Columbia LABORATORIES
A Tentamus Company

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

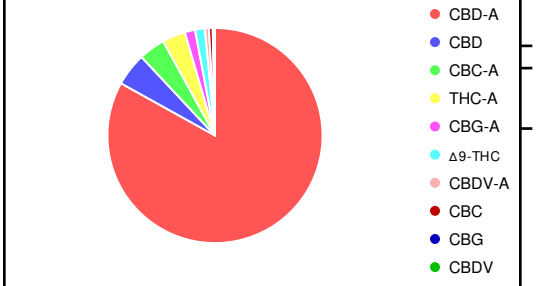
Report Number: 22-012621/D002.R000
Report Date: 10/25/2022
ORELAP#: OR100028
Purchase Order:
Received: 10/18/22 14:20

Customer: IHC LLC
Product identity: 01LIR209_SSC
Client/Metrc ID: .
Laboratory ID: 22-012621-0001

Summary

Potency:

Analyte	Result (%)
CBD-A	60.2
CBD	3.59
CBC-A	2.89
THC-A	2.51
CBG-A	1.13
Δ9-THC	1.07
CBDV-A	0.429
CBC	0.411
CBG	0.168
CBDV	0.0756



CBD-Total 56.4%

THC-Total 3.27%

(Reported in percent of total sample)

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Terpenes:

Analyte	Percent by weight	Percent of Total	Analyte	Percent by weight	Percent of Total
ß-Myrcene	2.43	30.68%	ß-Caryophyllene	1.27	16.04%
Terpinolene	0.902	11.39%	Humulene	0.699	8.83%
a-pinene	0.557	7.03%	(R)-(+)-Limonene	0.508	6.41%
a-Bisabolol	0.342	4.32%	(-)-ß-Pinene	0.230	2.90%
(-)-Guaiol	0.227	2.87%	trans-ß-Ocimene	0.199	2.51%
Linalool	0.156	1.97%	(-)-caryophyllene oxide	0.0991	1.25%
(-)-a-Terpineol	0.0748	0.94%	(+)-fenchol	0.0578	0.73%
a-phellandrene	0.0477	0.60%	a-Terpinene	0.0364	0.46%
gamma-Terpinene	0.0269	0.34%	(+)-Borneol	0.0249	0.31%
d-3-Carene	0.0241	0.30%	cis-ß-Ocimene	0.0109	0.14%
Total Terpenes	**7.92**	**100.00%**			

Metals:

Less than LOQ for all analytes.

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ORELAP#: OR100028
Purchase Order:
Received: 10/18/22 14:20

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

Product identity: 01LIR209_SSC
Client/Metrc ID: .
Sample Date:
Laboratory ID: 22-012621-0001
Evidence of Cooling: No
Temp: 12.3 °C
Relinquished by: Ramos

THE HEMP COLLECT

Sample Results

Potency **Method:** J AOAC 2015 V98-6 (mod)[b] **Units** % **Batch:** 2208955 **Analyze:** 10/19/22 10:44:00 P

Analyte	As Received	Dry weight	LOQ	Notes
CBC	0.411		0.0755	
CBC-A	2.89		0.0755	
CBC-Total	2.95		0.142	
CBD	3.59		0.0755	
CBD-A	60.2		0.755	
CBD-Total	56.4		0.738	
CBDV	0.0756		0.0755	
CBDV-A	0.429		0.0755	
CBDV-Total	0.447		0.141	
CBE	< LOQ		0.0755	
CBG	0.168		0.0755	
CBG-A	1.13		0.0755	
CBG-Total	1.16		0.141	
CBL	< LOQ		0.0755	
CBL-A	< LOQ		0.0755	
CBL-Total	< LOQ		0.142	
CBN	< LOQ		0.0755	
CBT	< LOQ		0.0755	
Δ10-THC	< LOQ		0.0755	
Δ8-THC	< LOQ		0.0755	
Δ8-THCV	< LOQ		0.0755	
Δ9-THC	1.07		0.0755	
exo-THC	< LOQ		0.0755	
THC-A	2.51		0.0755	
THC-Total	3.27		0.142	
THCV	< LOQ		0.0755	
THCV-A	< LOQ		0.0755	
THCV-Total	< LOQ		0.141	
Total Cannabinoids	72.5			

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Purchase Order:
Received: 10/18/22 14:20

Solvents **Method:** Residual Solvents by GC/MS^{b} **Units** µg/g **Batch** 2209018 **Analyze** 10/21/22 11:10 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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Pesticides **Method:** AOAC 2007.01 & EN 15662 (mod)þ **Units** mg/kg **Batch** 2208988 **Analyze** 10/21/22 08:26 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							

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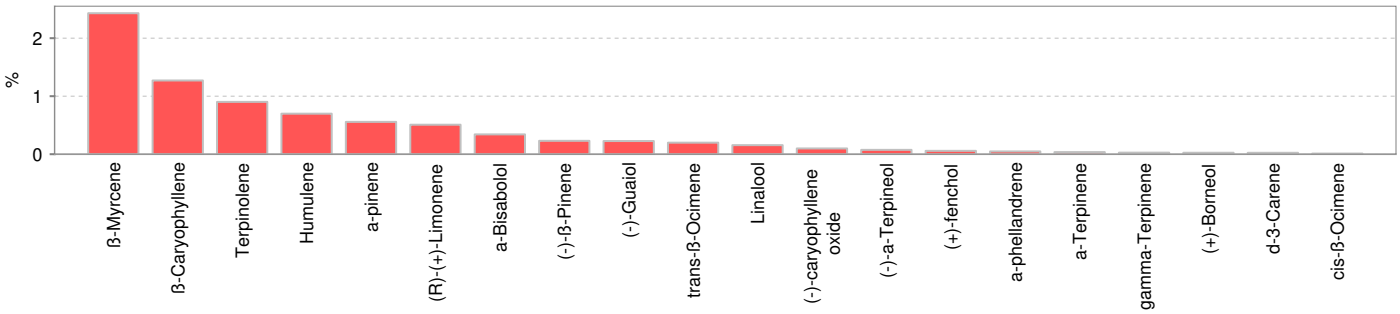
ORELAP#: OR100028
Purchase Order:
Received: 10/18/22 14:20

Terpenes

Method: J AOAC 2015 V98-6 **Units** % **Batch** 2209027 **Analyze** 10/20/22 10:14 PM

Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
ß-Myrcene	2.43	0.018	30.68%		ß-Caryophyllene	1.27	0.018	16.04%	
Terpinolene	0.902	0.018	11.389%		Humulene	0.699	0.018	8.826%	
a-pinene	0.557	0.018	7.033%		(R)-(+)-Limonene	0.508	0.018	6.414%	
a-Bisabolol	0.342	0.018	4.318%		(-)-ß-Pinene	0.230	0.018	2.904%	
(-)-Guaiol	0.227	0.018	2.866%		trans-ß-Ocimene	0.199	0.012	2.513%	
Linalool	0.156	0.018	1.970%		(-)-caryophyllene oxide	0.0991	0.018	1.2513%	
(-)-a-Terpineol	0.0748	0.018	0.9444%		(+)-fenchol	0.0578	0.018	0.7298%	
a-phellandrene	0.0477	0.018	0.6023%		a-Terpinene	0.0364	0.018	0.4596%	
gamma-Terpinene	0.0269	0.018	0.3396%		(+)-Borneol	0.0249	0.018	0.3144%	
d-3-Carene	0.0241	0.018	0.3043%		p-Cymene	< LOQ	0.018	0.00%	
Camphene	< LOQ	0.018	0.00%		(±)-fenchone	< LOQ	0.018	0.00%	
cis-ß-Ocimene	0.0109	0.006	0.1376%		Geraniol	< LOQ	0.018	0.00%	
Sabinene hydrate	< LOQ	0.018	0.00%		Sabinene	< LOQ	0.018	0.00%	
(±)-Camphor	< LOQ	0.018	0.00%		Eucalyptol	< LOQ	0.018	0.00%	
(-)-Isopulegol	< LOQ	0.018	0.00%		(+)-Pulegone	< LOQ	0.018	0.00%	
Isoborneol	< LOQ	0.018	0.00%		(+)-Cedrol	< LOQ	0.018	0.00%	
(±)-cis-Nerolidol	< LOQ	0.018	0.00%		(±)-trans-Nerolidol	< LOQ	0.018	0.00%	
a-cedrene	< LOQ	0.018	0.00%		farnesene	< LOQ	0.018	0.00%	
Geranyl acetate	< LOQ	0.018	0.00%		Menthol	< LOQ	0.018	0.00%	
nerol	< LOQ	0.018	0.00%		valencene	< LOQ	0.018	0.00%	
Total Terpenes	**7.92**								



Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Arsenic	< LOQ	0.200	mg/kg	0.0852	2209005	10/20/22	AOAC 2013.06 (mod.)þ	pass	
Cadmium	< LOQ	0.200	mg/kg	0.0852	2209005	10/20/22	AOAC 2013.06 (mod.)þ	pass	
Lead	< LOQ	0.500	mg/kg	0.0852	2209005	10/20/22	AOAC 2013.06 (mod.)þ	pass	
Mercury	< LOQ	0.100	mg/kg	0.0426	2209005	10/20/22	AOAC 2013.06 (mod.)þ	pass	

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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
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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Portland, OR 97230
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Columbia LABORATORIES

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

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

Company: The Hemp Collect
Contact: kyle@thehempcollect.com
Street: 431 NW Flanders st
City: Portland State: OR Zip: 97209
Email Results: dropbox (IHC)
Ph: (971) 600 1647 Fx Results: (___)
Billing (if different): joel@thehempcollect.com

Analysis Requested: Pesticides – OR 19 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:

PO Number:
Project Number:
Project Name:
Custom Reporting:
Report to State - ☐ METRC or ☐ Other:
Turnaround time: ☑ 5 Business Day Standard Turnaround
☐ 3 Business Day Rush Turnaround*
☐ 2 Business Day Rush Turnaround*
*Check for availability
Sampled by:

Lab ID	Client Sample Identification	Date	Time	Pesticides – OR 19 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/Matrix ID
1	01LIR209_SSC			X		X	X		X			X			C		
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Relinquished By:	Date	Time	Received By:	Date	Time
Kyle Farook	10/18	12:00 P		10-18-22	1737
	10.18.22	1538		10/18	14:00

Lab Use Only:
☐ Shipped Via: _____ or ☐ Client drop
Evidence of cooling: ☐ Yes | ☐ No - Temp (°C): 12.3
Sample in good condition: ☐ Yes | ☐ No
☐ Cash | ☐ Check | ☐ CC | ☐ Net: _____
Prolog storage: _____

* - Sample Type Codes: Vegetation (V) ; Isolates (S) ; Extract/Concentrate (C) ; Tincture/Topical (T) ; Edible (E) ; Beverage (B)

Whitaker Way
OR 97230
P: (503) 254-1794 | Fax: (503) 254-1452

Page ____ of ____

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Received: 10/18/22 14:20

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

Laboratory Quality Control Results

J AOAC 2015 V98-6 **Batch ID: 2208955**

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	2	0.102	0.101	%	101	80.0 - 120	Acceptable	
CBDV	2	0.111	0.110	%	101	80.0 - 120	Acceptable	
CBE	2	0.104	0.102	%	102	80.0 - 120	Acceptable	
CBDA	1	0.0989	0.100	%	98.5	90.0 - 110	Acceptable	
CBGA	1	0.0996	0.101	%	99.0	80.0 - 120	Acceptable	
CBG	1	0.104	0.103	%	101	80.0 - 120	Acceptable	
CBD	1	0.104	0.103	%	101	90.0 - 110	Acceptable	
THCV	2	0.106	0.106	%	100	80.0 - 120	Acceptable	
d8THCV	2	0.108	0.106	%	102	80.0 - 120	Acceptable	
THCVA	2	0.100	0.099	%	101	80.0 - 120	Acceptable	
CBN	1	0.102	0.101	%	101	90.0 - 110	Acceptable	
exo-THC	2	0.104	0.103	%	101	80.0 - 120	Acceptable	
d9THC	1	0.107	0.104	%	103	90.0 - 110	Acceptable	
d8THC	1	0.107	0.100	%	106	90.0 - 110	Acceptable	
CBL	2	0.0976	0.097	%	101	80.0 - 120	Acceptable	
d10THC	1	0.0956	0.096	%	99.9	80.0 - 120	Acceptable	
CBC	2	0.110	0.107	%	102	80.0 - 120	Acceptable	
THCA	1	0.0971	0.099	%	97.6	90.0 - 110	Acceptable	
CBCA	2	0.103	0.103	%	100	80.0 - 120	Acceptable	
CBLA	2	0.105	0.105	%	101	80.0 - 120	Acceptable	
CBT	2	0.109	0.108	%	102	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.077	%	< 0.077	Acceptable	
CBDV	<LOQ	0.077	%	< 0.077	Acceptable	
CBE	<LOQ	0.077	%	< 0.077	Acceptable	
CBDA	<LOQ	0.077	%	< 0.077	Acceptable	
CBGA	<LOQ	0.077	%	< 0.077	Acceptable	
CBG	<LOQ	0.077	%	< 0.077	Acceptable	
CBD	<LOQ	0.077	%	< 0.077	Acceptable	
THCV	<LOQ	0.077	%	< 0.077	Acceptable	
d8THCV	<LOQ	0.077	%	< 0.077	Acceptable	
THCVA	<LOQ	0.077	%	< 0.077	Acceptable	
CBN	<LOQ	0.077	%	< 0.077	Acceptable	
exo-THC	<LOQ	0.077	%	< 0.077	Acceptable	
d9THC	<LOQ	0.077	%	< 0.077	Acceptable	
d8THC	<LOQ	0.077	%	< 0.077	Acceptable	
CBL	<LOQ	0.077	%	< 0.077	Acceptable	
d10THC	<LOQ	0.077	%	< 0.077	Acceptable	
CBC	<LOQ	0.077	%	< 0.077	Acceptable	
THCA	<LOQ	0.077	%	< 0.077	Acceptable	
CBCA	<LOQ	0.077	%	< 0.077	Acceptable	
CBLA	<LOQ	0.077	%	< 0.077	Acceptable	
CBT	<LOQ	0.077	%	< 0.077	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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Revision: 1 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6					Batch ID: 2208955			
Sample Duplicate					Sample ID: 22-012332-0001-01			
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
CBDV	0.166	0.164	0.077	%	1.10	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
CBG	0.0938	0.0923	0.077	%	1.67	< 20	Acceptable	
CBD	32.3	32.1	0.077	%	0.653	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
CBN	0.177	0.174	0.077	%	1.81	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
d10THC	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
CBC	0.250	0.248	0.077	%	0.873	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.077	%	NA	< 20	Acceptable	
CBT	0.397	0.394	0.077	%	0.890	< 20	Acceptable	

Abbreviations

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

Units of Measure:

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

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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662			Units: mg/Kg					Batch ID: 2208988	
Method Blank				Laboratory Control Sample					
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits		Notes
Abamectin	0.000	< 0.250		0.969	1.000	96.9	50.0	150	
Acephate	0.041	< 0.250		1.009	1.000	100.9	60.0	120	
Acequinocyl	0.000	< 1.000		3.674	4.000	91.8	40.0	160	
Acetamiprid	0.000	< 0.100		0.398	0.400	99.5	60.0	120	
Aldicarb	0.000	< 0.200		0.771	0.800	96.3	60.0	120	
Azoxystrobin	0.000	< 0.100		0.387	0.400	96.8	60.0	120	
Bifenazate	0.000	< 0.100		0.332	0.400	83.1	60.0	120	
Bifenthrin	0.000	< 0.100		0.380	0.400	95.1	50.0	150	
Boscalid	0.000	< 0.200		0.777	0.800	97.1	60.0	120	
Carbaryl	0.000	< 0.100		0.391	0.400	97.7	60.0	120	
Carbofuran	0.000	< 0.100		0.387	0.400	96.6	60.0	120	
Chlorantraniliprole	0.000	< 0.100		0.400	0.400	100.1	60.0	120	
Chlorfenapyr	0.000	< 0.500		1.843	2.000	92.2	60.0	120	
Chlorpyrifos	0.000	< 0.100		0.377	0.400	94.2	60.0	120	
Clofentezine	0.000	< 0.100		0.391	0.400	97.7	60.0	120	
Cyfluthrin	0.000	< 0.500		1.855	2.000	92.8	50.0	150	
Cypermethrin	0.000	< 0.500		1.948	2.000	97.4	50.0	150	
Daminozide	0.000	< 0.500		1.994	2.000	99.7	60.0	120	
Diazinon	0.000	< 0.100		0.391	0.400	97.9	60.0	120	
Dichlorvos	0.000	< 0.500		1.917	2.000	95.8	60.0	120	
Dimethoate	0.000	< 0.100		0.402	0.400	100.4	60.0	120	
Ethoprophos	0.000	< 0.100		0.391	0.400	97.7	60.0	120	
Etofenprox	0.000	< 0.200		0.764	0.800	95.5	50.0	150	
Etoxazole	0.000	< 0.100		0.371	0.400	92.7	60.0	120	
Fenoxycarb	0.000	< 0.100		0.397	0.400	99.3	60.0	120	
Fenpyroximate	0.000	< 0.200		0.770	0.800	96.2	60.0	120	
Fipronil	0.000	< 0.200		0.800	0.800	100.0	60.0	120	
Flonicamid	0.000	< 0.250		1.062	1.000	106.2	60.0	120	
Fludioxonil	0.000	< 0.200		0.746	0.800	93.3	50.0	150	
Hexythiazox	0.000	< 0.250		0.925	1.000	92.5	60.0	120	
Imazalil	0.000	< 0.100		0.362	0.400	90.4	60.0	120	
Imidacloprid	0.000	< 0.200		0.801	0.800	100.2	60.0	120	
Kresoxim-methyl	0.000	< 0.200		0.807	0.800	100.8	60.0	120	
Malathion	0.000	< 0.100		0.391	0.400	97.8	60.0	120	
Metalaxyl	0.000	< 0.100		0.397	0.400	99.2	60.0	120	
Methiocarb	0.000	< 0.100		0.389	0.400	97.3	60.0	120	
Methomyl	0.000	< 0.200		0.792	0.800	99.0	60.0	120	
MGK-264	0.000	< 0.100		0.376	0.400	94.0	50.0	150	
Myclobutanil	0.000	< 0.100		0.400	0.400	100.1	60.0	120	
Naled	0.000	< 0.250		0.970	1.000	97.0	50.0	150	
Oxamyl	0.000	< 0.500		2.076	2.000	103.8	60.0	120	
Paclobutrazole	0.000	< 0.200		0.778	0.800	97.2	60.0	120	
Parathion-Methyl	0.000	< 0.200		0.896	0.800	112.0	50.0	150	
Permethrin	0.000	< 0.100		0.373	0.400	93.3	50.0	150	
Phosmet	0.000	< 0.100		0.392	0.400	98.1	50.0	150	
Piperonyl butoxide	0.000	< 0.500		1.931	2.000	96.6	60.0	120	
Prallethrin	0.000	< 0.100		0.392	0.400	97.9	60.0	120	
Propiconazole	0.000	< 0.200		0.792	0.800	99.0	60.0	120	
Propoxur	0.000	< 0.100		0.393	0.400	98.2	60.0	120	
Pyrethrin (Summe)	0.000	< 0.100		0.396	0.413	95.9	60.0	120	
Pyridaben	0.000	< 0.100		0.384	0.400	95.9	50.0	150	
Spinosad	0.000	< 0.100		0.367	0.388	94.6	50.0	150	
Spiromesifen	0.000	< 0.100		0.382	0.400	95.5	60.0	120	
Spirotetramat	0.000	< 0.100		0.390	0.400	97.6	60.0	120	
Spiroxamine	0.000	< 0.200		0.775	0.800	96.9	60.0	120	
Tebuconazole	0.000	< 0.200		0.813	0.800	101.6	60.0	120	
Thiacloprid	0.000	< 0.100		0.400	0.400	100.0	60.0	120	
Thiamethoxam	0.000	< 0.100		0.428	0.400	106.9	60.0	120	
Trifloxystrobin	0.000	< 0.100		0.386	0.400	96.5	60.0	120	

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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662 — **Units:** mg/Kg — **Batch ID:** 2208988

Matrix Spike/Matrix Spike Duplicate Recoveries — **Sample ID:** 22-012342-0001

Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.000	0.861	0.824	1.000	4.5%	< 30	86.1%	82.4%	50 - 150	
Acephate	0.000	1.040	1.023	1.000	1.6%	< 30	104.0%	102.3%	50 - 150	
Acequinocyl	0.000	3.139	3.216	4.000	2.4%	< 30	78.5%	80.4%	50 - 150	
Acetamiprid	0.000	0.410	0.395	0.400	3.6%	< 30	102.4%	98.8%	50 - 150	
Aldicarb	0.000	0.793	0.782	0.800	1.4%	< 30	99.1%	97.7%	50 - 150	
Azoxystrobin	0.000	0.388	0.385	0.400	0.8%	< 30	96.9%	96.1%	50 - 150	
Bifenazate	0.000	0.442	0.434	0.400	1.8%	< 30	110.6%	108.6%	50 - 150	
Bifenthrin	0.000	0.311	0.327	0.400	4.8%	< 30	77.8%	81.6%	50 - 150	
Boscalid	0.000	0.804	0.824	0.800	2.4%	< 30	100.6%	103.0%	50 - 150	
Carbaryl	0.000	0.404	0.374	0.400	7.6%	< 30	100.9%	93.5%	50 - 150	
Carbofuran	0.000	0.401	0.383	0.400	4.6%	< 30	100.4%	95.8%	50 - 150	
Chlorantraniliprole	0.000	0.420	0.395	0.400	6.3%	< 30	105.1%	98.7%	50 - 150	
Chlorfenapyr	0.000	1.855	2.383	2.000	24.9%	< 30	92.7%	119.2%	50 - 150	
Chlorpyrifos	0.011	0.459	0.425	0.400	7.8%	< 30	112.0%	103.5%	50 - 150	
Clofentezine	0.000	0.397	0.382	0.400	3.8%	< 30	99.2%	95.5%	50 - 150	
Cyfluthrin	0.000	0.790	0.709	2.000	10.8%	< 30	39.5%	35.5%	30 - 150	
Cypermethrin	0.000	0.785	0.733	2.000	6.9%	< 30	39.2%	36.6%	50 - 150	Q
Daminozide	0.000	2.164	2.141	2.000	1.1%	< 30	108.2%	107.0%	30 - 150	
Diazinon	0.000	0.351	0.342	0.400	2.7%	< 30	87.7%	85.4%	50 - 150	
Dichlorvos	0.000	2.090	1.907	2.000	9.2%	< 30	104.5%	95.3%	50 - 150	
Dimethoate	0.000	0.413	0.398	0.400	3.6%	< 30	103.2%	99.6%	50 - 150	
Ethoprophos	0.000	0.407	0.402	0.400	1.2%	< 30	101.7%	100.5%	50 - 150	
Etofenprox	0.000	0.712	0.726	0.800	1.9%	< 30	89.1%	90.8%	50 - 150	
Etoxazole	0.000	0.362	0.359	0.400	0.9%	< 30	90.6%	89.8%	50 - 150	
Fenoxycarb	0.000	0.406	0.400	0.400	1.3%	< 30	101.4%	100.1%	50 - 150	
Fenpyroximate	0.000	0.419	0.445	0.800	6.0%	< 30	52.4%	55.7%	50 - 150	
Fipronil	0.000	0.779	0.717	0.800	8.2%	< 30	97.3%	89.7%	50 - 150	
Flonicamid	0.000	1.046	1.063	1.000	1.7%	< 30	104.6%	106.3%	50 - 150	
Fludioxonil	0.000	0.847	0.851	0.800	0.4%	< 30	105.9%	106.3%	50 - 150	
Hexythiazox	0.000	1.012	0.961	1.000	5.3%	< 30	101.2%	96.1%	50 - 150	
Imazalil	0.000	0.400	0.397	0.400	0.9%	< 30	100.0%	99.1%	50 - 150	
Imidacloprid	0.000	0.829	0.816	0.800	1.5%	< 30	103.6%	102.0%	50 - 150	
Kresoxim-methyl	0.000	0.831	0.796	0.800	4.3%	< 30	103.9%	99.5%	50 - 150	
Malathion	0.000	0.400	0.396	0.400	1.1%	< 30	100.0%	99.0%	50 - 150	
Metalaxyl	0.000	0.400	0.400	0.400	0.2%	< 30	100.1%	99.9%	50 - 150	
Methiocarb	0.000	0.398	0.380	0.400	4.4%	< 30	99.4%	95.1%	50 - 150	
Methomyl	0.000	0.785	0.785	0.800	0.1%	< 30	98.1%	98.2%	50 - 150	
MGK-264	0.000	0.398	0.389	0.400	2.3%	< 30	99.5%	97.2%	50 - 150	
Myclobutanil	0.000	0.395	0.349	0.400	12.6%	< 30	98.9%	87.1%	50 - 150	
Naled	0.000	0.973	0.911	1.000	6.6%	< 30	97.3%	91.1%	50 - 150	
Oxamyl	0.000	2.053	2.023	2.000	1.4%	< 30	102.6%	101.2%	50 - 150	
Paclobutrazole	0.000	0.802	0.779	0.800	2.9%	< 30	100.3%	97.4%	50 - 150	
Parathion-Methyl	0.000	0.891	0.733	0.800	19.4%	< 30	111.4%	91.7%	30 - 150	
Permethrin	0.000	0.330	0.313	0.400	5.3%	< 30	82.6%	78.3%	50 - 150	
Phosmet	0.000	0.398	0.398	0.400	0.1%	< 30	99.5%	99.6%	50 - 150	
Piperonyl butoxide	0.000	1.814	1.806	2.000	0.4%	< 30	90.7%	90.3%	50 - 150	
Prallethrin	0.000	0.521	0.514	0.400	1.5%	< 30	130.3%	128.4%	50 - 150	
Propiconazole	0.000	0.963	0.920	0.800	4.6%	< 30	120.4%	115.0%	50 - 150	
Propoxur	0.000	0.425	0.380	0.400	11.1%	< 30	106.2%	95.0%	50 - 150	
Pyrethrin (Summe)	0.000	0.382	0.394	0.413	2.9%	< 30	92.6%	95.3%	50 - 150	
Pyridaben	0.000	0.430	0.415	0.400	3.4%	< 30	107.4%	103.8%	50 - 150	
Spinosad	0.000	0.327	0.320	0.388	2.4%	< 30	84.4%	82.4%	50 - 150	
Spiromesifen	0.000	0.402	0.406	0.400	1.0%	< 30	100.5%	101.5%	50 - 150	
Spirotetramat	0.000	0.430	0.437	0.400	1.8%	< 30	107.4%	109.3%	50 - 150	
Spiroxamine	0.000	0.784	0.785	0.800	0.1%	< 30	98.0%	98.1%	50 - 150	
Tebuconazole	0.000	0.799	0.811	0.800	1.5%	< 30	99.8%	101.3%	50 - 150	
Thiacloprid	0.000	0.400	0.390	0.400	2.5%	< 30	99.9%	97.4%	50 - 150	
Thiamethoxam	0.000	0.380	0.441	0.400	14.8%	< 30	94.9%	110.1%	50 - 150	
Trifloxystrobin	0.000	0.370	0.359	0.400	3.1%	< 30	92.5%	89.7%	50 - 150	

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Laboratory Quality Control Results

Residual Solvents **Batch ID:** 2209018

Method Blank					Laboratory Control Sample							
Analyte	**Result**		**LOQ**	**Notes**	**Result**	**Spike**	**Units**	**% Rec**	**Limits**			**Notes**
Propane	ND	<	200		588	572	µg/g	102.8	60	-	120	
Isobutane	ND	<	200		786	731	µg/g	107.5	60	-	120	
Butane	ND	<	200		762	731	µg/g	104.2	60	-	120	
2,2-Dimethylpropane	ND	<	200		1070	936	µg/g	114.3	60	-	120	
Methanol	ND	<	200		1920	1650	µg/g	116.4	60	-	120	
Ethylene Oxide	ND	<	30		58.2	56.2	µg/g	103.6	60	-	120	
2-Methylbutane	ND	<	200		1770	1650	µg/g	107.3	60	-	120	
Pentane	ND	<	200		1800	1650	µg/g	109.1	60	-	120	
Ethanol	ND	<	200		1900	1660	µg/g	114.5	70	-	130	
Ethyl Ether	ND	<	200		1850	1630	µg/g	113.5	60	-	120	
2,2-Dimethylbutane	ND	<	30		204	189	µg/g	107.9	60	-	120	
Acetone	ND	<	200		1890	1650	µg/g	114.5	60	-	120	
2-Propanol	ND	<	200		1890	1650	µg/g	114.5	60	-	120	
Ethyl Formate	ND	<	500		1320	1610	µg/g	82.0	70	-	130	
Acetonitrile	ND	<	100		593	504	µg/g	117.7	60	-	120	
Methyl Acetate	ND	<	500		1650	1630	µg/g	101.2	70	-	130	
2,3-Dimethylbutane	ND	<	30		191	174	µg/g	109.8	60	-	120	
Dichloromethane	ND	<	60		582	521	µg/g	111.7	60	-	120	
2-Methylpentane	ND	<	30		203	187	µg/g	108.6	60	-	120	
MTBE	ND	<	500		1590	1600	µg/g	99.4	70	-	130	
3-Methylpentane	ND	<	30		211	188	µg/g	112.2	60	-	120	
Hexane	ND	<	30		213	182	µg/g	117.0	60	-	120	
1-Propanol	ND	<	500		1620	1610	µg/g	100.6	70	-	130	
Methylethylketone	ND	<	500		1630	1600	µg/g	101.9	70	-	130	
Ethyl acetate	ND	<	200		1910	1630	µg/g	117.2	60	-	120	
2-Butanol	ND	<	200		1890	1630	µg/g	116.0	60	-	120	
Tetrahydrofuran	ND	<	100		560	506	µg/g	110.7	60	-	120	
Cyclohexane	ND	<	200		1810	1640	µg/g	110.4	60	-	120	
2-methyl-1-propanol	ND	<	500		1510	1620	µg/g	93.2	70	-	130	
Benzene	ND	<	1		5.45	4.93	µg/g	110.5	60	-	120	
Isopropyl Acetate	ND	<	200		1900	1640	µg/g	115.9	60	-	120	
Heptane	ND	<	200		1650	1630	µg/g	101.2	60	-	120	
1-Butanol	ND	<	500		1550	1600	µg/g	96.9	70	-	130	
Propyl Acetate	ND	<	500		1680	1620	µg/g	103.7	70	-	130	
1,4-Dioxane	ND	<	100		554	493	µg/g	112.4	60	-	120	
2-Ethoxyethanol	ND	<	30		208	171	µg/g	121.6	60	-	120	Q1
Methylisobutylketone	ND	<	500		1520	1620	µg/g	93.8	70	-	130	
3-Methyl-1-butanol	ND	<	500		1540	1610	µg/g	95.7	70	-	130	
Ethylene Glycol	ND	<	200		603	494	µg/g	122.1	60	-	120	Q1
Toluene	ND	<	100		558	506	µg/g	110.3	60	-	120	
Isobutyl Acetate	ND	<	500		1590	1620	µg/g	98.1	70	-	130	
1-Pentanol	ND	<	500		1470	1610	µg/g	91.3	70	-	130	
Butyl Acetate	ND	<	500		1500	1610	µg/g	93.2	70	-	130	
Ethylbenzene	ND	<	200		1100	996	µg/g	110.4	60	-	120	
m,p-Xylene	ND	<	200		1100	1010	µg/g	108.9	60	-	120	
o-Xylene	ND	<	200		1030	979	µg/g	105.2	60	-	120	
Cumene	ND	<	30		193	188	µg/g	102.7	60	-	120	
Anisole	ND	<	500		1400	1610	µg/g	87.0	70	-	130	
DMSO	ND	<	500		1410	1600	µg/g	88.1	70	-	130	
1,2-dimethoxyethane	ND	<	50		185	190	µg/g	97.4	70	-	130	
Triethylamine	ND	<	500		1500	1610	µg/g	93.2	70	-	130	
N,N-dimethylformamide	ND	<	150		431	496	µg/g	86.9	70	-	130	
N,N-dimethylacetamide	ND	<	150		447	483	µg/g	92.5	70	-	130	
Pyridine	ND	<	50		150	167	µg/g	89.8	70	-	130	
Sulfolane	ND	<	50		131	161	µg/g	81.4	70	-	130	
1,2-Dichloroethane	ND	<	1		0.975	1	µg/g	97.5	70	-	130	
Chloroform	ND	<	1		0.969	1	µg/g	96.9	70	-	130	
Trichloroethylene	ND	<	1		0.933	1	µg/g	93.3	70	-	130	
1,1-Dichloroethane	ND	<	1		0.977	1	µg/g	97.7	70	-	130	

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QC - Sample Duplicate **Sample ID: 22-012342-0001**

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	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	
1,1-Dichloroethane	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
Q1 - Quality control result biased high. Only non-detect samples reported.

Units of Measure:

µg/g- Microgram per gram or ppm

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Terpenes Quality Control Results

Method Reference: EPA 5035 **Batch ID:** 2209027

Method Blank					Laboratory Control Sample					
Analyte	**Result**	**LOQ**		**Notes**	**Result**	**LCS**	**Units**	**LCS % Rec**	**Limits**	**Notes**
a-pinene	<LOQ	<	200		423	500	µg/g	***85%***	70 - 130	
Camphene	<LOQ	<	200		397	500	µg/g	***79%***	70 - 130	
Sabinene	<LOQ	<	200		414	500	µg/g	***83%***	70 - 130	
b-Pinene	<LOQ	<	200		406	500	µg/g	***81%***	70 - 130	
b-Myrcene	<LOQ	<	200		386	500	µg/g	***77%***	70 - 130	
a-phelllandrene	<LOQ	<	200		382	500	µg/g	***76%***	70 - 130	
d-3-Carene	<LOQ	<	200		367	500	µg/g	***73%***	70 - 130	
a-Terpinene	<LOQ	<	200		415	500	µg/g	***83%***	70 - 130	
p-Cymene	<LOQ	<	200		380	500	µg/g	***76%***	70 - 130	
D-Limonene	<LOQ	<	200		416	500	µg/g	***83%***	70 - 130	
Eucalyptol	<LOQ	<	200		374	500	µg/g	***75%***	70 - 130	
b-cis-Ocimene	<LOQ	<	67		125	167	µg/g	***75%***	70 - 130	
b-trans-Ocimene	<LOQ	<	133		266	333	µg/g	***80%***	70 - 130	
g-Terpinene	<LOQ	<	200		392	500	µg/g	***78%***	70 - 130	
Sabinene_Hydrate	<LOQ	<	200		390	500	µg/g	***78%***	70 - 130	
Terpinolene	<LOQ	<	200		401	500	µg/g	***80%***	70 - 130	
D-Fenchone	<LOQ	<	200		400	500	µg/g	***80%***	70 - 130	
Linalool	<LOQ	<	200		434	500	µg/g	***87%***	70 - 130	
Fenchol	<LOQ	<	200		397	500	µg/g	***79%***	70 - 130	
Camphor	<LOQ	<	200		356	500	µg/g	***71%***	70 - 130	
Isopulego	<LOQ	<	200		375	500	µg/g	***75%***	70 - 130	
Isoborneol	<LOQ	<	200		367	500	µg/g	***73%***	70 - 130	
Borneol	<LOQ	<	200		399	500	µg/g	***80%***	70 - 130	
DL-Menthol	<LOQ	<	200		363	500	µg/g	***73%***	70 - 130	
Terpineol	<LOQ	<	200		404	500	µg/g	***81%***	70 - 130	
Nerol	<LOQ	<	200		435	500	µg/g	***87%***	70 - 130	
Pulegone	<LOQ	<	200		422	500	µg/g	***84%***	70 - 130	
Gereniol	<LOQ	<	200		494	500	µg/g	***99%***	70 - 130	
Geranyl_Acetate	<LOQ	<	200		386	500	µg/g	***77%***	70 - 130	
a-Cedrene	<LOQ	<	200		383	500	µg/g	***77%***	70 - 130	
b-Caryophyllene	<LOQ	<	200		356	500	µg/g	***71%***	70 - 130	
a-Humulene	<LOQ	<	200		400	500	µg/g	***80%***	70 - 130	
Valenene	<LOQ	<	200		351	500	µg/g	***70%***	70 - 130	
cis-Nerolidol	<LOQ	<	200		436	500	µg/g	***87%***	70 - 130	
a-Farnesene	<LOQ	<	200		405	500	µg/g	***81%***	70 - 130	
trans-Nerolidol	<LOQ	<	200		440	500	µg/g	***88%***	70 - 130	
Caryophyllene_Oxide	<LOQ	<	200		399	500	µg/g	***80%***	70 - 130	
Guaiol	<LOQ	<	200		414	500	µg/g	***83%***	70 - 130	
Cedrol	<LOQ	<	200		375	500	µg/g	***75%***	70 - 130	
a-Bisabolol	<LOQ	<	200		380	500	µg/g	***76%***	70 - 130	

Definitions

LOQ	Limit of Quantitation
LCS	Laboratory Control Sample
% REC	Percent Recovery

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Terpenes Quality Control Results

Method Reference: EPA 5035 **Batch ID:** 2209027

Sample/Sample Duplicate **Sample ID: 22-012621-0001**

Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	5550	5570	184	µg/g	0%	< 20	
Camphene	<LOQ	<LOQ	184	µg/g	0%	< 20	
Sabinene	<LOQ	<LOQ	184	µg/g	0%	< 20	
b-Pinene	2290	2300	184	µg/g	0%	< 20	
b-Myrcene	24400	24300	184	µg/g	0%	< 20	
a-phelllandrene	463	477	184	µg/g	3%	< 20	
d-3-Carene	248	241	184	µg/g	3%	< 20	
a-Terpinene	378	364	184	µg/g	4%	< 20	
p-Cymene	<LOQ	<LOQ	184	µg/g	0%	< 20	
D-Limonene	5110	5080	184	µg/g	1%	< 20	
Eucalyptol	<LOQ	<LOQ	184	µg/g	0%	< 20	
b-cis-Ocimene	103	109	61.3	µg/g	6%	< 20	
b-trans-Ocimene	2000	1990	123	µg/g	1%	< 20	
g-Terpinene	273	269	184	µg/g	1%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	184	µg/g	0%	< 20	
Terpinolene	9110	9020	184	µg/g	1%	< 20	
D-Fenchone	<LOQ	<LOQ	184	µg/g	0%	< 20	
Linalool	1590	1560	184	µg/g	2%	< 20	
Fenchol	600	578	184	µg/g	4%	< 20	
Camphor	<LOQ	<LOQ	184	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	184	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	184	µg/g	0%	< 20	
Borneol	253	249	184	µg/g	2%	< 20	
DL-Menthol	<LOQ	<LOQ	184	µg/g	0%	< 20	
Terpineol	759	748	184	µg/g	1%	< 20	
Nerol	<LOQ	<LOQ	184	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	184	µg/g	0%	< 20	
Gereniol	<LOQ	<LOQ	184	µg/g	0%	< 20	
Geranyl_Acetate	<LOQ	<LOQ	184	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	184	µg/g	0%	< 20	
b-Caryophyllene	12900	12700	184	µg/g	2%	< 20	
a-Humulene	7090	6990	184	µg/g	1%	< 20	
Valenene	<LOQ	<LOQ	184	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	184	µg/g	0%	< 20	
a-Farnesene	<LOQ	<LOQ	184	µg/g	0%	< 20	
trans-Nerolidol	<LOQ	<LOQ	184	µg/g	0%	< 20	
Caryophyllene_Oxide	1050	991	184	µg/g	6%	< 20	
Guaiol	2340	2270	184	µg/g	3%	< 20	
Cedrol	<LOQ	<LOQ	184	µg/g	0%	< 20	
a-Bisabolol	3490	3420	184	µg/g	2%	< 20	

Definitions

RPD Relative Percent Difference

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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.