

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU	BATCH #	LOQ: Limit Of Quantitation LOD: Limit Of Detection 1 g = 10 ⁻³ kg = 10 ³ mg = 10 ⁶ µg 1 mg/kg = 1 ppm = 1000 ppb	
PRODUCT NAME	SERVING SIZE		
LABORATORY :	OREGON ACCREDITATION: OR100028		
POTENCY	PER SERVING	PER GRAM	Percent
Cannabidiol (CBD)	mg/serving	mg/g	%
Total THC (d9-THC, THCA)	mg/serving	mg/g	%
Cannabigerol (CBG)	mg/serving	mg/g	%
Cannabinol (CBN)	mg/serving	mg/g	%
Cannabichromene (CBC)	mg/serving	mg/g	%
Tetrahydrocannabinolic Acid (THCA)	mg/serving	mg/g	%
Delta-9-THC (d9-THC)	mg/serving	mg/g	%
Delta-8-THC (d8-THC)	mg/serving	mg/g	%
HEAVY METALS	PER SERVING	PER GRAM	REGULATORY ACTION LEVEL
Arsenic	µg/serving	µg/g	10 µg/day ^[1]
Cadmium	µg/serving	µg/g	4.1 µg/day ^[1]
Lead	µg/serving	µg/g	6 µg/day ^[1]
Mercury	µg/serving	µg/g	2 µg/day ^[1]
PESTICIDES	REGULATORY ACTION LEVEL		
None of the other 59 pesticides tested found above limit of detection in the sample.			10 ppb ^[1]
RESIDUAL SOLVENTS	Results	REGULATORY ACTION LEVEL	
Ethanol*	µg/g	50,000 mg/day	
Heptane	µg/g	50,000 mg/day	
None of the 34 residual solvents tested found above limit of quantitation in the sample.			
MICROBIAL	PASS/FAIL		
Yeast & Mold	Pass		
Coliform	Pass		
TERPENES	% OF SAMPLE		
Farnesene	%		
β-Caryophyllene	%		
α-Bisabolol	%		
Guaiol	%		
Humulene	%		
Caryophyllene Oxide	%		





1. American Herbal Pharmacopoeia. (2014). Cannabis Inflorescence: Standards of Identity, Analysis, and Quality Control. Washington DC: AHP.

*Ethanol is a food additive used in some of our ingredients. The FDA has labeled ethanol as Generally Recognized as Safe (GRAS). Many foods contain trace amounts of ethanol, including soy sauce, pasta sauces, fruits and juices, etc. Our products contain safe levels of ethanol and always below pertinent regulatory action levels.



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

Customer: Etz Hayim Holdings
Product identity: FORM-ED19-SG100
Client/Metric ID: .
Laboratory ID: 22-004788-0001

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status		
CBC per 1g [†]	1.92		mg/1g		CBD-Total per 1g	240 mg/1g
CBD per 1g	240		mg/1g			
CBDV per 1g [†]	0.838		mg/1g		THC-Total per 1g	2.24 mg/1g
CBE per 1g [†]	1.26		mg/1g			
CBG per 1g [†]	1.06		mg/1g		(Reported in milligrams per serving)	
CBT per 1g [†]	2.17		mg/1g			
Δ9-THC per 1g	2.24		mg/1g			

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
(R)-(+)-Limonene [†]	11.3	61.08%	β-Myrcene [†]	4.97	26.86%
β-Caryophyllene [†]	1.97	10.65%	Humulene [†]	0.185	1.00%
α-Bisabolol [†]	0.0483	0.26%	(-)-caryophyllene oxide [†]	0.0259	0.14%
d-3-Carene [†]	0.0213	0.12%	Total Terpenes[†]	18.5	100.00%

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

Customer: Etz Hayim Holdings
16427 NE Airport Way
PORTLAND 97230
United States of America (USA)

Product identity: FORM-ED19-SG100

Client/Metric ID: .

Sample Date:

Laboratory ID: 22-004788-0001

Evidence of Cooling: No

Temp: 20.1 °C

Relinquished by: Client

Serving Size #1: 1 g

Sample Results

Potency per 1g					
Method J AOAC 2015 V98-6 (mod)Units mg/se Batch: 2203744 Analyze: 5/2/22 2:28:00 PM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g†	1.92		mg/1g	0.0329	
CBC-A per 1g†	< LOQ		mg/1g	0.0329	
CBC-Total per 1g†	1.92		mg/1g	0.0617	
CBD per 1g	240		mg/1g	3.29	
CBD-A per 1g	< LOQ		mg/1g	0.0329	
CBD-Total per 1g	240		mg/1g	3.32	
CBDV per 1g†	0.838		mg/1g	0.0329	
CBDV-A per 1g†	< LOQ		mg/1g	0.0329	
CBDV-Total per 1g†	0.838		mg/1g	0.0613	
CBE per 1g†	1.26		mg/1g	0.0329	
CBG per 1g†	1.06		mg/1g	0.0329	
CBG-A per 1g†	< LOQ		mg/1g	0.0329	
CBG-Total per 1g†	1.06		mg/1g	0.0613	
CBL per 1g†	< LOQ		mg/1g	0.0329	
CBL-A per 1g†	< LOQ		mg/1g	0.0329	
CBL-Total per 1g†	< LOQ		mg/1g	0.0617	
CBN per 1g	< LOQ		mg/1g	0.0329	
CBT per 1g†	2.17		mg/1g	0.0329	
Δ8-THCV per 1g†	< LOQ		mg/1g	0.0329	
Δ8-THC per 1g†	< LOQ		mg/1g	0.0329	
Δ9-THC per 1g	2.24		mg/1g	0.0329	
exo-THC per 1g†	< LOQ		mg/1g	0.0329	
THC-A per 1g	< LOQ		mg/1g	0.0329	
THC-Total per 1g	2.24		mg/1g	0.0617	
THCV per 1g†	< LOQ		mg/1g	0.0329	
THCV-A per 1g†	< LOQ		mg/1g	0.0329	
THCV-Total per 1g†	< LOQ		mg/1g	0.0617	
Total Cannabinoids per 1g	249		mg/1g		



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2203842	05/07/22	AOAC 991.14 (Petrifilm)		X, I
Total Coliforms	< LOQ		cfu/g	10	2203842	05/07/22	AOAC 991.14 (Petrifilm)		X, I
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2203843	05/08/22	AOAC 2014.05 (RAPID)		X, I
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2203843	05/08/22	AOAC 2014.05 (RAPID)		X, I

Solvents

Residual Solvents by GC/MS						Batch 2204069					
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		Ethanol [†]	< LOQ		200		
Ethyl acetate	< LOQ	5000	200	pass		Ethyl benzene	< LOQ		200		
Ethyl ether	< LOQ	5000	200	pass		Ethylene glycol	< LOQ	620	200	pass	
Ethylene oxide	< LOQ	50.0	20.0	pass		Hexanes (sum)	< LOQ	290	150	pass	
Isopropyl acetate	< LOQ	5000	200	pass		Isopropylbenzene (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							



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

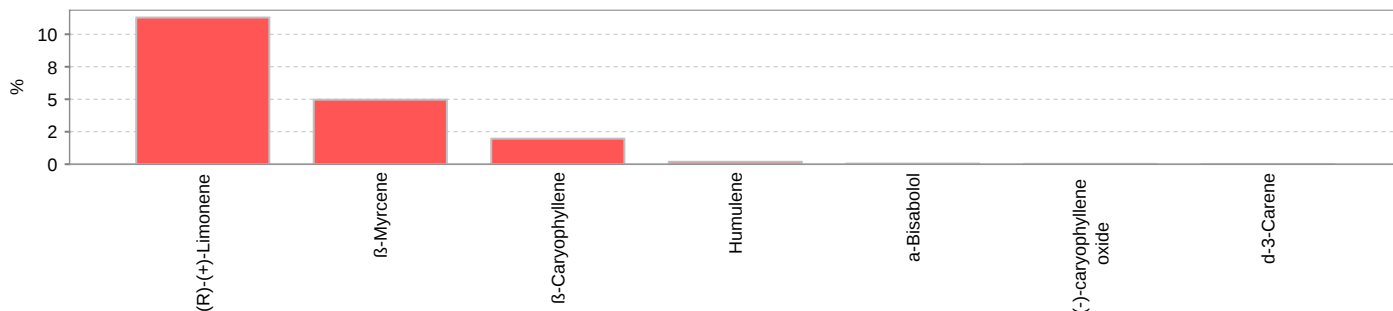


Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

Pesticides					Method AOAC 2007.01 & EN 15662 (mod)	Units mg/kg	Batch 2203921	Analyze 05/06/22 01:56 PM				
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes	
Abamectin	< LOQ	0.50	0.250	pass		Acephate	< LOQ	0.40	0.250	pass		
Acequinocyl	< LOQ	2.0	1.00	pass		Acetamiprid	< LOQ	0.20	0.100	pass		
Aldicarb	< LOQ	0.40	0.200	pass		Azoxystrobin	< LOQ	0.20	0.100	pass		
Bifenazate	< LOQ	0.20	0.100	pass		Bifenthrin	< LOQ	0.20	0.100	pass		
Boscalid	< LOQ	0.40	0.200	pass		Carbaryl	< LOQ	0.20	0.100	pass		
Carbofuran	< LOQ	0.20	0.100	pass		Chlorantraniliprole	< LOQ	0.20	0.100	pass		
Chlorfenapyr	< LOQ	1.0	0.500	pass		Chlorpyrifos	< LOQ	0.20	0.100	pass		
Clofentezine	< LOQ	0.20	0.100	pass		Cyfluthrin	< LOQ	1.0	0.500	pass		
Cypermethrin	< LOQ	1.0	0.500	pass		Daminozide	< LOQ	1.0	0.500	pass		
Diazinon	< LOQ	0.20	0.100	pass		Dichlorvos	< LOQ	1.0	0.500	pass		
Dimethoate	< LOQ	0.20	0.100	pass		Ethoprophos	< LOQ	0.20	0.100	pass		
Etofenprox	< LOQ	0.40	0.200	pass		Etoxazole	< LOQ	0.20	0.100	pass		
Fenoxycarb	< LOQ	0.20	0.100	pass		Fenpyroximate	< LOQ	0.40	0.200	pass		
Fipronil	< LOQ	0.40	0.200	pass		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								



Terpenes	Method J AOAC 2015 V98-6				Units %	Batch 2203907	Analyze 05/06/22	02:23 AM	
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
(R)-(+)-Limonene [†]	11.3	0.182	61.08%		β-Myrcene [†]	4.97	0.182	26.86%	
β-Caryophyllene [†]	1.97	0.018	10.65%		Humulene [†]	0.185	0.018	1.000%	
α-Bisabolol [†]	0.0483	0.018	0.2611%		(-)-caryophyllene oxide [†]	0.0259	0.018	0.1400%	
d-3-Carene [†]	0.0213	0.018	0.1151%		α-Terpinene [†]	< LOQ	0.018	0.00%	
(-)-Guaiol [†]	< LOQ	0.018	0.00%		farnesene [†]	< LOQ	0.018	0.00%	
nerol [†]	< LOQ	0.018	0.00%		(+)-Pulegone [†]	< LOQ	0.018	0.00%	
gamma-Terpinene [†]	< LOQ	0.018	0.00%		p-Cymene [†]	< LOQ	0.018	0.00%	
(±)-Camphor [†]	< LOQ	0.018	0.00%		Geraniol [†]	< LOQ	0.018	0.00%	
(-)-α-Terpineol [†]	< LOQ	0.018	0.00%		Sabinene hydrate [†]	< LOQ	0.018	0.00%	
(-)-β-Pinene [†]	< LOQ	0.018	0.00%		(+)-fenchol [†]	< LOQ	0.018	0.00%	
Sabinene [†]	< LOQ	0.018	0.00%		(-)-Isopulegol [†]	< LOQ	0.018	0.00%	
Menthol [†]	< LOQ	0.018	0.00%		(+)-Cedrol [†]	< LOQ	0.018	0.00%	
Geranyl acetate [†]	< LOQ	0.018	0.00%		(±)-trans-Nerolidol [†]	< LOQ	0.018	0.00%	
(+)-Borneol [†]	< LOQ	0.018	0.00%		(±)-cis-Nerolidol [†]	< LOQ	0.018	0.00%	
(±)-fenchone [†]	< LOQ	0.018	0.00%		α-cedrene [†]	< LOQ	0.018	0.00%	
α-phellandrene [†]	< LOQ	0.018	0.00%		α-pinene [†]	< LOQ	0.018	0.00%	
Camphene [†]	< LOQ	0.018	0.00%		cis-β-Ocimene [†]	< LOQ	0.006	0.00%	
Eucalyptol [†]	< LOQ	0.018	0.00%		Isoborneol [†]	< LOQ	0.018	0.00%	
Linalool [†]	< LOQ	0.018	0.00%		Terpinolene [†]	< LOQ	0.018	0.00%	
trans-β-Ocimene [†]	< LOQ	0.012	0.00%		valencene [†]	< LOQ	0.018	0.00%	
Total Terpenes	18.5								



Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
Arsenic	< LOQ	0.200	mg/kg	0.0949	2203916	05/05/22	AOAC 2013.06 (mod.)	pass	X
Cadmium	< LOQ	0.200	mg/kg	0.0949	2203916	05/05/22	AOAC 2013.06 (mod.)	pass	X
Lead	< LOQ	0.500	mg/kg	0.0949	2203916	05/05/22	AOAC 2013.06 (mod.)	pass	X
Mercury	< LOQ	0.100	mg/kg	0.0475	2203916	05/05/22	AOAC 2013.06 (mod.)	pass	X



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

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

cfu/g = Colony forming units per gram

g = g

µg/g = Microgram per gram

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

mg/1g = Milligram per 1g

% = Percentage of sample

% wt = µg/g divided by 10,000

Glossary of Qualifiers

I: Insufficient sample received to meet method requirements.

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner
General Manager



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

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

Laboratory Quality Control Results

JAOAC2015 V98.6				Batch ID: 2203744			
Laboratory Control Sample							
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	0.0334	0.033	%	100	80.0 - 120	Acceptable	
CBDV	0.0368	0.033	%	110	80.0 - 120	Acceptable	
CBE	0.0324	0.033	%	97.3	80.0 - 120	Acceptable	
CBDA	0.0328	0.033	%	98.3	90.0 - 110	Acceptable	
CBGA	0.0325	0.033	%	97.4	80.0 - 120	Acceptable	
CBG	0.0323	0.033	%	96.8	80.0 - 120	Acceptable	
CBD	0.0339	0.033	%	102	90.0 - 110	Acceptable	
THCV	0.0331	0.033	%	99.2	80.0 - 120	Acceptable	
d8THCV	0.0331	0.033	%	99.2	80.0 - 120	Acceptable	
THCVA	0.0320	0.033	%	96.1	80.0 - 120	Acceptable	
CBN	0.0347	0.033	%	104	90.0 - 110	Acceptable	
exo-THC	0.0314	0.033	%	94.3	80.0 - 120	Acceptable	
d9THC	0.0334	0.033	%	100	90.0 - 110	Acceptable	
d8THC	0.0337	0.033	%	101	90.0 - 110	Acceptable	
CBL	0.0333	0.033	%	99.9	80.0 - 120	Acceptable	
CBC	0.0338	0.033	%	101	80.0 - 120	Acceptable	
THCA	0.0320	0.033	%	96.0	90.0 - 110	Acceptable	
CBCA	0.0329	0.033	%	98.8	80.0 - 120	Acceptable	
CBLA	0.0337	0.033	%	101	80.0 - 120	Acceptable	
CBT	0.0332	0.033	%	99.7	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	< LOQ	0.003	%	< 0.003	Acceptable	
CBDV	< LOQ	0.003	%	< 0.003	Acceptable	
CBE	< LOQ	0.003	%	< 0.003	Acceptable	
CBDA	< LOQ	0.003	%	< 0.003	Acceptable	
CBGA	< LOQ	0.003	%	< 0.003	Acceptable	
CBG	< LOQ	0.003	%	< 0.003	Acceptable	
CBD	< LOQ	0.003	%	< 0.003	Acceptable	
THCV	< LOQ	0.003	%	< 0.003	Acceptable	
d8THCV	< LOQ	0.003	%	< 0.003	Acceptable	
THCVA	< LOQ	0.003	%	< 0.003	Acceptable	
CBN	< LOQ	0.003	%	< 0.003	Acceptable	
exo-THC	< LOQ	0.003	%	< 0.003	Acceptable	
d9THC	< LOQ	0.003	%	< 0.003	Acceptable	
d8THC	< LOQ	0.003	%	< 0.003	Acceptable	
CBL	< LOQ	0.003	%	< 0.003	Acceptable	
CBC	< LOQ	0.003	%	< 0.003	Acceptable	
THCA	< LOQ	0.003	%	< 0.003	Acceptable	
CBCA	< LOQ	0.003	%	< 0.003	Acceptable	
CBLA	< LOQ	0.003	%	< 0.003	Acceptable	
CBT	< LOQ	0.003	%	< 0.003	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

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

Laboratory Quality Control Results

JAOAC2015 V986					Batch ID: 2203744			
Sample Duplicate					Sample ID: 22-004710-0001			
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	0.0131	0.0126	0.003	%	3.92	< 20	Acceptable	
CBE	0.0232	0.0233	0.003	%	0.189	< 20	Acceptable	
CBD	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0393	0.0395	0.003	%	0.491	< 20	Acceptable	
CBD	2.54	2.56	0.003	%	0.784	< 20	Acceptable	
THCV	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
d8THCV	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
CBN	0.00526	0.00546	0.003	%	3.63	< 20	Acceptable	
exo-THC	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
d9THC	0.0609	0.0613	0.003	%	0.617	< 20	Acceptable	
d8THC	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
CBL	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
CBC	0.0969	0.0946	0.003	%	2.35	< 20	Acceptable	
THCA	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
CBLA	< LOQ	< LOQ	0.003	%	NA	< 20	Acceptable	
CBT	0.0207	0.0213	0.003	%	2.87	< 20	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

Revision: 1 Document ID: 7086
Legacy ID: CFL-E57Worksheet Validated 11/04/2020

Terpenes Quality Control Results

Method Reference: EPA5035				Batch ID: 2203907					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	LCS	Units	LCS% Rec	Limits	Notes
a-pinene	<LOQ	< 200		588	500	µg/g	118%	70 - 130	
Camphene	<LOQ	< 200		453	500	µg/g	91%	70 - 130	
Sabinene	<LOQ	< 200		598	500	µg/g	120%	70 - 130	
b-Pinene	<LOQ	< 200		588	500	µg/g	118%	70 - 130	
b-Myrcene	<LOQ	< 200		431	500	µg/g	86%	70 - 130	
a-phellandrene	<LOQ	< 200		415	500	µg/g	83%	70 - 130	
d-3-Carene	<LOQ	< 200		434	500	µg/g	87%	70 - 130	
a-Terpinene	<LOQ	< 200		602	500	µg/g	120%	70 - 130	
p-Cymene	<LOQ	< 200		469	500	µg/g	94%	70 - 130	
D-Limonene	<LOQ	< 200		590	500	µg/g	118%	70 - 130	
Eucalyptol	<LOQ	< 200		428	500	µg/g	86%	70 - 130	
b-cis-Ocimene	<LOQ	< 67		152	167	µg/g	91%	70 - 130	
b-trans-Ocimene	<LOQ	< 133		298	333	µg/g	89%	70 - 130	
g-Terpinene	<LOQ	< 200		587	500	µg/g	117%	70 - 130	
Sabinene_Hydrate	<LOQ	< 200		602	500	µg/g	120%	70 - 130	
Terpinolene	<LOQ	< 200		580	500	µg/g	116%	70 - 130	
D-Fenchone	<LOQ	< 200		537	500	µg/g	107%	70 - 130	
Linalool	<LOQ	< 200		444	500	µg/g	89%	70 - 130	
Fenchol	<LOQ	< 200		619	500	µg/g	124%	70 - 130	
Camphor	<LOQ	< 200		440	500	µg/g	88%	70 - 130	
Isopulego	<LOQ	< 200		437	500	µg/g	87%	70 - 130	
Isoborneol	<LOQ	< 200		416	500	µg/g	83%	70 - 130	
Borneol	<LOQ	< 200		624	500	µg/g	125%	70 - 130	
DL-Menthol	<LOQ	< 200		420	500	µg/g	84%	70 - 130	
Terpineol	<LOQ	< 200		616	500	µg/g	123%	70 - 130	
Nerol	<LOQ	< 200		425	500	µg/g	85%	70 - 130	
Pulegone	<LOQ	< 200		570	500	µg/g	114%	70 - 130	
Geraniol	<LOQ	< 200		639	500	µg/g	128%	70 - 130	
Geranyl_Acetate	<LOQ	< 200		428	500	µg/g	86%	70 - 130	
a-Cedrene	<LOQ	< 200		613	500	µg/g	123%	70 - 130	
b-Caryophyllene	<LOQ	< 200		414	500	µg/g	83%	70 - 130	
a-Humulene	<LOQ	< 200		619	500	µg/g	124%	70 - 130	
Valenene	<LOQ	< 200		421	500	µg/g	84%	70 - 130	
cis-Nerolidol	<LOQ	< 200		439	500	µg/g	88%	70 - 130	
a-Farnesene	<LOQ	< 200		456	500	µg/g	91%	70 - 130	
trans-Nerolidol	<LOQ	< 200		621	500	µg/g	124%	70 - 130	
Caryophyllene_Oxide	<LOQ	< 200		423	500	µg/g	85%	70 - 130	
Guaiol	<LOQ	< 200		639	500	µg/g	128%	70 - 130	
Cedrol	<LOQ	< 200		419	500	µg/g	84%	70 - 130	
a-Bisabolol	<LOQ	< 200		435	500	µg/g	87%	70 - 130	

Definitions

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



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

Revision: 1 Document ID: 7086
Legacy ID: CFL-E57Worksheet Validated 11/04/2020

Terpenes Quality Control Results

Method Reference: EPA5035			Batch ID: 2203907				
Sample/ Sample Duplicate			Sample ID: 22-004868-0001				
Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	<LOQ	<LOQ	196	µg/g	0%	< 20	
Camphene	<LOQ	<LOQ	196	µg/g	0%	< 20	
Sabinene	<LOQ	<LOQ	196	µg/g	0%	< 20	
b-Pinene	<LOQ	<LOQ	196	µg/g	0%	< 20	
b-Myrcene	<LOQ	<LOQ	196	µg/g	0%	< 20	
a-phellandrene	<LOQ	<LOQ	196	µg/g	0%	< 20	
d-3-Carene	<LOQ	<LOQ	196	µg/g	0%	< 20	
a-Terpinene	<LOQ	<LOQ	196	µg/g	0%	< 20	
p-Cymene	<LOQ	<LOQ	196	µg/g	0%	< 20	
D-Limonene	<LOQ	<LOQ	196	µg/g	0%	< 20	
Eucalyptol	<LOQ	<LOQ	196	µg/g	0%	< 20	
b-cis-Ocimene	<LOQ	<LOQ	65.2	µg/g	0%	< 20	
b-trans-Ocimene	<LOQ	<LOQ	130	µg/g	0%	< 20	
g-Terpinene	<LOQ	<LOQ	196	µg/g	0%	< 20	
Sabinene_Hydrate	<LOQ	<LOQ	196	µg/g	0%	< 20	
Terpinolene	<LOQ	<LOQ	196	µg/g	0%	< 20	
D-Fenchone	<LOQ	<LOQ	196	µg/g	0%	< 20	
Linalool	<LOQ	<LOQ	196	µg/g	0%	< 20	
Fenchol	<LOQ	<LOQ	196	µg/g	0%	< 20	
Camphor	<LOQ	<LOQ	196	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	196	µg/g	0%	< 20	
Isoborneol	<LOQ	<LOQ	196	µg/g	0%	< 20	
Borneol	<LOQ	<LOQ	196	µg/g	0%	< 20	
DL-Menthol	<LOQ	<LOQ	196	µg/g	0%	< 20	
Terpineol	<LOQ	<LOQ	196	µg/g	0%	< 20	
Nerol	<LOQ	<LOQ	196	µg/g	0%	< 20	
Pulegone	<LOQ	<LOQ	196	µg/g	0%	< 20	
Gereniol	<LOQ	<LOQ	196	µg/g	0%	< 20	
Geranyl_Acetate	<LOQ	<LOQ	196	µg/g	0%	< 20	
a-Cedrene	<LOQ	<LOQ	196	µg/g	0%	< 20	
b-Caryophyllene	<LOQ	<LOQ	196	µg/g	0%	< 20	
a-Humulene	<LOQ	<LOQ	196	µg/g	0%	< 20	
Valenene	<LOQ	<LOQ	196	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	196	µg/g	0%	< 20	
a-Farnesene	<LOQ	<LOQ	196	µg/g	0%	< 20	
trans-Nerolidol	<LOQ	<LOQ	196	µg/g	0%	< 20	
Caryophyllene_Oxide	<LOQ	<LOQ	196	µg/g	0%	< 20	
Guaiol	<LOQ	<LOQ	196	µg/g	0%	< 20	
Cedrol	<LOQ	<LOQ	196	µg/g	0%	< 20	
a-Bisabolol	<LOQ	<LOQ	196	µg/g	0%	< 20	

Definitions

RPD Relative Percent Difference



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

Revision: Document ID:
Legacy ID: Effective:

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2204069					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Re:	Limits	Notes
Propane	ND	< 200		599	572	µg/g	104.7	60 - 120	
Isobutane	ND	< 200		762	731	µg/g	104.2	60 - 120	
Butane	ND	< 200		750	731	µg/g	102.6	60 - 120	
2,2-Dimethylpropane	ND	< 200		1020	936	µg/g	109.0	60 - 120	
Methanol	ND	< 200		1430	1620	µg/g	88.3	60 - 120	
Ethylene Oxide	ND	< 30		66.2	56.2	µg/g	117.8	60 - 120	
2-Methylbutane	ND	< 200		1500	1620	µg/g	92.6	60 - 120	
Pentane	ND	< 200		1470	1610	µg/g	91.3	60 - 120	
Ethanol	ND	< 200		1520	1630	µg/g	93.3	70 - 130	
Ethyl Ether	ND	< 200		1510	1620	µg/g	93.2	60 - 120	
2,2-Dimethylbutane	ND	< 30		165	174	µg/g	94.8	60 - 120	
Acetone	ND	< 200		1530	1650	µg/g	92.7	60 - 120	
2-Propanol	ND	< 200		1460	1610	µg/g	90.7	60 - 120	
Ethyl Formate	ND	< 500		1430	1600	µg/g	89.4	70 - 130	
Acetonitrile	ND	< 100		444	498	µg/g	89.2	60 - 120	
Methyl Acetate	ND	< 500		1480	1610	µg/g	91.9	70 - 130	
2,3-Dimethylbutane	ND	< 30		165	176	µg/g	93.8	60 - 120	
Dichloromethane	ND	< 60		492	510	µg/g	96.5	60 - 120	
2-Methylpentane	ND	< 30		163	176	µg/g	92.6	60 - 120	
MTBE	ND	< 500		1510	1600	µg/g	94.4	70 - 130	
3-Methylpentane	ND	< 30		160	175	µg/g	91.4	60 - 120	
Hexane	ND	< 30		162	177	µg/g	91.5	60 - 120	
1-Propanol	ND	< 500		1410	1610	µg/g	87.6	70 - 130	
Methyl ethyl ketone	ND	< 500		1500	1600	µg/g	93.8	70 - 130	
Ethyl acetate	ND	< 200		1500	1630	µg/g	92.0	60 - 120	
2-Butanol	ND	< 200		1510	1620	µg/g	93.2	60 - 120	
Tetrahydrofuran	ND	< 100		462	500	µg/g	92.4	60 - 120	
Cyclohexane	ND	< 200		1530	1620	µg/g	94.4	60 - 120	
2-methyl-1-propanol	ND	< 500		1360	1620	µg/g	84.0	70 - 130	
Benzene	ND	< 1		4.78	5.32	µg/g	89.8	60 - 120	
Isopropyl Acetate	ND	< 200		1480	1620	µg/g	91.4	60 - 120	
Heptane	ND	< 200		1440	1770	µg/g	81.4	60 - 120	
1-Butanol	ND	< 500		1240	1600	µg/g	77.5	70 - 130	
Propyl Acetate	ND	< 500		1510	1600	µg/g	94.4	70 - 130	
1,4-Dioxane	ND	< 100		474	504	µg/g	94.0	60 - 120	
2-Ethoxyethanol	ND	< 30		168	181	µg/g	92.8	60 - 120	
Methylisobutyl ketone	ND	< 500		1400	1610	µg/g	87.0	70 - 130	
3-Methyl-1-butanol	ND	< 500		1300	1610	µg/g	80.7	70 - 130	
Ethylene Glycol	ND	< 200		350	494	µg/g	70.9	60 - 120	
Toluene	ND	< 100		464	491	µg/g	94.5	60 - 120	
Isobutyl Acetate	ND	< 500		1570	1600	µg/g	98.1	70 - 130	
1-Pentanol	ND	< 500		1350	1610	µg/g	83.9	70 - 130	
Butyl Acetate	ND	< 500		1370	1610	µg/g	85.1	70 - 130	
Ethylbenzene	ND	< 200		940	973	µg/g	96.6	60 - 120	
m,p-Xylene	ND	< 200		969	996	µg/g	97.3	60 - 120	
o-Xylene	ND	< 200		967	973	µg/g	99.4	60 - 120	
Cumene	ND	< 30		172	170	µg/g	101.2	60 - 120	
Anisole	ND	< 500		1290	1610	µg/g	80.1	70 - 130	
DMSO	ND	< 500		1430	1630	µg/g	87.7	70 - 130	
1,2-dimethoxyethane	ND	< 50		156	164	µg/g	95.1	70 - 130	
Triethylamine	ND	< 500		1490	1600	µg/g	93.1	70 - 130	
N,N-dimethylformamide	ND	< 150		433	497	µg/g	87.1	70 - 130	
N,N-dimethylacetamide	ND	< 150		421	498	µg/g	84.5	70 - 130	
Pyridine	ND	< 50		182	180	µg/g	101.1	70 - 130	
1,2-Dichloroethane	ND	< 1		1.15	1	µg/g	115.0	70 - 130	
Chloroform	ND	< 1		1.12	1	µg/g	112.0	70 - 130	
Trichloroethylene	ND	< 1		1.15	1	µg/g	115.0	70 - 130	



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10

Revision: Document ID:
Legacy ID: Effective:

QC- Sample Duplicate

Sample ID: 22-004788-0001

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	
Methyl ethyl ketone	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2-Butanol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Tetrahydrofuran	ND	ND	100 µg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2-methyl-1-propanol	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1 µg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
1-Butanol	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Propyl Acetate	ND	ND	500 µg/g	0.0	< 20	Acceptable	
1,4-Dioxane	ND	ND	100 µg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Methylisobutylketone	ND	ND	500 µg/g	0.0	< 20	Acceptable	
3-Methyl-1-butanol	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Toluene	ND	ND	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	
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

Units of Measure:

µg/g - Microgram per gram or ppm



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



Report Number: 22-004788/D005.R000
Report Date: 05/12/2022
ORELAP#: OR100028
Purchase Order:
Received: 04/27/22 15:10





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.