Columbia LABORATORIES
A Tentamus Company

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

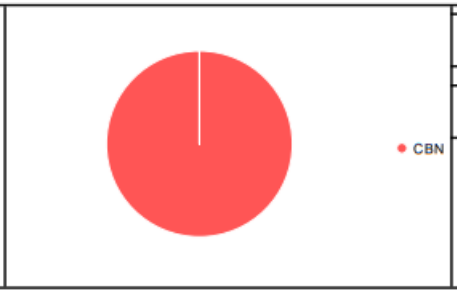
Report Number: 22-009878/D003.R000
Report Date: 01/23/2023
ORELAP#: OR100028
Purchase Order:
Received: 01/23/23 11:25

Customer:
Product identity:
Client/Metrc ID:
Laboratory ID: 22-009878-0002
Manufactured Date: 01/23/2023

Summary

Potency:

Analyte	Result (%)
CBN	> 98.0



CBD-Total	<LOQ
THC-Total	<LOQ

(Reported in percent of total sample)

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

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Testing in accordance with: OAR 333-007-0430

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Received: 01/23/23 11:25

ıstomer:
'oduct identity:
ient/Metrc ID: -
ımple Date: 22-009878-0002
ıboratory ID: No
'idence of Cooling: 22.8 °C
ɛmp: Relinquished by: Client

Sample Results

Potency **Method:** J AOAC 2015 V98-6 (mod)ᵖ **Units** % **Batch:** 2207088 **Analyze:** 8/20/22 2:43:00 AM

Analyte	As Received	Dry weight	LOQ	Notes
CBC	< LOQ		0.0068	
CBC-A	< LOQ		0.0068	
CBC-Total	< LOQ		0.0128	
CBD	< LOQ		0.0068	
CBD-A	< LOQ		0.0068	
CBD-Total	< LOQ		0.0128	
CBDV	< LOQ		0.0068	
CBDV-A	< LOQ		0.0068	
CBDV-Total	< LOQ		0.0128	
CBE	< LOQ		0.0068	
CBG	< LOQ		0.0068	
CBG-A	< LOQ		0.0068	
CBG-Total	< LOQ		0.0128	
CBL	< LOQ		0.0068	
CBL-A	< LOQ		0.0068	
CBL-Total	< LOQ		0.0128	
CBN	> 98.0		0.684	
CBT	< LOQ		0.0068	
Δ8-THC	< LOQ		0.0068	
Δ8-THCV	< LOQ		0.0068	
Δ9-THC	< LOQ		0.0068	
exo-THC	< LOQ		0.0068	
THC-A	< LOQ		0.0068	
THC-Total	< LOQ		0.0128	
THCV	< LOQ		0.0068	
THCV-A	< LOQ		0.0068	
THCV-Total	< LOQ		0.0128	
Total Cannabinoids	> 98.0			

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

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Solvents **Method:** Residual Solvents by GC/MS[b] **Units** µg/g **Batch** 2207131 **Analyze** 08/23/22 03:55 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,2-Dichloroethane	< LOQ	1.00	1.00	pass		2-Propanol (IPA)	< LOQ	5000	200	pass	
Acetone	< LOQ	5000	200	pass		Acetonitrile	< LOQ	410	100	pass	
Benzene	< LOQ	1.00	1.00	pass		Chloroform	< LOQ	1.00	1.00	pass	
Ethyl acetate	< LOQ	5000	200	pass		Ethyl ether	< LOQ	5000	200	pass	
Ethylene oxide	< LOQ	1.00	1.00	pass		m,p-Xylene	< LOQ		200		
Methanol	< LOQ	3000	200	pass		Methylene chloride	< LOQ	1.00	1.00	pass	
n-Butane	< LOQ	5000	200	pass		n-Heptane	< LOQ	5000	200	pass	
n-Hexane	< LOQ	290	30.0	pass		n-Pentane	< LOQ	5000	200	pass	
o-Xylene	< LOQ		200			Propane	< LOQ	5000	200	pass	
Toluene	< LOQ	890	100	pass		Total Xylenes	< LOQ	2170	400	pass	
Trichloroethylene	< LOQ	1.00	1.00	pass							

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Pesticides **Method:** AOAC 2007.01 & EN 15662 (mod) **Units** mg/kg **Batch** 2207103 **Analyze** 08/23/22 08:54 AM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.100	0.100	pass		Acephate	< LOQ	0.100	0.100	pass	
Acequinocyl	< LOQ	0.100	0.100	pass		Acetamiprid	< LOQ	0.100	0.100	pass	
Aldicarb	< LOQ	0.100	0.100	pass		Azoxystrobin	< LOQ	0.100	0.100	pass	
Bifenazate	< LOQ	0.100	0.100	pass		Bifenthrin	< LOQ	3.00	3.00	pass	
Boscalid	< LOQ	0.100	0.100	pass		Captan	< LOQ	0.700	0.700	pass	
Carbaryl	< LOQ	0.500	0.500	pass		Carbofuran	< LOQ	0.100	0.100	pass	
Chlorantraniliprole	< LOQ	10.0	3.00	pass		Chlordane	< LOQ	0.1	0.100	pass	
Chlorfenapyr	< LOQ	0.100	0.100	pass		Chlorpyrifos	< LOQ	0.100	0.100	pass	
Clofentezine	< LOQ	0.100	0.100	pass		Coumaphos	< LOQ	0.100	0.100	pass	
Cyfluthrin	< LOQ	2.00	2.00	pass		Cypermethrin	< LOQ	1.00	1.00	pass	
Daminozide	< LOQ	0.100	0.100	pass		Diazinon	< LOQ	0.100	0.100	pass	
Dichlorvos	< LOQ	0.100	0.100	pass		Dimethoate	< LOQ	0.100	0.100	pass	
Dimethomorph	< LOQ	2.00	2.00	pass		Ethoprophos	< LOQ	0.100	0.100	pass	
Etofenprox	< LOQ	0.100	0.100	pass		Etoxazole	< LOQ	0.100	0.100	pass	
Fenhexamid	< LOQ	0.100	0.100	pass		Fenoxycarb	< LOQ	0.100	0.100	pass	
Fenpyroximate	< LOQ	0.100	0.100	pass		Fipronil	< LOQ	0.100	0.100	pass	
Flonicamid	< LOQ	0.100	0.100	pass		Fludioxonil	< LOQ	0.100	0.100	pass	
Hexythiazox	< LOQ	0.100	0.100	pass		Imazalil	< LOQ	0.100	0.100	pass	
Imidacloprid	< LOQ	5.00	3.00	pass		Kresoxim-methyl	< LOQ	0.100	0.100	pass	
Malathion	< LOQ	0.500	0.500	pass		Metalaxyl	< LOQ	2.00	2.00	pass	
Methiocarb	< LOQ	0.100	0.100	pass		Methomyl	< LOQ	1.00	1.00	pass	
Mevinphos	< LOQ	0.100	0.100	pass		Myclobutanil	< LOQ	0.100	0.100	pass	
Naled	< LOQ	0.100	0.100	pass		Oxamyl	< LOQ	0.500	0.500	pass	
Paclobutrazole	< LOQ	0.100	0.100	pass		Parathion-Methyl	< LOQ	0.100	0.100	pass	
Permethrin	< LOQ	0.500	0.500	pass		Phosmet	< LOQ	0.100	0.100	pass	
Piperonyl butoxide	< LOQ	3.00	3.00	pass		Prallethrin	< LOQ	0.100	0.100	pass	
Propiconazole	< LOQ	0.100	0.100	pass		Propoxur	< LOQ	0.100	0.100	pass	
Pyrethrins (total)	< LOQ	0.500	0.500	pass		Pyridaben	< LOQ	0.100	0.100	pass	
Quintozene	< LOQ	0.100	0.100	pass		Spinetoram	< LOQ	0.100	0.100	pass	
Spinosad	< LOQ	0.100	0.100	pass		Spiromesifen	< LOQ	0.100	0.100	pass	
Spirotetramat	< LOQ	0.100	0.100	pass		Spiroxamine	< LOQ	0.100	0.100	pass	
Tebuconazole	< LOQ	0.100	0.100	pass		Thiacloprid	< LOQ	0.100	0.100	pass	
Thiamethoxam	< LOQ	5.00	3.00	pass		Trifloxystrobin	< LOQ	0.100	0.100	pass	

Mycotoxins

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Aflatoxin B2[x]	< LOQ		µg/kg	5.00	2207083	08/22/22	AOAC 2007.01 & EN 15662 (mod)[b]		
Aflatoxin B1[x]	< LOQ		µg/kg	5.00	2207083	08/22/22	AOAC 2007.01 & EN 15662 (mod)[b]		
Aflatoxin G1[x]	< LOQ		µg/kg	5.00	2207083	08/22/22	AOAC 2007.01 & EN 15662 (mod)[b]		
Aflatoxin G2[x]	< LOQ		µg/kg	5.00	2207083	08/22/22	AOAC 2007.01 & EN 15662 (mod)[b]		
Ochratoxin A[x]	< LOQ		µg/kg	5.00	2207083	08/22/22	AOAC 2007.01 & EN 15662 (mod)[b]		
Total Aflatoxins[x]	0.000		µg/kg	20.0		08/23/22	AOAC 2007.01 & EN 15662 (mod)[b]		

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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.

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

Units of Measure

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

Approved Signatory

Derrick Tanner
General Manager

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Received: 01/18/23 11:25

Revision: 1 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2207088**

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	1	0.109	0.100	%	109	80.0 - 120	Acceptable	
CBDV	1	0.120	0.100	%	120	80.0 - 120	Acceptable	
CBE	1	0.107	0.100	%	107	80.0 - 120	Acceptable	
CBDA	1	0.101	0.100	%	101	90.0 - 110	Acceptable	
CBGA	1	0.101	0.100	%	101	80.0 - 120	Acceptable	
CBG	1	0.106	0.100	%	106	80.0 - 120	Acceptable	
CBD	1	0.108	0.100	%	108	90.0 - 110	Acceptable	
THCV	1	0.104	0.100	%	104	80.0 - 120	Acceptable	
d8THCV	1	0.108	0.100	%	108	80.0 - 120	Acceptable	
THCVA	1	0.105	0.100	%	105	80.0 - 120	Acceptable	
CBN	1	0.106	0.100	%	106	90.0 - 110	Acceptable	
exo-THC	1	0.103	0.100	%	103	80.0 - 120	Acceptable	
d9THC	1	0.109	0.100	%	109	90.0 - 110	Acceptable	
d8THC	1	0.0979	0.100	%	97.9	90.0 - 110	Acceptable	
CBL	1	0.0961	0.100	%	96.1	80.0 - 120	Acceptable	
CBC	1	0.104	0.100	%	104	80.0 - 120	Acceptable	
THCA	1	0.0972	0.100	%	97.2	90.0 - 110	Acceptable	
CBCA	1	0.106	0.100	%	106	80.0 - 120	Acceptable	
CBLA	1	0.110	0.100	%	110	80.0 - 120	Acceptable	
CBT	1	0.0855	0.100	%	85.5	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBDV	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBE	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBDA	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBGA	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBG	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBD	<LOQ	0.0077	%	< 0.0077	Acceptable	
THCV	<LOQ	0.0077	%	< 0.0077	Acceptable	
d8THCV	<LOQ	0.0077	%	< 0.0077	Acceptable	
THCVA	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBN	<LOQ	0.0077	%	< 0.0077	Acceptable	
exo-THC	<LOQ	0.0077	%	< 0.0077	Acceptable	
d9THC	<LOQ	0.0077	%	< 0.0077	Acceptable	
d8THC	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBL	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBC	<LOQ	0.0077	%	< 0.0077	Acceptable	
THCA	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBCA	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBLA	<LOQ	0.0077	%	< 0.0077	Acceptable	
CBT	<LOQ	0.0077	%	< 0.0077	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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Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC 2015 V98-6					Batch ID: 2207088			
Sample Duplicate					Sample ID: 22-009821-0002			
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBN	>98	>98	0.0077	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.0077	%	NA	< 20	Acceptable	

Abbreviations

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RPD - Relative Percent Difference
LOQ - Limit of Quantitation

Units of Measure:

% - Percent

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Revision: 5 Document ID: 3828
Validation Approved Date:

Laboratory Pestcide Quality Control Results

AOAC 2007.01 &EN 15662	Group	1	Units:	mg/Kg			Batch ID	2207103	
Method Blank				Laboratory Control Sample					
Analyte	Inst.	Result	LOQ	Notes	Result	Spike	% Rec	Limits	Notes
Chlorfluazuron (Acelepryn)	GC	0.000	0.100		0.505	0.400	126%	70 - 130	
Endosulfan I (alpha)	GC	0.010	0.050		0.125	0.100	125%	70 - 130	
Endosulfan II (beta)	GC	0.015	0.050		0.126	0.100	126%	70 - 130	
Etridiazole	GC	0.000	0.050		0.098	0.100	98%	70 - 130	
Kinoprene	GC	0.000	0.050		0.526	0.400	132%	70 - 130	Q1
Metdiachlor	GC	0.010	0.100		0.240	0.200	120%	70 - 130	
Quintozene	GC	0.000	0.050		0.043	0.040	107%	70 - 130	
TMIF (Captan Indicator)	GC	0.000	0.700		1.659	1.400	119%	70 - 130	
Azamedin	LC	0.000	0.070		0.362	0.280	129%	70 - 130	
Acephate	LC	0.000	0.020		0.100	0.080	126%	70 - 130	
Acequinocyl	LC	0.000	0.025		0.105	0.100	105%	70 - 130	
Acetamiprid	LC	0.000	0.050		0.251	0.200	126%	70 - 130	
Aldicarb	LC	0.000	0.100		0.555	0.400	139%	70 - 130	Q1
Aretmrin	LC	0.000	0.100		0.604	0.400	151%	70 - 130	Q1
Atrazine	LC	0.000	0.025		0.116	0.100	116%	70 - 130	
Azadirachtin	LC	0.000	0.500		2.635	2.000	132%	70 - 130	Q1
Azoxystrobin	LC	0.000	0.010		0.052	0.040	130%	70 - 130	Q1
Benzovindiflupyr	LC	0.000	0.010		0.051	0.040	127%	70 - 130	
Bifenazate	LC	0.000	0.010		0.050	0.040	125%	70 - 130	
Bifenthrin	LC	0.000	0.100		0.381	0.400	95%	70 - 130	
Boscalid	LC	0.000	0.010		0.058	0.040	145%	70 - 130	Q1
Buprofezin	LC	0.000	0.010		0.053	0.040	133%	70 - 130	Q1
Carbaryl	LC	0.000	0.025		0.123	0.100	123%	70 - 130	
Carbofuran	LC	0.000	0.010		0.047	0.040	117%	70 - 130	
Chlorantraniliprole	LC	0.000	0.010		0.053	0.040	132%	70 - 130	Q1
Chlorfenapyr	LC	0.000	0.050		0.547	0.400	137%	70 - 130	Q1
Chlorpyrifos	LC	0.000	0.010		0.044	0.040	110%	70 - 130	
Clofentezine	LC	0.000	0.010		0.052	0.040	130%	70 - 130	
Clothianidin	LC	0.000	0.025		0.144	0.100	144%	70 - 130	Q1
Coumaphos	LC	0.000	0.010		0.051	0.040	129%	70 - 130	
Cyantraniliprole	LC	0.000	0.010		0.049	0.040	123%	70 - 130	
Cyfluthrin	LC	0.000	0.400		0.700	0.800	88%	70 - 130	
Cyhalothrin, Lambda	LC	0.000	0.250		0.985	1.000	98%	70 - 130	
Cypermethrin	LC	0.000	0.300		1.222	1.200	102%	70 - 130	
Cyprodinil	LC	0.000	0.010		0.048	0.040	121%	70 - 130	
Diaminozide	LC	0.000	0.050		0.245	0.200	122%	70 - 130	
Diflubenzuron	LC	0.000	0.500		3.849	4.000	96%	70 - 130	
Dimethoate	LC	0.000	0.010		0.052	0.040	129%	70 - 130	
Dichlorvos	LC	0.000	0.050		0.258	0.200	129%	70 - 130	
Dimethoate	LC	0.000	0.010		0.053	0.040	132%	70 - 130	Q1
Dimethomorph	LC	0.000	0.050		0.288	0.200	144%	70 - 130	Q1
Dinotefuran	LC	0.000	0.050		0.254	0.200	127%	70 - 130	
Diuron	LC	0.000	0.125		0.537	0.500	107%	70 - 130	
Dodemorph	LC	0.000	0.050		0.265	0.200	132%	70 - 130	Q1
Endosulfan Sulfate	LC	0.000	0.050		0.290	0.200	145%	70 - 130	Q1
Ethoprophos	LC	0.000	0.010		0.051	0.040	126%	70 - 130	
Etoxazole	LC	0.000	0.010		0.041	0.040	104%	70 - 130	
Etoxazole	LC	0.000	0.010		0.047	0.040	118%	70 - 130	
Fenhexamid	LC	0.000	0.100		0.511	0.400	128%	70 - 130	
Fenoxycarb	LC	0.000	0.010		0.054	0.040	135%	70 - 130	Q1
Fenpyroximate	LC	0.000	0.020		0.090	0.080	112%	70 - 130	
Fensulfothion	LC	0.000	0.010		0.058	0.040	145%	70 - 130	Q1
Fenthion	LC	0.000	0.010		0.056	0.040	141%	70 - 130	Q1
Fenvalerate	LC	0.000	0.200		0.405	0.400	101%	70 - 130	
Fipronil	LC	0.000	0.010		0.062	0.040	154%	70 - 130	Q1
Flonicamid	LC	0.000	0.025		0.128	0.100	128%	70 - 130	
Fludioxonil	LC	0.000	0.010		0.056	0.040	139%	70 - 130	Q1

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Columbia LABORATORIES
A Tentamus Company

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

Report Number: 22-009878/D003.R000
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Laboratory Pesticide Quality Control Results

AOAC 2007.01 &EN 15662		Group	1	Units:	mg/Kg				Batch ID:	2207103	
Matrix Spike/Matrix Spike Duplicate Recoveries									Sample ID:	22-009958001	
Analyte	Inst.	Result	MSRes	MSDRes	Spike	RPD%	MS % Re	MSD % Re	Limits		Notes
Chlordane (cis-trans)	GC	0.000	0.424	0.374	0.400	12.3%	106%	94%	50 - 150		
Endosulfan I (alpha)	GC	0.033	0.149	0.143	0.100	5.2%	116%	110%	50 - 150		
Endosulfan II (beta)	GC	0.000	0.113	0.091	0.100	21.8%	113%	91%	50 - 150		
Etridiazole	GC	0.000	0.075	0.079	0.100	9.0%	73%	79%	50 - 150		
Kinoprene	GC	0.000	2.669	2.846	0.400	6.4%	667%	711%	50 - 150		Q
Metalaxyl	GC	0.000	0.249	0.231	0.200	7.8%	125%	115%	50 - 150		
Quinoxyfene	GC	0.000	0.017	0.013	0.040	27.9%	44%	33%	50 - 150		Q
THPI (captan indicator)	GC	0.000	0.844	0.942	1.400	11.0%	60%	67%	50 - 150		
Abamectin	LC	0.000	0.359	0.348	0.280	3.2%	128%	124%	50 - 150		
Acephate	LC	0.010	0.103	0.099	0.080	4.9%	116%	111%	50 - 150		
Acequinocyl	LC	0.005	0.121	0.115	0.100	4.8%	115%	110%	50 - 150		
Acetamiprid	LC	0.000	0.272	0.257	0.200	5.4%	136%	129%	50 - 150		
Aldicarb	LC	0.000	0.566	0.543	0.400	4.4%	142%	136%	50 - 150		
Azadirachtin	LC	0.023	0.636	0.651	0.400	2.3%	153%	157%	50 - 150		Q
Azinphos-methyl	LC	0.004	0.132	0.127	0.100	3.7%	128%	124%	50 - 150		
Azadirachtin	LC	0.000	2.608	2.373	2.000	9.4%	130%	119%	50 - 150		
Azoxystrobin	LC	0.001	0.251	0.249	0.040	4.6%	127%	121%	50 - 150		
Benzovindiflupyr	LC	0.000	0.058	0.050	0.040	5.7%	132%	124%	50 - 150		
Bifenazate	LC	0.000	0.056	0.054	0.040	3.0%	140%	136%	50 - 150		
Bifenthrin	LC	0.024	0.471	0.440	0.400	7.1%	112%	104%	50 - 150		
Boscalid	LC	0.000	0.058	0.060	0.040	3.6%	144%	149%	50 - 150		
Buprofezin	LC	0.002	0.050	0.050	0.040	1.5%	122%	120%	50 - 150		
Carbaryl	LC	0.000	0.132	0.125	0.100	5.6%	132%	125%	50 - 150		
Carbofuran	LC	0.001	0.052	0.053	0.040	0.7%	128%	129%	50 - 150		
Chlorantraniliprole	LC	0.000	0.063	0.057	0.040	9.2%	158%	144%	50 - 150		Q
Chlorfenapyr	LC	0.000	0.515	0.417	0.400	21.2%	129%	104%	50 - 150		
Chlorpyrifos	LC	0.003	0.050	0.049	0.040	2.9%	118%	114%	50 - 150		
Clofentezine	LC	0.000	0.052	0.051	0.040	2.2%	131%	128%	50 - 150		
Clothianidin	LC	0.000	0.139	0.137	0.100	1.2%	139%	137%	50 - 150		
Coumaphos	LC	0.001	0.060	0.061	0.040	1.4%	147%	149%	50 - 150		
Cyantraniliprole	LC	0.000	0.054	0.050	0.040	6.7%	134%	125%	50 - 150		
Cyfluthrin	LC	0.044	0.995	1.000	0.800	0.5%	119%	120%	50 - 150		
Cyhalothrin, Lambda	LC	0.080	1.233	1.218	1.000	1.3%	115%	114%	50 - 150		
Cypermethrin	LC	0.074	1.505	1.418	1.200	6.3%	119%	112%	50 - 150		
Cyprodinil	LC	0.004	0.054	0.053	0.040	1.9%	127%	124%	50 - 150		
Daminozide	LC	0.000	0.230	0.215	0.200	15.0%	125%	108%	50 - 150		
Deltamethrin	LC	0.377	4.721	4.576	4.000	3.4%	109%	105%	50 - 150		
Diazinon	LC	0.000	0.058	0.050	0.040	7.1%	133%	124%	50 - 150		
Dichlorvos	LC	0.012	0.270	0.263	0.200	2.9%	129%	126%	50 - 150		
Dimethoate	LC	0.000	0.056	0.052	0.040	8.2%	140%	129%	50 - 150		
Dimethomorph	LC	0.000	0.295	0.284	0.200	4.0%	148%	142%	50 - 150		
Dinotefuran	LC	0.007	0.280	0.265	0.200	5.7%	137%	129%	50 - 150		
Diuron	LC	0.000	0.637	0.592	0.500	5.8%	125%	118%	50 - 150		
Dodemorph	LC	0.000	0.252	0.245	0.200	2.7%	126%	123%	50 - 150		
Endosulfan sulfate	LC	0.000	0.419	0.441	0.200	5.1%	210%	220%	50 - 150		Q
Ethoprophos	LC	0.001	0.052	0.050	0.040	3.9%	128%	123%	50 - 150		
Etofenprox	LC	0.005	0.046	0.047	0.040	0.3%	103%	103%	50 - 150		
Etoxazole	LC	0.002	0.050	0.049	0.040	2.1%	120%	117%	50 - 150		
Fenhexamid	LC	0.024	0.617	0.617	0.400	0.1%	148%	148%	50 - 150		
Fenoxycarb	LC	0.000	0.058	0.055	0.040	5.2%	144%	137%	50 - 150		
Fenpyroximate	LC	0.008	0.105	0.096	0.080	8.6%	123%	113%	50 - 150		
Fenthion	LC	0.000	0.056	0.050	0.040	9.8%	139%	126%	50 - 150		
Fenvalerate	LC	0.002	0.054	0.049	0.040	11.8%	131%	116%	50 - 150		
Fipronil	LC	0.013	0.511	0.497	0.400	2.8%	124%	121%	50 - 150		
Flonicamid	LC	0.000	0.060	0.054	0.040	9.9%	149%	135%	50 - 150		
Fludioxonil	LC	0.000	0.134	0.125	0.100	6.9%	134%	125%	50 - 150		
Hexythiazox	LC	0.000	0.055	0.051	0.040	7.9%	137%	127%	50 - 150		

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Laboratory Quality Control Results

Residual Solvents — Batch ID: 220713 1

Method Blank					Laboratory Control Sample							
Analyte	Result		LOQ	Notes	Result	Spike	Units	%Rec	Limits			Notes
Propane	ND	<	200		483	572	µg/g	84.4	60	-	120	
Isobutane	ND	<	200		608	731	µg/g	83.2	60	-	120	
Butane	ND	<	200		593	731	µg/g	81.1	60	-	120	
2,2-Dimethylpropane	ND	<	200		787	936	µg/g	84.1	60	-	120	
Methanol	ND	<	200		1,270	1650	µg/g	77.0	60	-	120	
Ethylene Oxide	ND	<	30		47.8	56.2	µg/g	85.1	60	-	120	
2-Methylbutane	ND	<	200		1,090	1620	µg/g	67.3	60	-	120	
Pentane	ND	<	200		1,120	1610	µg/g	69.6	60	-	120	
Ethanol	ND	<	200		1,230	1620	µg/g	75.9	70	-	130	
Ethyl Ether	ND	<	200		1,180	1600	µg/g	73.8	60	-	120	
2,2-Dimethylbutane	ND	<	30		114	167	µg/g	68.3	60	-	120	
Acetone	ND	<	200		1,250	1620	µg/g	77.2	60	-	120	
2-Propanol	ND	<	200		1,250	1610	µg/g	77.6	60	-	120	
Ethyl Formate	ND	<	500		1,110	1620	µg/g	68.5	70	-	130	Q6
Acetonitrile	ND	<	100		475	635	µg/g	74.8	60	-	120	
Methyl Acetate	ND	<	500		1,320	1630	µg/g	81.0	70	-	130	
2,3-Dimethylbutane	ND	<	30		143	177	µg/g	80.8	60	-	120	
Dichloromethane	ND	<	60		394	498	µg/g	79.1	60	-	120	
2-Methylpentane	ND	<	30		124	166	µg/g	74.7	60	-	120	
MTBE	ND	<	500		1,310	1600	µg/g	81.9	70	-	130	
3-Methylpentane	ND	<	30		134	175	µg/g	76.6	60	-	120	
Hexane	ND	<	30		133	174	µg/g	76.4	60	-	120	
1-Propanol	ND	<	500		1,280	1620	µg/g	79.0	70	-	130	
Methylethylketone	ND	<	500		1,310	1600	µg/g	81.9	70	-	130	
Ethyl acetate	ND	<	200		1,180	1610	µg/g	73.3	60	-	120	
2-Butanol	ND	<	200		1,200	1620	µg/g	74.1	60	-	120	
Tetrahydrofuran	ND	<	100		350	507	µg/g	69.0	60	-	120	
Cyclohexane	ND	<	200		1,130	1610	µg/g	70.2	60	-	120	
2-methyl-1-propanol	ND	<	500		1,210	1640	µg/g	73.8	70	-	130	
Benzene	ND	<	1		3.38	5.22	µg/g	64.8	60	-	120	
Isopropyl Acetate	ND	<	200		1,160	1610	µg/g	72.0	60	-	120	
Heptane	ND	<	200		1,120	1610	µg/g	69.6	60	-	120	
1-Butanol	ND	<	500		1,170	1610	µg/g	72.7	70	-	130	
Propyl Acetate	ND	<	500		1,250	1610	µg/g	77.6	70	-	130	
1,4-Dioxane	ND	<	100		367	508	µg/g	72.2	60	-	120	
2-Ethoxyethanol	ND	<	80		111	165	µg/g	67.3	60	-	120	
Methylisobutylketone	ND	<	500		1,160	1610	µg/g	72.0	70	-	130	
3-Methyl-1-butanol	ND	<	500		1,080	1600	µg/g	67.5	70	-	130	Q6
Ethylene Glycol	ND	<	200		306	492	µg/g	62.2	60	-	120	
Toluene	ND	<	100		330	497	µg/g	66.4	60	-	120	
Isobutyl Acetate	ND	<	500		1,170	1610	µg/g	72.7	70	-	130	
1-Pentanol	ND	<	500		1,140	1600	µg/g	71.3	70	-	130	
Butyl Acetate	ND	<	500		1,220	1610	µg/g	75.8	70	-	130	
Ethylbenzene	ND	<	200		625	980	µg/g	63.8	60	-	120	
m,p-Xylene	ND	<	200		628	985	µg/g	63.8	60	-	120	
o-Xylene	ND	<	200		612	965	µg/g	63.4	60	-	120	
Cumene	ND	<	30		111	168	µg/g	66.1	60	-	120	
Anisole	ND	<	500		1,120	1600	µg/g	70.0	70	-	130	
DMSO	ND	<	500		1,190	1610	µg/g	73.9	70	-	130	
1,2-dimethoxyethane	ND	<	50		127	165	µg/g	77.0	70	-	130	
Triethylamine	ND	<	500		1,310	1620	µg/g	80.9	70	-	130	
N,N-dimethylformamide	ND	<	150		367	481	µg/g	76.3	70	-	130	
N,N-dimethylacetamide	ND	<	150		353	480	µg/g	73.5	70	-	130	
Pyridine	ND	<	50		124	171	µg/g	72.5	70	-	130	
Sulfolane	ND	<	50		128	179	µg/g	71.5	70	-	130	
1,2-Dichloroethane	ND	<	1		0.974	1	µg/g	97.4	70	-	130	
Chloroform	ND	<	1		0.991	1	µg/g	99.1	70	-	130	
Trichloroethylene	ND	<	1		0.956	1	µg/g	95.6	70	-	130	

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QC - Sample Duplicate — Sample ID: 22-009645-0003

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	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500	µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	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
Q6 - Quality control outside QC limits. Data acceptable based on remaining QC.

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.

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 333-007-0400 OAR 333-007-0410 OAR 333-007-0430