Columbia LABORATORIES
A Tentamus Company

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

Report Number:	22-009572/D003.R000
Report Date:	08/19/2022
ORELAP#:	OR100028
Purchase Order:	
Received:	08/10/22 12:00

Customer:	Mission Farms CBD
Product identity:	Distillate Lot #0822
Client/Metrc ID:	.
Laboratory ID:	22-009572-0001

Summary

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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ORELAP#: OR100028
Purchase Order:
Received: 08/10/22 12:00

Customer: Mission Farms CBD
1001 SW Disk DR #250
Bend Oregon 97702
United States of America (USA)

Product identity: Distillate Lot #0822
Client/Metrc ID: .
Sample Date:
Laboratory ID: 22-009572-0001
Evidence of Cooling: No
Temp: 25 °C
Relinquished by: UPS

Sample Results

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2206794	08/14/22	AOAC 2014.05 (RAPID)þ		I
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2206794	08/14/22	AOAC 2014.05 (RAPID)þ		I

Solvents

Method: Residual Solvents by GC/MSþ **Units** µg/g **Batch** 2207035 **Analyze** 08/19/22 11:49 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 (Isopentane)	< LOQ		200		
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass	
2,2-Dimethylbutane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< 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 (Cumene)	< LOQ	70.0	30.0	pass		m,p-Xylene	< LOQ		200		
Methanol	< LOQ	3000	200	pass		Methylene chloride	< LOQ	600	60.0	pass	
Methylpropane (Isobutane)	< 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 benzene	< LOQ	2170	600	pass	

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Received: 08/10/22 12:00

Pesticides **Method:** AOAC 2007.01 & EN 15662 (mod)[þ] **Units** mg/kg **Batch** 2206905 **Analyze** 08/16/22 11:13 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							

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Arsenic	< LOQ	0.200	mg/kg	0.0755	2206926	08/16/22	AOAC 2013.06 (mod.)[þ]	pass	
Cadmium	< LOQ	0.200	mg/kg	0.0755	2206926	08/16/22	AOAC 2013.06 (mod.)[þ]	pass	
Lead	< LOQ	0.500	mg/kg	0.0755	2206926	08/16/22	AOAC 2013.06 (mod.)[þ]	pass	
Mercury	< LOQ	0.100	mg/kg	0.0378	2206926	08/16/22	AOAC 2013.06 (mod.)[þ]	pass	

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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, CCR title 16-division 42. BCC-section 5723

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.

ᵇ = ISO/IEC 17025:2017 accredited method.
¥ = TNI accredited analyte.

Units of Measure

cfu/g = Colony forming units per gram
µg/g = Microgram per gram
mg/kg = Milligram per kilogram = parts per million (ppm)
% wt = µg/g divided by 10,000

Glossary of Qualifiers

I: Insufficient sample received to meet method requirements.

Approved Signatory

Derrick Tanner
General Manager

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Hemp & Cannabis: Usable / Extract / Finished Product Chain of Custody Record

ORELAP ID: OR100028 ANAB ISO 17025 ID: AT-1508

Document Control ID: 2832 Revision: 5
Effective: 01/04/2022

Company: MissionFarmsCBD
Contact: BenJoyce
Address: 60857YellowLeafStreet
City: Bend State: OR Zip Code: _____
Email Results: _____
Ph: (925) -_____

Billing Contact (if different)
Name: _____ Email: _____
Address: _____
City: _____ State: _____ Zip: _____
Ph: (___) -_____

PO Number: _____
Project ID: _____
Batch ID: _____
Sampled by: _____
Custom Reporting: _____

Source Material: ☐ - Ind. Hemp product | ☐ - Rec. Cannabis
Reporting Type: ☐ - Compliance | ☐ - R&D
Report to: ☐ - METRC | ☐ - ODA | ☐ - USDA |
☐ - Other:

Turnaround time (TAT - Business Days):
☐ - 5BD | ☐ - 3BD* | ☐ - 2BD*
*Check for availability

Lab ID	Client Sample Identification	Sample date	Analysis Requested											Material Type †	Weight (Units)	Comments/Metrc ID
	DistillateLot#0822		4	4	4	4										Pleasereport in mg/g and mg/unit weight and includebatch# for eachsample

Signature - Relinquished By:	Date	Time	Signature - Received By:	Date	Time	Lab Use Only:
AndrewBardwil	08/09/22	1305	AE	8/10/22	1200	☐ Shipped Via: _____ ☐ Client drop off
						Evidence of cooling: ☐ Yes ☐ No - Temp °C): 25
						Sample in good condition: ☐ Yes ☐ No _____
						Payment: ☐ Cash ☐ Check ☐ CC ☐ Net: _____
						Prelog storage:

† - Material Type Codes: Plant Material (P) ; Isolate (I) ; Concentrate/Extract (C) ; Tincture/Topical (T) ; Edible (E) ; Beverage (B) ; Vapor Product (V)

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms

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Purchase Order:
Received: 08/10/22 12:00

Revision: 3 Document ID: 3120
Legacy ID: CFL-C21 Worksheet Validated 10/30/2020

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 **Units:** mg/Kg **Batch ID:** 2206905

Method Blank				Laboratory Control Sample					
Analyte	**Blank Result**	**Blank Limits**	**Notes**	**LCS Result**	**LCS Spike**	**LCS % Rec**	**Limits**		**Notes**
Abamectin	0.000	< 0.250		0.933	1.000	93.3	50.0	150	
Acephate	0.000	< 0.250		0.984	1.000	98.4	60.0	120	
Acequinocyl	0.000	< 1.000		3.352	4.000	83.8	40.0	160	
Acetamiprid	0.000	< 0.100		0.386	0.400	96.4	60.0	120	
Aldicarb	0.000	< 0.200		0.750	0.800	93.7	60.0	120	
Azoxystrobin	0.000	< 0.100		0.414	0.400	103.6	60.0	120	
Bifenazate	0.000	< 0.100		0.420	0.400	104.9	60.0	120	
Bifenthrin	0.000	< 0.100		0.370	0.400	92.5	50.0	150	
Boscalid	0.000	< 0.200		0.887	0.800	110.9	60.0	120	
Carbaryl	0.000	< 0.100		0.385	0.400	96.3	60.0	120	
Carbofuran	0.000	< 0.100		0.383	0.400	95.6	60.0	120	
Chlorantraniliprole	0.000	< 0.100		0.410	0.400	102.5	60.0	120	
Chlorfenapyr	0.000	< 0.500		1.562	2.000	78.1	60.0	120	
Chlorpyrifos	0.000	< 0.100		0.383	0.400	95.6	60.0	120	
Clofentezine	0.000	< 0.100		0.374	0.400	93.4	60.0	120	
Cyfluthrin	0.000	< 0.500		1.944	2.000	97.2	50.0	150	
Cypermethrin	0.000	< 0.500		1.845	2.000	92.3	50.0	150	
Daminozide	0.000	< 0.500		2.032	2.000	101.6	60.0	120	
Diazinon	0.000	< 0.100		0.414	0.400	103.5	60.0	120	
Dichlorvos	0.000	< 0.500		2.174	2.000	108.7	60.0	120	
Dimethoate	0.000	< 0.100		0.384	0.400	95.9	60.0	120	
Ethoprophos	0.000	< 0.100		0.405	0.400	101.3	60.0	120	
Etofenprox	0.000	< 0.200		0.770	0.800	96.3	50.0	150	
Etoxazole	0.000	< 0.100		0.413	0.400	103.3	60.0	120	
Fenoxycarb	0.000	< 0.100		0.400	0.400	100.0	60.0	120	
Fenpyroximate	0.000	< 0.200		0.764	0.800	95.5	60.0	120	
Fipronil	0.000	< 0.200		0.828	0.800	103.4	60.0	120	
Flonicamid	0.000	< 0.250		1.047	1.000	104.7	60.0	120	
Fludioxonil	0.000	< 0.200		0.818	0.800	102.3	50.0	150	
Hexythiazox	0.000	< 0.250		0.937	1.000	93.7	60.0	120	
Imazalil	0.000	< 0.100		0.387	0.400	96.7	60.0	120	
Imidacloprid	0.000	< 0.200		0.773	0.800	96.7	60.0	120	
Kresoxim-methyl	0.000	< 0.200		0.800	0.800	100.0	60.0	120	
Malathion	0.000	< 0.100		0.408	0.400	102.0	60.0	120	
Metalaxyl	0.000	< 0.100		0.389	0.400	97.4	60.0	120	
Methiocarb	0.000	< 0.100		0.370	0.400	92.5	60.0	120	
Methomyl	0.000	< 0.200		0.796	0.800	99.5	60.0	120	
MGK-264	0.000	< 0.100		0.371	0.400	92.7	50.0	150	
Myclobutanil	0.000	< 0.100		0.413	0.400	103.3	60.0	120	
Naled	0.000	< 0.250		0.970	1.000	97.0	50.0	150	
Oxamyl	0.000	< 0.500		1.865	2.000	93.2	60.0	120	
Paclobutrazole	0.000	< 0.200		0.862	0.800	107.8	60.0	120	
Parathion-Methyl	0.000	< 0.200		0.659	0.800	82.4	50.0	150	
Permethrin	0.000	< 0.100		0.369	0.400	92.2	50.0	150	
Phosmet	0.000	< 0.100		0.396	0.400	99.1	50.0	150	
Piperonyl butoxide	0.000	< 0.500		2.263	2.000	113.2	60.0	120	
Prallethrin	0.000	< 0.100		0.363	0.400	90.8	60.0	120	
Propiconazole	0.000	< 0.200		0.774	0.800	96.7	60.0	120	
Propoxur	0.000	< 0.100		0.414	0.400	103.6	60.0	120	
Pyrethrin (Summe)	0.000	< 0.100		0.394	0.413	95.5	60.0	120	
Pyridaben	0.000	< 0.100		0.393	0.400	98.2	50.0	150	
Spinosad	0.000	< 0.100		0.393	0.388	101.4	50.0	150	
Spiromesifen	0.000	< 0.100		0.400	0.400	100.0	60.0	120	
Spirotetramat	0.000	< 0.100		0.403	0.400	100.8	60.0	120	
Spiroxamine	0.000	< 0.200		0.795	0.800	99.4	60.0	120	
Tebuconazole	0.000	< 0.200		0.814	0.800	101.7	60.0	120	
Thiacloprid	0.000	< 0.100		0.395	0.400	98.9	60.0	120	
Thiamethoxam	0.000	< 0.100		0.419	0.400	104.8	60.0	120	
Trifloxystrobin	0.000	< 0.100		0.411	0.400	102.9	60.0	120	

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Revision: 3 Document ID: 3120
Legacy ID: CFL-C21 Worksheet Validated 10/30/2020

Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 | **Units:** mg/Kg | **Batch ID:** 2206905

Matrix Spike/Matrix Spike Duplicate Recoveries | **Sample ID:** 22-008728-0001

Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.000	0.848	0.830	1.000	2.2%	< 30	84.8%	83.0%	50 - 150	
Acephate	0.000	1.004	0.941	1.000	6.5%	< 30	100.4%	94.1%	50 - 150	
Acequinocyl	0.000	0.255	0.224	4.000	12.9%	< 30	6.4%	5.6%	50 - 150	Q
Acetamiprid	0.000	0.394	0.375	0.400	5.1%	< 30	98.6%	93.7%	50 - 150	
Aldicarb	0.000	0.773	0.731	0.800	5.6%	< 30	96.6%	91.4%	50 - 150	
Azoxystrobin	0.000	0.404	0.371	0.400	8.6%	< 30	101.0%	92.7%	50 - 150	
Bifenazate	0.000	0.432	0.415	0.400	4.1%	< 30	108.1%	103.8%	50 - 150	
Bifenthrin	0.000	0.193	0.185	0.400	4.1%	< 30	48.2%	46.2%	50 - 150	Q
Boscalid	0.000	0.870	0.753	0.800	14.4%	< 30	108.8%	94.2%	50 - 150	
Carbaryl	0.000	0.374	0.361	0.400	3.5%	< 30	93.6%	90.4%	50 - 150	
Carbofuran	0.000	0.375	0.352	0.400	6.4%	< 30	93.8%	88.0%	50 - 150	
Chlorantraniliprole	0.000	0.415	0.394	0.400	5.1%	< 30	103.7%	98.5%	50 - 150	
Chlorfenapyr	0.000	1.977	2.089	2.000	5.5%	< 30	98.9%	104.5%	50 - 150	
Chlorpyrifos	0.000	0.378	0.340	0.400	10.4%	< 30	94.4%	85.1%	50 - 150	
Clofentezine	0.000	0.378	0.363	0.400	3.8%	< 30	94.4%	90.9%	50 - 150	
Cyfluthrin	0.000	1.611	1.484	2.000	8.3%	< 30	80.6%	74.2%	30 - 150	
Cypermethrin	0.000	1.830	1.748	2.000	4.6%	< 30	91.5%	87.4%	50 - 150	
Daminozide	0.000	1.951	1.876	2.000	3.9%	< 30	97.6%	93.8%	30 - 150	
Diazinon	0.000	0.410	0.393	0.400	4.3%	< 30	102.5%	98.2%	50 - 150	
Dichlorvos	0.000	2.089	2.093	2.000	0.2%	< 30	104.4%	104.7%	50 - 150	
Dimethoate	0.000	0.394	0.383	0.400	2.7%	< 30	98.5%	95.8%	50 - 150	
Ethoprophos	0.000	0.424	0.392	0.400	7.9%	< 30	106.1%	98.0%	50 - 150	
Etofenprox	0.000	0.722	0.676	0.800	6.7%	< 30	90.3%	84.5%	50 - 150	
Etoxazole	0.000	0.392	0.369	0.400	6.2%	< 30	98.1%	92.1%	50 - 150	
Fenoxycarb	0.000	0.393	0.371	0.400	5.9%	< 30	98.3%	92.7%	50 - 150	
Fenpyroximate	0.000	0.740	0.729	0.800	1.6%	< 30	92.5%	91.1%	50 - 150	
Fipronil	0.000	0.688	0.678	0.800	1.4%	< 30	86.0%	84.8%	50 - 150	
Flonicamid	0.000	0.928	1.009	1.000	8.3%	< 30	92.8%	100.9%	50 - 150	
Fludioxonil	0.000	0.729	0.729	0.800	0.0%	< 30	91.1%	91.1%	50 - 150	
Hexythiazox	0.000	0.540	0.503	1.000	7.1%	< 30	54.0%	50.3%	50 - 150	
Imazalil	0.000	0.373	0.356	0.400	4.7%	< 30	93.4%	89.1%	50 - 150	
Imidacloprid	0.000	0.740	0.728	0.800	1.6%	< 30	92.5%	91.0%	50 - 150	
Kresoxim-methyl	0.000	0.737	0.783	0.800	6.0%	< 30	92.1%	97.9%	50 - 150	
Malathion	0.000	0.389	0.378	0.400	2.7%	< 30	97.2%	94.6%	50 - 150	
Metalaxyl	0.000	0.409	0.370	0.400	10.0%	< 30	102.2%	92.4%	50 - 150	
Methiocarb	0.000	0.368	0.385	0.400	4.5%	< 30	92.0%	96.3%	50 - 150	
Methomyl	0.000	0.816	0.805	0.800	1.4%	< 30	102.0%	100.6%	50 - 150	
MGK-264	0.000	0.365	0.385	0.400	5.2%	< 30	91.3%	96.2%	50 - 150	
Myclobutanil	0.000	0.391	0.396	0.400	1.1%	< 30	97.8%	98.9%	50 - 150	
Naled	0.000	0.963	0.879	1.000	9.1%	< 30	96.3%	87.9%	50 - 150	
Oxamyl	0.000	2.042	2.014	2.000	1.4%	< 30	102.1%	100.7%	50 - 150	
Paclobutrazole	0.000	0.791	0.792	0.800	0.2%	< 30	98.8%	99.0%	50 - 150	
Parathion-Methyl	0.000	0.585	0.636	0.800	8.3%	< 30	73.2%	79.5%	30 - 150	
Permethrin	0.011	0.312	0.295	0.400	5.5%	< 30	75.1%	71.1%	50 - 150	
Phosmet	0.000	0.407	0.401	0.400	1.5%	< 30	101.8%	100.3%	50 - 150	
Piperonyl butoxide	0.000	2.218	2.162	2.000	2.6%	< 30	110.9%	108.1%	50 - 150	
Prallethrin	0.000	0.300	0.298	0.400	0.8%	< 30	75.1%	74.5%	50 - 150	
Propiconazole	0.000	0.753	0.739	0.800	1.8%	< 30	94.1%	92.4%	50 - 150	
Propoxur	0.000	0.412	0.391	0.400	5.4%	< 30	103.1%	97.7%	50 - 150	
Pyrethrin (Summe)	0.015	0.407	0.409	0.413	0.4%	< 30	94.8%	95.3%	50 - 150	
Pyridaben	0.000	0.350	0.321	0.400	8.5%	< 30	87.5%	80.3%	50 - 150	
Spinosad	0.000	0.373	0.372	0.388	0.3%	< 30	96.1%	95.9%	50 - 150	
Spiromesifen	0.000	0.362	0.357	0.400	1.3%	< 30	90.4%	89.3%	50 - 150	
Spirotetramat	0.000	0.415	0.384	0.400	7.7%	< 30	103.8%	96.1%	50 - 150	
Spiroxamine	0.000	0.792	0.781	0.800	1.4%	< 30	99.0%	97.6%	50 - 150	
Tebuconazole	0.000	0.782	0.756	0.800	3.3%	< 30	97.7%	94.5%	50 - 150	
Thiacloprid	0.000	0.394	0.385	0.400	2.2%	< 30	98.5%	96.4%	50 - 150	
Thiamethoxam	0.000	0.403	0.421	0.400	4.4%	< 30	100.8%	105.3%	50 - 150	
Trifloxystrobin	0.000	0.412	0.409	0.400	0.5%	< 30	102.9%	102.4%	50 - 150	

Columbia LABORATORIES
A Tentamus Company

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503-254-1794

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Report Date: 08/19/2022
ORELAP#: OR100028
Purchase Order:
Received: 08/10/22 12:00

Revision: Document ID:
Legacy ID: Effective:

Laboratory Quality Control Results

Residual Solvents **Batch ID:** 2207035

Method Blank					Laboratory Control Sample							
Analyte	**Result**		**LOQ**	**Notes**	**Result**	**Spike**	**Units**	**% Rec**	**Limits**			**Notes**
Propane	ND	<	200		603	572	µg/g	105.4	60	-	120	
Isobutane	ND	<	200		800	731	µg/g	109.4	60	-	120	
Butane	ND	<	200		788	731	µg/g	107.8	60	-	120	
2,2-Dimethylpropane	ND	<	200		1030	936	µg/g	110.0	60	-	120	
Methanol	ND	<	200		1600	1650	µg/g	97.0	60	-	120	
Ethylene Oxide	ND	<	30		64.2	56.2	µg/g	114.2	60	-	120	
2-Methylbutane	ND	<	200		1420	1620	µg/g	87.7	60	-	120	
Pentane	ND	<	200		1430	1610	µg/g	88.8	60	-	120	
Ethanol	ND	<	200		1570	1620	µg/g	96.9	70	-	130	
Ethyl Ether	ND	<	200		1500	1600	µg/g	93.8	60	-	120	
2,2-Dimethylbutane	ND	<	30		157	167	µg/g	94.0	60	-	120	
Acetone	ND	<	200		1580	1620	µg/g	97.5	60	-	120	
2-Propanol	ND	<	200		1590	1610	µg/g	98.8	60	-	120	
Ethyl Formate	ND	<	500		1490	1620	µg/g	92.0	70	-	130	
Acetonitrile	ND	<	100		600	635	µg/g	94.5	60	-	120	
Methyl Acetate	ND	<	500		1710	1630	µg/g	104.9	70	-	130	
2,3-Dimethylbutane	ND	<	30		198	177	µg/g	111.9	60	-	120	
Dichloromethane	ND	<	60		482	498	µg/g	96.8	60	-	120	
2-Methylpentane	ND	<	30		170	166	µg/g	102.4	60	-	120	
MTBE	ND	<	500		1660	1600	µg/g	103.8	70	-	130	
3-Methylpentane	ND	<	30		168	175	µg/g	96.0	60	-	120	
Hexane	ND	<	30		168	174	µg/g	96.6	60	-	120	
1-Propanol	ND	<	500		1680	1620	µg/g	103.7	70	-	130	
Methylethylketone	ND	<	500		1700	1600	µg/g	106.3	70	-	130	
Ethyl acetate	ND	<	200		1530	1610	µg/g	95.0	60	-	120	
2-Butanol	ND	<	200		1520	1620	µg/g	93.8	60	-	120	
Tetrahydrofuran	ND	<	100		452	507	µg/g	89.2	60	-	120	
Cyclohexane	ND	<	200		1490	1610	µg/g	92.5	60	-	120	
2-methyl-1-propanol	ND	<	500		1630	1640	µg/g	99.4	70	-	130	
Benzene	ND	<	1		4.42	5.22	µg/g	84.7	60	-	120	
Isopropyl Acetate	ND	<	200		1510	1610	µg/g	93.8	60	-	120	
Heptane	ND	<	200		1480	1610	µg/g	91.9	60	-	120	
1-Butanol	ND	<	500		1560	1610	µg/g	96.9	70	-	130	
Propyl Acetate	ND	<	500		1610	1610	µg/g	100.0	70	-	130	
1,4-Dioxane	ND	<	100		453	508	µg/g	89.2	60	-	120	
2-Ethoxyethanol	ND	<	30		149	165	µg/g	90.3	60	-	120	
Methylisobutylketone	ND	<	500		1520	1610	µg/g	94.4	70	-	130	
3-Methyl-1-butanol	ND	<	500		1450	1600	µg/g	90.6	70	-	130	
Ethylene Glycol	ND	<	200		380	492	µg/g	77.2	60	-	120	
Toluene	ND	<	100		418	497	µg/g	84.1	60	-	120	
Isobutyl Acetate	ND	<	500		1580	1610	µg/g	98.1	70	-	130	
1-Pentanol	ND	<	500		1500	1600	µg/g	93.8	70	-	130	
Butyl Acetate	ND	<	500		1520	1610	µg/g	94.4	70	-	130	
Ethylbenzene	ND	<	200		779	980	µg/g	79.5	60	-	120	
m,p-Xylene	ND	<	200		774	985	µg/g	78.6	60	-	120	
o-Xylene	ND	<	200		752	965	µg/g	77.9	60	-	120	
Cumene	ND	<	30		133	168	µg/g	79.2	60	-	120	
Anisole	ND	<	500		1300	1600	µg/g	81.3	70	-	130	
DMSO	ND	<	500		1340	1610	µg/g	83.2	70	-	130	
1,2-dimethoxyethane	ND	<	50		173	165	µg/g	104.8	70	-	130	
Triethylamine	ND	<	500		1610	1620	µg/g	99.4	70	-	130	
N,N-dimethylformamide	ND	<	150		435	481	µg/g	90.4	70	-	130	
N,N-dimethylacetamide	ND	<	150		402	480	µg/g	83.8	70	-	130	
Pyridine	ND	<	50		176	171	µg/g	102.9	70	-	130	
Sulfolane	ND	<	50		141	179	µg/g	78.8	70	-	130	
1,2-Dichloroethane	ND	<	1		1.09	1	µg/g	109.0	70	-	130	
Chloroform	ND	<	1		1.11	1	µg/g	111.0	70	-	130	
Trichloroethylene	ND	<	1		1.04	1	µg/g	104.0	70	-	130	

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Revision: Document ID:
Legacy ID: Effective:

QC - Sample Duplicate **Sample ID: 22-009520-0001**

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	727	456	200	µg/g	45.8	< 20	FAIL	Q4
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	60	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	100	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	
Sulfolane	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	

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation
Q4 - Non-homogenous sample matrix, affecting RPD result and/or % recoveries.

Units of Measure:

µg/g- Microgram per gram or ppm

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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	Quantitaion 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.