



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



Report Number: 22-002955/D006.R000
Report Date: 03/18/2022
ORELAP#: OR100028
Purchase Order:
Received: 03/15/22 10:02

Customer: KALIBLOOM
Product identity: Runtz
Client/Metric ID: .
Laboratory ID: 22-002955-0005

Summary

Potency:

Analyte	Result (%)								
CBD-A	12.6								
Δ8-THC†	1.83								
CBD	1.28								
CBG-A†	0.629								
CBC-A†	0.493								
THC-A	0.459								
CBC	0.101								
CBG†	0.0698								
CBDV-A†	0.0417								
				<table border="1"> <tr> <td>CBD-Total</td> <td>12.3%</td> </tr> <tr> <td>THC-Total</td> <td>0.403%</td> </tr> <tr> <td colspan="2">(Reported in percent of total sample)</td> </tr> </table>	CBD-Total	12.3%	THC-Total	0.403%	(Reported in percent of total sample)
CBD-Total	12.3%								
THC-Total	0.403%								
(Reported in percent of total sample)									

Water Activity and Moisture:

Analyte	Result	Limits	Unit
Moisture (Loss on Drying)	10.1	15.0	%
Water Activity	0.433	0.650	aw

Pesticides:

All analytes passing and less than LOQ.

Terpenes:

Analyte	Percent by weight	Percent of Total	Analyte	Percent by weight	Percent of Total
farnesene†	0.714	32.75%	β-Myrcene†	0.394	18.07%
β-Caryophyllene†	0.350	16.06%	α-Bisabolol†	0.142	6.51%
Humulene†	0.137	6.28%	trans-β-Ocimene†	0.104	4.77%
(-)-Guaial†	0.0986	4.52%	α-pinene†	0.0924	4.24%
(R)-(+)-Limonene†	0.0653	3.00%	(-)-β-Pinene†	0.0328	1.50%
Linalool†	0.0238	1.09%	(±)-trans-Nerolidol†	0.0227	1.04%
Total Terpenes†	2.18	100.00%			



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Customer: KALIBLOOM

Product identity: Runtz
Client/Metric ID: .
Sample Date:
Laboratory ID: 22-002955-0005
Evidence of Cooling: No
Temp: 19.1 °C
Relinquished by: Fedex

Sample Results

Potency Method J AOAC 2015 V98-6 (mod) Units % Batch: 2202310 Analyze: 3/17/22 10:43:00 AM

Analyte	As Received	Dry weight	LOQ	Notes
CBC	0.101		0.0296	
CBC-A†	0.493		0.0296	
CBC-Total†	0.533		0.0556	
CBD	1.28		0.0296	
CBD-A	12.6		0.296	
CBD-Total	12.3		0.289	
CBDV†	< LOQ		0.0296	
CBDV-A†	0.0417		0.0296	
CBDV-Total†	< LOQ		0.0553	
CBE†	< LOQ		0.0296	
CBG†	0.0698		0.0296	
CBG-A†	0.629		0.0296	
CBG-Total	0.622		0.0553	
CBL†	< LOQ		0.0296	
CBL-A†	< LOQ		0.0296	
CBL-Total†	< LOQ		0.0556	
CBN	< LOQ		0.0296	
CBT†	< LOQ		0.0296	
Δ8-THC†	1.83		0.0296	
Δ8-THCV	< LOQ		0.0296	
Δ9-THC	< LOQ		0.0296	
THC-A	0.459		0.0296	
THC-Total	0.403		0.0556	
THCV†	< LOQ		0.0296	
THCV-A†	< LOQ		0.0296	
THCV-Total†	< LOQ		0.0553	
Total Cannabinoids†	17.5			



Water Activity and Moisture

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
Moisture (Loss on Drying)	10.1	15.0	%	0.20	2202307	03/16/22	AOAC 966.02 (mod.)	pass	
Water Activity	0.433	0.650	aw	0.0300	2202322	03/17/22	AOAC 978.18	pass	

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 333-007-0420 OAR 333-007-0430



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Pesticides											
Method AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 2202346 Analyze 03/18/22 09:09 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		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	

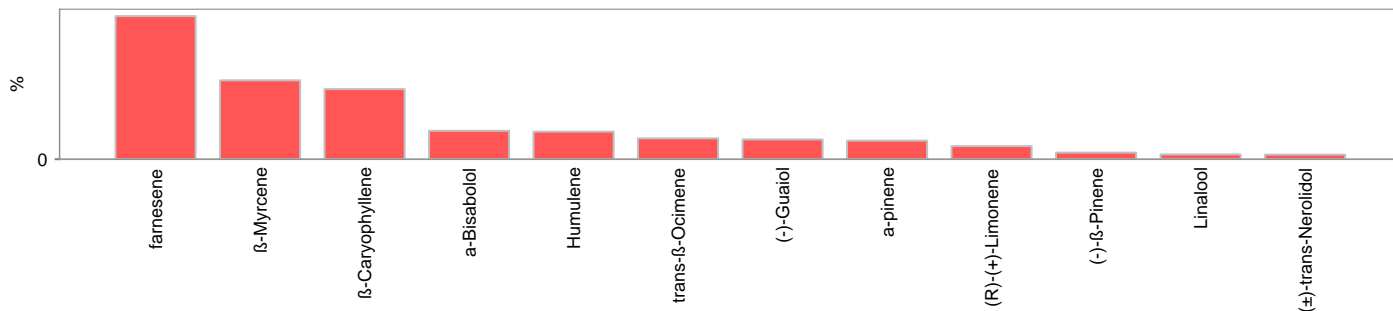


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Terpenes				Method J AOAC 2015 V98-6	Units %	Batch 2202319	Analyze 03/16/22 09:19 PM		
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
farnesene [†]	0.714	0.019	32.752%		β-Myrcene [†]	0.394	0.019	18.073%	
β-Caryophyllene [†]	0.350	0.019	16.055%		α-Bisabolol [†]	0.142	0.019	6.514%	
Humulene [†]	0.137	0.019	6.284%		trans-β-Ocimene [†]	0.104	0.012	4.771%	
(-)-Guaiol [†]	0.0986	0.019	4.5229%		α-pinene [†]	0.0924	0.019	4.2385%	
(R)-(+)-Limonene [†]	0.0653	0.019	2.9954%		(-)-β-Pinene [†]	0.0328	0.019	1.5046%	
Linalool [†]	0.0238	0.019	1.0917%		(±)-trans-Nerolidol [†]	0.0227	0.019	1.0413%	
Geraniol [†]	< LOQ	0.019	0.00%		(±)-fenchone [†]	< LOQ	0.019	0.00%	
nerol [†]	< LOQ	0.019	0.00%		α-phellandrene [†]	< LOQ	0.019	0.00%	
(+)-Cedrol [†]	< LOQ	0.019	0.00%		Geranyl acetate [†]	< LOQ	0.019	0.00%	
(+)-Pulegone [†]	< LOQ	0.019	0.00%		α-Terpinene [†]	< LOQ	0.019	0.00%	
γ-Terpinene [†]	< LOQ	0.019	0.00%		valencene [†]	< LOQ	0.019	0.00%	
p-Cymene [†]	< LOQ	0.019	0.00%		d-3-Carene [†]	< LOQ	0.019	0.00%	
(-)-α-Terpineol [†]	< LOQ	0.019	0.00%		(+)-fenchol [†]	< LOQ	0.019	0.00%	
Menthol [†]	< LOQ	0.019	0.00%		Sabinene hydrate [†]	< LOQ	0.019	0.00%	
Camphene [†]	< LOQ	0.019	0.00%		(±)-Camphor [†]	< LOQ	0.019	0.00%	
(±)-cis-Nerolidol [†]	< LOQ	0.019	0.00%		Isoborneol [†]	< LOQ	0.019	0.00%	
(+)-Borneol [†]	< LOQ	0.019	0.00%		(-)-caryophyllene oxide [†]	< LOQ	0.019	0.00%	
(-)-Isopulegol [†]	< LOQ	0.019	0.00%		α-cedrene [†]	< LOQ	0.019	0.00%	
cis-β-Ocimene [†]	< LOQ	0.006	0.00%		Eucalyptol [†]	< LOQ	0.019	0.00%	
Sabinene [†]	< LOQ	0.019	0.00%		Terpinolene [†]	< LOQ	0.019	0.00%	
Total Terpenes	2.18								





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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.

† = Analyte not NELAP accredited.

Units of Measure

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

% = Percentage of sample

aw = Water Activity

% wt = $\mu\text{g/g}$ divided by 10,000

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

Company: <u>Kalibloom</u> Contact: <u>Taylor</u> Street: <u>3315 E Russell Rd STE A-4 #346</u> City: <u>Las Vegas</u> State: <u>NV</u> Zip: <u>89120</u> <input checked="" type="checkbox"/> Email Results: <u>Kalibloomworldwide@gmail.com</u> Ph: (808) <u>5610852</u> <input type="checkbox"/> Fx Results: () Billing (if different): _____				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 type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush * <input type="checkbox"/> Priority Rush * <i>*Ask for availability</i>			
Lab ID	Client Sample Identification	Date	Time	Potency	Terpenes	Pesticides	Water Activity	Moisture			Sample Type †	Weight (Units)	Comments/Metrc ID
	Grand Daddy Grape	03/11	4pm	✓	✓	✓	✓	✓			V	15gr	
	Pineapple OG	03/11	4pm	✓	✓	✓	✓	✓			V	15gr	
	Strawberry Haze	03/11	4pm	✓	✓	✓	✓	✓			V	15gr	
	Skywalker Lifter	03/11	4pm	✓	✓	✓	✓	✓			V	15gr	
	Runtz	03/11	4pm	✓	✓	✓	✓	✓			V	15gr	
	Platinum Cookies	03/11	4pm	✓	✓	✓	✓	✓			V	15gr	
	Lemon Skunk	03/11	4pm	✓	✓	✓	✓	✓			V	15gr	
	Lemon Lime Diesel	03/11	4pm	✓	✓	✓	✓	✓			V	15gr	
	Wedding Cake	03/11	4pm	✓	✓	✓	✓	✓			V	15gr	
		03/11									V		
		03/11									V		
Relinquished By:		Date	Time	Received By: <u>AC</u>		Date	Time	Lab Use Only:					
								<input checked="" type="checkbox"/> Shipped Via: <u>Fedex</u> or <input type="checkbox"/> Client drop Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No - Temp (°C): <u>19.1 °C</u> Sample in good condition: <input checked="" 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@columbialaboratories.com
 Page _____ of _____
www.columbialaboratories.com



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Document ID: 3177 Revision: 2
Effective: 06/25/2021
Page 1 of 1

Job Number: _____ Search Name: _____

Package/Cooler opened on (if different than received date/time) Date: _____ Time: _____

Received By (Initials): AC Logged in by (Initials): _____ Date: 3/15 Time: 10:02

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

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

4) How was the package/cooler delivered?

UPS FEDEX USPS CLIENT COURIER OTHER: _____

Tracking Number (written in or copy of shipping label): 2707 8053 8418

5) Was packing material used? YES NO NA

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? 19.1 °C

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

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2202310

Laboratory Control Sample							
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	0.0440	0.04	%	110	80.0 - 120	Acceptable	
CBDV	0.0429	0.04	%	107	80.0 - 120	Acceptable	
CBE	0.0384	0.04	%	96.0	80.0 - 120	Acceptable	
CBDA	0.0420	0.04	%	105	80.0 - 120	Acceptable	
CBGA	0.0399	0.04	%	99.6	80.0 - 120	Acceptable	
CBG	0.0422	0.04	%	106	80.0 - 120	Acceptable	
CBD	0.0435	0.04	%	109	80.0 - 120	Acceptable	
THCV	0.0418	0.04	%	104	80.0 - 120	Acceptable	
d8THCV	0.0420	0.04	%	105	80.0 - 120	Acceptable	
THCVA	0.0383	0.04	%	95.8	80.0 - 120	Acceptable	
CBN	0.0432	0.04	%	108	80.0 - 120	Acceptable	
exo-THC	0.0413	0.04	%	103	80.0 - 120	Acceptable	
d9THC	0.0441	0.04	%	110	80.0 - 120	Acceptable	
d8THC	0.0406	0.04	%	101	80.0 - 120	Acceptable	
CBL	0.0406	0.04	%	102	80.0 - 120	Acceptable	
CBC	0.0426	0.04	%	106	80.0 - 120	Acceptable	
THCA	0.0395	0.04	%	98.8	80.0 - 120	Acceptable	
CBCA	0.0416	0.04	%	104	80.0 - 120	Acceptable	
CBLA	0.0402	0.04	%	100	80.0 - 120	Acceptable	
CBT	0.0408	0.04	%	102	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	< LOQ	0.03	%	< 0.03	Acceptable	
CBDV	< LOQ	0.03	%	< 0.03	Acceptable	
CBE	< LOQ	0.03	%	< 0.03	Acceptable	
CBDA	< LOQ	0.03	%	< 0.03	Acceptable	
CBGA	< LOQ	0.03	%	< 0.03	Acceptable	
CBG	< LOQ	0.03	%	< 0.03	Acceptable	
CBD	< LOQ	0.03	%	< 0.03	Acceptable	
THCV	< LOQ	0.03	%	< 0.03	Acceptable	
d8THCV	< LOQ	0.03	%	< 0.03	Acceptable	
THCVA	< LOQ	0.03	%	< 0.03	Acceptable	
CBN	< LOQ	0.03	%	< 0.03	Acceptable	
exo-THC	< LOQ	0.03	%	< 0.03	Acceptable	
d9THC	< LOQ	0.03	%	< 0.03	Acceptable	
d8THC	< LOQ	0.03	%	< 0.03	Acceptable	
CBL	< LOQ	0.03	%	< 0.03	Acceptable	
CBC	< LOQ	0.03	%	< 0.03	Acceptable	
THCA	< LOQ	0.03	%	< 0.03	Acceptable	
CBCA	< LOQ	0.03	%	< 0.03	Acceptable	
CBLA	< LOQ	0.03	%	< 0.03	Acceptable	
CBT	< LOQ	0.03	%	< 0.03	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: 2202310								
Sample Duplicate								
Sample ID: 22-002877-0013								
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
CBDV	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
CBE	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
CBDA	1.06	1.06	0.03	%	0.605	< 20	Acceptable	
CBGA	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
CBG	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
CBD	1.54	1.54	0.03	%	0.228	< 20	Acceptable	
THCV	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
d8THCV	0.0580	0.0593	0.03	%	2.26	< 20	Acceptable	
THCVA	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
CBN	0.0812	0.0822	0.03	%	1.24	< 20	Acceptable	
exo-THC	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
d9THC	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
d8THC	22.1	21.5	0.03	%	2.65	< 20	Acceptable	
CBL	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
CBC	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
THCA	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
CBCA	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
CBLA	< LOQ	< LOQ	0.03	%	NA	< 20	Acceptable	
CBT	0.0993	0.0987	0.03	%	0.595	< 20	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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503-254-1794

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Terpenes Quality Control Results

Method Reference: EPA 5035				Batch ID: 2202319					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	LCS	Units	LCS % Rec	Limits	Notes
a-pinene	<LOQ	< 200		518	500	µg/g	104%	70 - 130	
Camphene	<LOQ	< 200		396	500	µg/g	79%	70 - 130	
Sabinene	<LOQ	< 200		509	500	µg/g	102%	70 - 130	
b-Pinene	<LOQ	< 200		546	500	µg/g	109%	70 - 130	
b-Myrcene	<LOQ	< 200		448	500	µg/g	90%	70 - 130	
a-phellandrene	<LOQ	< 200		403	500	µg/g	81%	70 - 130	
d-3-Carene	<LOQ	< 200		410	500	µg/g	82%	70 - 130	
a-Terpinene	<LOQ	< 200		440	500	µg/g	88%	70 - 130	
p-Cymene	<LOQ	< 200		397	500	µg/g	79%	70 - 130	
D-Limonene	<LOQ	< 200		519	500	µg/g	104%	70 - 130	
Eucalyptol	<LOQ	< 200		395	500	µg/g	79%	70 - 130	
b-cis-Ocimene	<LOQ	< 67		123	167	µg/g	74%	70 - 130	
b-trans-Ocimene	<LOQ	< 133		265	333	µg/g	79%	70 - 130	
g-Terpinene	<LOQ	< 200		457	500	µg/g	91%	70 - 130	
Sabinene_Hydrate	<LOQ	< 200		520	500	µg/g	104%	70 - 130	
Terpinolene	<LOQ	< 200		454	500	µg/g	91%	70 - 130	
D-Fenchone	<LOQ	< 200		546	500	µg/g	109%	70 - 130	
Linalool	<LOQ	< 200		408	500	µg/g	82%	70 - 130	
Fenchol	<LOQ	< 200		509	500	µg/g	102%	70 - 130	
Camphor	<LOQ	< 200		405	500	µg/g	81%	70 - 130	
Isopulego	<LOQ	< 200		415	500	µg/g	83%	70 - 130	
Isoborneol	<LOQ	< 200		442	500	µg/g	88%	70 - 130	
Borneol	<LOQ	< 200		570	500	µg/g	114%	70 - 130	
DL-Menthol	<LOQ	< 200		472	500	µg/g	94%	70 - 130	
Terpineol	<LOQ	< 200		529	500	µg/g	106%	70 - 130	
Nerol	<LOQ	< 200		397	500	µg/g	79%	70 - 130	
Pulegone	<LOQ	< 200		618	500	µg/g	124%	70 - 130	
Geraniol	<LOQ	< 200		737	500	µg/g	147%	70 - 130	Q1
Geranyl_Acetate	<LOQ	< 200		473	500	µg/g	95%	70 - 130	
a-Cedrene	<LOQ	< 200		554	500	µg/g	111%	70 - 130	
b-Caryophyllene	<LOQ	< 200		494	500	µg/g	99%	70 - 130	
a-Humulene	<LOQ	< 200		640	500	µg/g	128%	70 - 130	
Valenene	<LOQ	< 200		530	500	µg/g	106%	70 - 130	
cis-Nerolidol	<LOQ	< 200		603	500	µg/g	121%	70 - 130	
a-Farnesene	<LOQ	< 200		516	500	µg/g	103%	70 - 130	
trans-Nerolidol	<LOQ	< 200		619	500	µg/g	124%	70 - 130	
Caryophyllene_Oxide	<LOQ	< 200		536	500	µg/g	107%	70 - 130	
Guaiol	<LOQ	< 200		646	500	µg/g	129%	70 - 130	
Cedrol	<LOQ	< 200		563	500	µg/g	113%	70 - 130	
a-Bisabolol	<LOQ	< 200		647	500	µg/g	129%	70 - 130	

Definitions

LOQ	Limit of Quantitation
LCS	Laboratory Control Sample
% REC	Percent Recovery
Q1	Quality control result biased high. Only non-detect samples reported.



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Terpenes Quality Control Results

Method Reference: EPA 5035		Batch ID: 2202319					
Sample/Sample Duplicate		Sample ID: 22-002955-0001					
Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	1150	1230	197	µg/g	7%	< 20	
Camphene	<LOQ	<LOQ	197	µg/g	0%	< 20	
Sabinene	<LOQ	<LOQ	197	µg/g	0%	< 20	
b-Pinene	392	409	197	µg/g	4%	< 20	
b-Myrcene	4000	4290	197	µg/g	7%	< 20	
a-phellandrene	<LOQ	<LOQ	197	µg/g	0%	< 20	
d-3-Carene	<LOQ	<LOQ	197	µg/g	0%	< 20	
a-Terpinene	<LOQ	<LOQ	197	µg/g	0%	< 20	
p-Cymene	<LOQ	<LOQ	197	µg/g	0%	< 20	
D-Limonene	632	652	197	µg/g	3%	< 20	
Eucalyptol	<LOQ	<LOQ	197	µg/g	0%	< 20	
b-cis-Ocimene	<LOQ	<LOQ	65.8	µg/g	0%	< 20	
b-trans-Ocimene	939	1050	132	µg/g	11%	< 20	
g-Terpinene	<LOQ	<LOQ	197	µg/g	0%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	197	µg/g	0%	< 20	
Terpinolene	<LOQ	<LOQ	197	µg/g	0%	< 20	
D-Fenchone	<LOQ	<LOQ	197	µg/g	0%	< 20	
Linalool	238	250	197	µg/g	5%	< 20	
Fenchol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Camphor	<LOQ	<LOQ	197	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	197	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Borneol	<LOQ	<LOQ	197	µg/g	0%	< 20	
DL-Menthol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Terpineol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Nerol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	197	µg/g	0%	< 20	
Geraniol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Geranyl_Acetate	<LOQ	<LOQ	197	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	197	µg/g	0%	< 20	
b-Caryophyllene	4000	3960	197	µg/g	1%	< 20	
a-Humulene	1830	1800	197	µg/g	2%	< 20	
Valenene	<LOQ	<LOQ	197	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	197	µg/g	0%	< 20	
a-Farnesene	4520	4480	197	µg/g	1%	< 20	
trans-Nerolidol	261	277	197	µg/g	6%	< 20	
Caryophyllene_Oxide	<LOQ	<LOQ	197	µg/g	0%	< 20	
Guaiol	1750	1730	197	µg/g	1%	< 20	
Cedrol	<LOQ	<LOQ	197	µg/g	0%	< 20	
a-Bisabolol	1600	1560	197	µg/g	3%	< 20	

Definitions

RPD Relative Percent Difference



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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg		Laboratory Control Sample		Batch ID: 2202346		
Method Blank	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS % Rec	Limits	Notes
Abamectin	0.000	< 0.250		0.863	1.000	86.3	80.4 - 106	
Acephate	0.000	< 0.250		0.848	1.000	84.8	67.1 - 125	
Acequinocyl	0.000	< 1.000		3.442	4.000	86.1	77.9 - 117	
Acetamiprid	0.000	< 0.100		0.375	0.400	93.9	68.8 - 128	
Aldicarb	0.000	< 0.200		0.760	0.800	94.9	70.2 - 130	
Azoxystrobin	0.000	< 0.100		0.380	0.400	95.0	75.2 - 125	
Bifenazate	0.000	< 0.100		0.380	0.400	95.0	68.8 - 128	
Bifenthrin	0.000	< 0.100		0.352	0.400	88.1	72.9 - 126	
Boscalid	0.000	< 0.200		0.850	0.800	106.3	69.7 - 129	
Carbaryl	0.000	< 0.100		0.375	0.400	93.7	72.0 - 124	
Carbofuran	0.000	< 0.100		0.385	0.400	96.3	79.1 - 119	
Chlorantraniliprole	0.000	< 0.100		0.377	0.400	94.2	88.9 - 165	
Chlorfenapyr	0.499	< 0.500		1.832	2.000	91.6	70.7 - 131	
Chlorpyrifos	0.000	< 0.100		0.371	0.400	92.8	69.7 - 124	
Clofentazine	0.000	< 0.100		0.185	0.400	46.3	43.5 - 80.7	
Cyfluthrin	0.000	< 0.500		2.101	2.000	105.0	70.8 - 132	
Cypermethrin	0.000	< 0.500		1.979	2.000	98.9	70.3 - 131	
Daminozide	0.029	< 0.500		0.653	2.000	32.7	25.0 - 46.3	
Diazinon	0.000	< 0.100		0.402	0.400	100.5	71.4 - 131	
Dichlorvos	0.000	< 0.500		2.192	2.000	109.6	80.3 - 129	
Dimethoate	0.000	< 0.100		0.372	0.400	92.9	78.6 - 118	
Ethoprophos	0.000	< 0.100		0.392	0.400	98.0	69.7 - 129	
Etofenprox	0.000	< 0.200		0.731	0.800	91.4	71.5 - 128	
Etoxazole	0.001	< 0.100		0.388	0.400	97.1	71.0 - 132	
Fenoxycarb	0.000	< 0.100		0.370	0.400	92.4	71.8 - 123	
Fenpyroximate	0.000	< 0.200		0.773	0.800	96.6	73.2 - 127	
Fipronil	0.000	< 0.200		0.756	0.800	94.5	70.8 - 131	
Flonicamid	0.000	< 0.250		0.956	1.000	95.6	74.9 - 130	
Fludioxonil	0.000	< 0.200		0.782	0.800	97.7	66.7 - 124	
Hexythiazox	0.000	< 0.250		0.929	1.000	92.9	70.4 - 125	
Imazalil	0.000	< 0.100		0.371	0.400	92.9	66.7 - 124	
Imidacloprid	0.000	< 0.200		0.767	0.800	95.9	75.9 - 122	
Kresoxim-methyl	0.000	< 0.200		0.761	0.800	95.1	70.4 - 126	
Malathion	0.000	< 0.100		0.388	0.400	96.9	73.0 - 125	
Metaxyl	0.000	< 0.100		0.379	0.400	94.8	74.5 - 122	
Methiocarb	0.000	< 0.100		0.353	0.400	88.3	71.6 - 133	
Methomyl	0.000	< 0.200		0.734	0.800	91.7	64.8 - 120	
MGK-264	0.000	< 0.100		0.396	0.400	99.1	69.8 - 130	
Myclobutanil	0.001	< 0.100		0.372	0.400	93.1	67.7 - 126	
Naled	0.000	< 0.250		0.533	1.000	53.3	45.2 - 84	
Oxamyl	0.000	< 0.500		1.958	2.000	97.9	66.0 - 122	
Paclobutrazole	0.000	< 0.200		0.766	0.800	95.7	68.2 - 127	
Parathion-Methyl	0.000	< 0.200		0.701	0.800	87.7	63.9 - 116	
Permethrin	0.000	< 0.100		0.418	0.400	104.5	74.4 - 126	
Phosmet	0.000	< 0.100		0.382	0.400	95.4	69.1 - 126	
Piperonyl butoxide	0.000	< 0.500		1.983	2.000	99.1	70.4 - 131	
Prallethrin	0.000	< 0.100		0.385	0.400	96.2	66.6 - 124	
Propiconazole	0.000	< 0.200		0.767	0.800	95.9	72.0 - 126	
Propoxur	0.000	< 0.100		0.378	0.400	94.6	77.1 - 120	
Pyrethrin (Summe)	0.000	< 0.100		0.438	0.413	105.9	64.6 - 120	
Pyridaben	0.000	< 0.100		0.374	0.400	93.5	74.0 - 122	
Spinosad	0.000	< 0.100		0.359	0.388	92.6	72.4 - 135	
Spiromesifen	0.000	< 0.100		0.378	0.400	94.5	70.0 - 130	
Spirotetramat	0.000	< 0.100		0.367	0.400	91.6	68.2 - 127	
Spiroxamine	0.000	< 0.200		0.741	0.800	92.7	73.6 - 122	
Tebuconazole	0.000	< 0.200		0.747	0.800	93.3	68.0 - 126	
Thiacloprid	0.000	< 0.100		0.370	0.400	92.5	70.6 - 124	
Thiamethoxam	0.000	< 0.100		0.376	0.400	94.0	67.8 - 123	
Trifloxystrobin	0.000	< 0.100		0.368	0.400	92.0	74.8 - 125	



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Laboratory Pesticide Quality Control Results

AOAC 2007.1 & EN 15662		Units: mg/Kg					Batch ID: 2202346			
Matrix Spike/Matrix Spike Duplicate Recoveries		Sample ID: 22-002955-0002								
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS % Rec	MSD % Rec	Limits	Notes
Abamectin	0.000	0.689	0.762	1.000	10.0%	< 30	68.9%	76.2%	50 - 150	
Acephate	0.000	0.828	0.866	1.000	4.5%	< 30	82.8%	86.6%	50 - 150	
Acequinocyl	0.000	3.510	3.918	4.000	11.0%	< 30	87.7%	97.9%	50 - 150	
Acetamiprid	0.000	0.374	0.376	0.400	0.6%	< 30	93.5%	94.0%	50 - 150	
Aldicarb	0.000	0.698	0.705	0.800	1.1%	< 30	87.2%	88.2%	50 - 150	
Azoxystrobin	0.007	0.320	0.338	0.400	5.5%	< 30	78.3%	82.7%	50 - 150	
Bifenazate	0.000	0.317	0.327	0.400	3.3%	< 30	79.2%	81.9%	50 - 150	
Bifenthrin	0.000	0.327	0.344	0.400	5.3%	< 30	81.7%	86.1%	50 - 150	
Boscalid	0.000	0.700	0.687	0.800	1.9%	< 30	87.5%	85.8%	50 - 150	
Carbaryl	0.000	0.301	0.299	0.400	0.9%	< 30	75.3%	74.6%	50 - 150	
Carbofuran	0.000	0.279	0.292	0.400	4.4%	< 30	69.8%	73.0%	50 - 150	
Chlorantraniliprole	0.000	0.287	0.295	0.400	3.0%	< 30	71.7%	73.9%	50 - 150	
Chlorfenapyr	0.000	1.715	1.399	2.000	20.3%	< 30	85.7%	70.0%	50 - 150	
Chlorpyrifos	0.000	0.363	0.374	0.400	2.9%	< 30	90.7%	93.4%	50 - 150	
Clofentezine	0.000	0.238	0.233	0.400	2.2%	< 30	59.5%	58.2%	50 - 150	
Cyfluthrin	0.000	1.306	1.266	2.000	3.1%	< 30	65.3%	63.3%	30 - 150	
Cypermethrin	0.031	1.617	1.672	2.000	3.4%	< 30	79.3%	82.0%	50 - 150	
Daminozide	0.075	0.645	0.695	2.000	8.4%	< 30	28.5%	31.0%	30 - 150	Q
Diazinon	0.000	0.326	0.357	0.400	9.1%	< 30	81.5%	89.3%	50 - 150	
Dichlorvos	0.000	1.648	1.715	2.000	3.9%	< 30	82.4%	85.7%	50 - 150	
Dimethoate	0.000	0.356	0.370	0.400	3.8%	< 30	89.0%	92.5%	50 - 150	
Ethoprophos	0.000	0.342	0.344	0.400	0.7%	< 30	85.4%	86.0%	50 - 150	
Etofenprox	0.000	0.679	0.722	0.800	6.1%	< 30	84.9%	90.3%	50 - 150	
Etoxazole	0.009	0.383	0.405	0.400	5.7%	< 30	93.3%	98.8%	50 - 150	
Fenoxycarb	0.000	0.321	0.340	0.400	5.6%	< 30	80.2%	84.9%	50 - 150	
Fenpyroximate	0.000	0.681	0.692	0.800	1.6%	< 30	85.2%	86.5%	50 - 150	
Fipronil	0.000	0.673	0.716	0.800	6.2%	< 30	84.2%	89.5%	50 - 150	
Flonicamid	0.000	0.867	0.946	1.000	8.7%	< 30	86.7%	94.6%	50 - 150	
Fludioxonil	0.000	0.713	0.701	0.800	1.6%	< 30	89.1%	87.7%	50 - 150	
Hexythiazox	0.000	0.411	0.436	1.000	5.8%	< 30	41.1%	43.6%	50 - 150	Q
Imazalil	0.001	0.321	0.326	0.400	1.5%	< 30	80.1%	81.3%	50 - 150	
Imidacloprid	0.003	0.725	0.796	0.800	9.3%	< 30	90.3%	99.1%	50 - 150	
Kresoxim-methyl	0.000	0.700	0.737	0.800	5.2%	< 30	87.4%	92.1%	50 - 150	
Malathion	0.000	0.340	0.374	0.400	9.3%	< 30	85.1%	93.4%	50 - 150	
Metaxyl	0.000	0.311	0.319	0.400	2.4%	< 30	77.7%	79.6%	50 - 150	
Methiocarb	0.000	0.308	0.302	0.400	1.8%	< 30	76.9%	75.5%	50 - 150	
Methomyl	0.000	0.630	0.770	0.800	20.1%	< 30	78.7%	96.3%	50 - 150	
MGK-264	0.000	0.276	0.288	0.400	4.2%	< 30	69.0%	72.0%	50 - 150	
Myclobutanil	0.003	0.355	0.350	0.400	1.4%	< 30	88.1%	86.8%	50 - 150	
Naled	0.000	0.676	0.697	1.000	3.1%	< 30	67.6%	69.7%	50 - 150	
Oxamyl	0.000	1.838	1.892	2.000	2.9%	< 30	91.9%	94.6%	50 - 150	
Paclobutrazole	0.000	0.756	0.767	0.800	1.5%	< 30	94.5%	95.9%	50 - 150	
Parathion-Methyl	0.000	0.666	0.649	0.800	2.7%	< 30	83.3%	81.1%	30 - 150	
Permethrin	0.000	0.420	0.390	0.400	7.3%	< 30	105.0%	97.6%	50 - 150	
Phosmet	0.000	0.299	0.310	0.400	3.6%	< 30	74.7%	77.4%	50 - 150	
Piperonyl butoxide	0.000	1.833	1.872	2.000	2.1%	< 30	91.7%	93.6%	50 - 150	
Prallethrin	0.000	0.205	0.216	0.400	5.5%	< 30	51.2%	54.1%	50 - 150	
Propiconazole	0.000	0.732	0.804	0.800	9.5%	< 30	91.5%	100.6%	50 - 150	
Propoxur	0.001	0.294	0.305	0.400	3.8%	< 30	73.2%	76.0%	50 - 150	
Pyrethrin (Summe)	0.000	0.317	0.330	0.413	4.1%	< 30	76.6%	79.8%	50 - 150	
Pyridaben	0.000	0.348	0.367	0.400	5.1%	< 30	87.1%	91.6%	50 - 150	
Spinosad	0.000	0.318	0.336	0.388	5.5%	< 30	81.9%	86.5%	50 - 150	
Spiromesifen	0.000	0.425	0.437	0.400	2.8%	< 30	106.3%	109.3%	50 - 150	
Spirotetramat	0.000	0.382	0.389	0.400	1.9%	< 30	95.5%	97.3%	50 - 150	
Spiroxamine	0.000	0.684	0.698	0.800	2.0%	< 30	85.5%	87.3%	50 - 150	
Tebuconazole	0.000	0.716	0.740	0.800	3.3%	< 30	89.5%	92.5%	50 - 150	
Thiacloprid	0.000	0.318	0.324	0.400	1.8%	< 30	79.5%	81.0%	50 - 150	
Thiamethoxam	0.000	0.309	0.381	0.400	20.8%	< 30	77.2%	95.1%	50 - 150	
Trifloxystrobin	0.000	0.370	0.404	0.400	8.7%	< 30	92.6%	100.9%	50 - 150	



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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.