< 0.100		0.420	0.400	105.1	80.6 - 123	
Naled	0.000	< 0.200		1.026	1.000	102.6	80.3 - 126	
Oxamyl	0.000	< 0.400		2.022	2.000	101.1	80.1 - 117	
Paclobutrazol	0.000	< 0.200		0.875	0.800	109.3	81.6 - 126	
Parathion Methyl	0.000	< 0.200		0.739	0.800	92.3	72.5 - 135	
Permethrin	0.000	< 0.100		0.484	0.400	120.9	75.0 - 139	
Phosmet	0.000	< 0.100		0.380	0.400	94.9	82.0 - 122	
Piperonyl butoxide	0.000	< 1.000		1.793	2.000	89.6	81.3 - 137	
Prallethrin	0.000	< 0.200		0.411	0.400	102.8	81.3 - 127	
Propiconazole	0.000	< 0.200		0.942	0.800	117.8	84.7 - 121	
Propoxur	0.000	< 0.100		0.392	0.400	98.0	84.2 - 121	
Pyrethrins	0.000	< 0.500		0.352	0.413	85.2	76.1 - 141	
Pyridaben	0.000	< 0.100		0.372	0.400	93.1	79.2 - 147	
Spinosad	0.000	< 0.100		0.424	0.388	109.2	88.4 - 127	
Spiromesifen	0.000	< 0.100		0.374	0.400	93.5	79.9 - 127	
Spirotetramat	0.000	< 0.100		0.394	0.400	98.6	81.1 - 121	
Spiroxamine	0.000	< 0.100		0.753	0.800	94.1	78.4 - 133	
Tebuconazol	0.000	< 0.200		0.908	0.800	113.4	83.1 - 122	
Thiadoprid	0.000	< 0.100		0.406	0.400	101.4	84.3 - 120	
Thiamethoxam	0.000	< 0.100		0.415	0.400	103.7	80.1 - 121	
Trifloxystrobin	0.000	< 0.100		0.507	0.400	126.8	81.4 - 125	Q1



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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.