



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



**Report Number:** 21-013092/D003.R000  
**Report Date:** 11/12/2021  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 11/05/21 15:45

**Customer:** IHC LLC  
**Product identity:** 01LIR209\_1029\_PB  
**Client/Metric ID:** .  
**Laboratory ID:** 21-013092-0003

### Summary

#### Potency:

Analyte	Result (%)								
CBD-A	71.6								
CBC-A†	3.06								
THC-A	2.91								
CBG-A†	2.51								
CBDV-A†	0.678								
CBD	0.623								
CBG†	0.211								
				<table border="1"> <tr> <td>CBD-Total</td> <td>63.4%</td> </tr> <tr> <td>THC-Total</td> <td>2.55%</td> </tr> <tr> <td colspan="2">(Reported in percent of total sample)</td> </tr> </table>	CBD-Total	63.4%	THC-Total	2.55%	(Reported in percent of total sample)
CBD-Total	63.4%								
THC-Total	2.55%								
(Reported in percent of total sample)									

#### Residual Solvents:

Analyte	Result (µg/g)	Limits (µg/g)	Status
Butanes (sum)	576	5000	pass
n-Butane	576		

#### Terpenes:

Analyte	Percent by weight	Percent of Total	Analyte	Percent by weight	Percent of Total
β-Myrcene†	3.46	29.08%	Terpinolene†	1.74	14.62%
farnesene†	1.49	12.52%	β-Caryophyllene†	1.10	9.24%
α-pinene†	0.719	6.04%	(R)-(+)-Limonene†	0.593	4.98%
Humulene†	0.556	4.67%	(-)-β-Pinene†	0.465	3.91%
trans-β-Ocimene†	0.454	3.82%	α-Bisabolol†	0.453	3.81%
(-)-Guaiol†	0.179	1.50%	Linalool†	0.129	1.08%
(-)-α-Terpineol†	0.117	0.98%	α-phellandrene†	0.0897	0.75%
(+)-fenchol†	0.0734	0.62%	α-Terpinene†	0.0677	0.57%
(-)-caryophyllene oxide†	0.0581	0.49%	d-3-Carene†	0.0475	0.40%
γ-Terpinene†	0.0450	0.38%	(+)-Borneol†	0.0279	0.23%
Sabinene†	0.0244	0.21%	p-Cymene†	0.0207	0.17%
cis-β-Ocimene†	0.0162	0.14%	<b>Total Terpenes†</b>	<b>11.9</b>	<b>100.00%</b>



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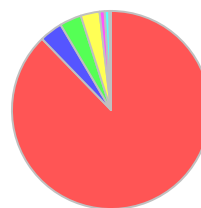
**Customer:** IHC LLC  
 825 NW 16th Ave  
 Portland Oregon 97209  
 United States of America (USA)

**Product identity:** 01LIR209\_1029\_PB  
**Client/Metric ID:** .  
**Sample Date:**  
**Laboratory ID:** 21-013092-0003  
**Evidence of Cooling:** No  
**Temp:** 20.5 °C  
**Relinquished by:** Client



### Sample Results

Potency	Method J AOAC 2015 V98-6 (mod)			Units %	Batch: 2110106	Analyze: 11/8/21 10:36:00 PM
Analyte	As Received	Dry weight	LOQ	Notes		
CBC	< LOQ		0.0837			
CBC-A†	3.06		0.0837			
CBC-Total†	2.68		0.157			
CBD	0.623		0.0837			
CBD-A	71.6		0.837			
CBD-Total	63.4		0.818			
CBDV†	< LOQ		0.0837			
CBDV-A†	0.678		0.0837			
CBDV-Total†	0.588		0.156			
CBE†	< LOQ		0.0837			
CBG†	0.211		0.0837			
CBG-A†	2.51		0.0837			
CBG-Total	2.41		0.156			
CBL†	< LOQ		0.0837			
CBL-A†	< LOQ		0.0837			
CBL-Total†	< LOQ		0.157			
CBN	< LOQ		0.0837			
CBT†	< LOQ		0.0837			
Δ8-THC†	< LOQ		0.0837			
Δ8-THCV	< LOQ		0.0837			
Δ9-THC	< LOQ		0.0837			
THC-A	2.91		0.0837			
THC-Total	2.55		0.157			
THCV†	< LOQ		0.0837			
THCV-A†	< LOQ		0.0837			
THCV-Total†	< LOQ		0.156			
<b>Total Cannabinoids†</b>	<b>81.6</b>					



- CBD-A
- CBC-A
- THC-A
- CBG-A
- CBDV-A
- CBD
- CBG



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Solvents					Residual Solvents by GC/MS					Analyze 11/10/21 01:33 PM				
Analyte	Method	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)	576	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	576		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			

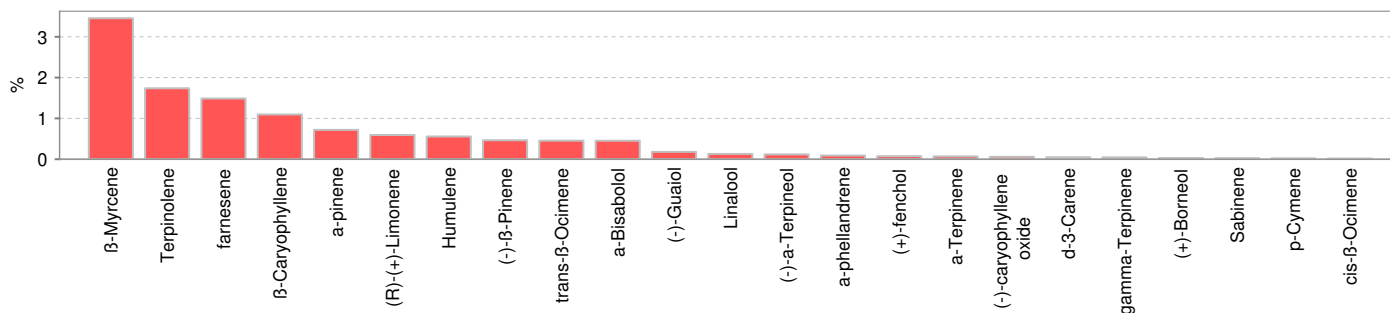


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Terpenes				Method J AOAC 2015 V98-6	Units %	Batch 2110153	Analyze 11/09/21 06:15 AM		
Analyte	Result	LOQ	% of Total	Notes	Analyte	Result	LOQ	% of Total	Notes
β-Myrcene <sup>†</sup>	3.46	0.019	29.08%		Terpinolene <sup>†</sup>	1.74	0.019	14.62%	
farnesene <sup>†</sup>	1.49	0.019	12.52%		β-Caryophyllene <sup>†</sup>	1.10	0.019	9.24%	
α-pinene <sup>†</sup>	0.719	0.019	6.042%		(R)-(+)-Limonene <sup>†</sup>	0.593	0.019	4.983%	
Humulene <sup>†</sup>	0.556	0.019	4.672%		(-)-β-Pinene <sup>†</sup>	0.465	0.019	3.908%	
trans-β-Ocimene <sup>†</sup>	0.454	0.013	3.815%		α-Bisabolol <sup>†</sup>	0.453	0.019	3.807%	
(-)-Guaiol <sup>†</sup>	0.179	0.019	1.504%		Linalool <sup>†</sup>	0.129	0.019	1.084%	
(-)-α-Terpineol <sup>†</sup>	0.117	0.019	0.983%		α-phellandrene <sup>†</sup>	0.0897	0.019	0.7538%	
(+)-fenchol <sup>†</sup>	0.0734	0.019	0.6168%		α-Terpinene <sup>†</sup>	0.0677	0.019	0.5689%	
(-)-caryophyllene oxide <sup>†</sup>	0.0581	0.019	0.4882%		d-3-Carene <sup>†</sup>	0.0475	0.019	0.3992%	
γ-Terpinene <sup>†</sup>	0.0450	0.019	0.3782%		(+)-Borneol <sup>†</sup>	0.0279	0.019	0.2345%	
Sabinene <sup>†</sup>	0.0244	0.019	0.2050%		p-Cymene <sup>†</sup>	0.0207	0.019	0.1739%	
(±)-trans-Nerolidol <sup>†</sup>	< LOQ	0.019	0.00%		cis-β-Ocimene <sup>†</sup>	0.0162	0.006	0.1361%	
Camphene <sup>†</sup>	< LOQ	0.019	0.00%		Eucalyptol <sup>†</sup>	< LOQ	0.019	0.00%	
Sabinene hydrate <sup>†</sup>	< LOQ	0.019	0.00%		(±)-Camphor <sup>†</sup>	< LOQ	0.019	0.00%	
Geranyl acetate <sup>†</sup>	< LOQ	0.019	0.00%		Geraniol <sup>†</sup>	< LOQ	0.019	0.00%	
(+)-Pulegone <sup>†</sup>	< LOQ	0.019	0.00%		(-)-Isopulegol <sup>†</sup>	< LOQ	0.019	0.00%	
(+)-Cedrol <sup>†</sup>	< LOQ	0.019	0.00%		(±)-cis-Nerolidol <sup>†</sup>	< LOQ	0.019	0.00%	
(±)-fenchone <sup>†</sup>	< LOQ	0.019	0.00%		α-cedrene <sup>†</sup>	< LOQ	0.019	0.00%	
Isoborneol <sup>†</sup>	< LOQ	0.019	0.00%		Menthol <sup>†</sup>	< LOQ	0.019	0.00%	
nerol <sup>†</sup>	< LOQ	0.019	0.00%		valencene <sup>†</sup>	< LOQ	0.019	0.00%	
<b>Total Terpenes</b>	<b>11.9</b>								





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These test results are representative of the individual sample selected and submitted by the client.

**Abbreviations**

**Limits:** Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220, CCR title 16-division 42. BCC-section 5723

**Limit(s) of Quantitation (LOQ):** The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

† = Analyte not NELAP accredited.

**Units of Measure**

µg/g = Microgram per gram

% = Percentage of sample

% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner  
General Manager



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

Revision: 4.00 Control#: CR023 Rev 02/24/2021 EM: 09/04/2021  
ORELAP ID: OR100028

Company: <u>IHC</u> Contact: <u>Kyle Farrok</u> Street: <u>431 NW Flinders St</u> City: <u>Portland</u> State: <u>OR</u> Zip: <u>97209</u> <input type="checkbox"/> Email Results: <u>Dropbox</u> Ph: (b1) <u>bUS1b4</u> <input type="checkbox"/> Fx Results: ( ) Billing (if different): <u>beth@thehempcollect.co</u>				<b>Analysis Requested</b>										FD Number: _____ Project Number: _____ Project Name: _____ Order Reporting: _____ Report to State - <input type="checkbox"/> MET&C or <input type="checkbox"/> Other: _____ Turnaround time: <input checked="" type="checkbox"/> 5 Business Day Standard Turnaround <input type="checkbox"/> 3 Business Day Rush Turnaround* <input type="checkbox"/> 2 Business Day Rush Turnaround* <small>*Check for availability</small>			
Lab ID	Client Sample Identification	Date	Time	Peptides - 08/19 compounds	Peptide Multi-Residue - 379 compounds	Terpene	Residual Solvents	Moldman & Water Activity	Terpene	Micro: Yeast and Mold	Micro: F, Col and Total Coliforms	Heavy Metals	Mycotoxins	Other	Sample Type 1	Weight (Units)	Comments/Metric ID
1	0103SFT304	11/5			X										E	0.75g/unit	
2	03CMLS01	11/5			X										E	16g/unit	
3	01LIR209_1029_PB	11/5			X	X		X							C		
4	01LIR209_1029_PW	11/5			X			X							C		
5																	
6																	
7																	
8																	
9																	
10																	
Subscribed By:		Date	Time	Received By:		Date	Time	Lab Use Only:									
Kyle Farrok		11/5	1:30	FO		11/5/21	15:45	<input type="checkbox"/> Shipped Via: _____ or <input checked="" type="checkbox"/> Client drop Evidence of cooling: <input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No - Temp (°C): <u>20.5</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: Prolong storage: _____									

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

Sample collection in Columbia Laboratories will only be performed outside an approved for services to accordance with the current terms of service associated with this COC. By signing "Subscribed By" you are agreeing to these terms

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Portland, OR 97230

P: (503) 254-1794 | Fax: (503) 254-1452  
info@columbialaboratories.com

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www.columbialaboratories.com



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Revision #: 0.00 Control : CFL-D06  
Revision Date: 05/31/2019 Effective Date: 05/31/2019

**Laboratory Quality Control Results**

**J AOAC 2015 V98-6** **Batch ID: 2110106**

Laboratory Control Sample							
Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	0.195	0.2	%	97.6	85.0 - 115	Acceptable	
CBDV	0.209	0.2	%	105	85.0 - 115	Acceptable	
CBE	0.198	0.2	%	99.1	85.0 - 115	Acceptable	
CBDA	0.220	0.2	%	110	85.0 - 115	Acceptable	
CBGA	0.197	0.2	%	98.3	85.0 - 115	Acceptable	
CBG	0.195	0.2	%	97.6	85.0 - 115	Acceptable	
CBD	0.229	0.2	%	114	85.0 - 115	Acceptable	
THCV	0.188	0.2	%	94.1	85.0 - 115	Acceptable	
d8THCV	0.184	0.2	%	91.8	85.0 - 115	Acceptable	
THCVA	0.195	0.2	%	97.3	85.0 - 115	Acceptable	
CBN	0.222	0.2	%	111	85.0 - 115	Acceptable	
exo-THC	0.173	0.2	%	86.7	85.0 - 115	Acceptable	
d9THC	0.209	0.2	%	105	85.0 - 115	Acceptable	
d8THC	0.190	0.2	%	95.2	85.0 - 115	Acceptable	
CBL	0.180	0.2	%	90.0	85.0 - 115	Acceptable	
CBC	0.194	0.2	%	97.0	85.0 - 115	Acceptable	
THCA	0.225	0.2	%	112	85.0 - 115	Acceptable	
CBCA	0.200	0.2	%	99.8	85.0 - 115	Acceptable	
CBLA	0.198	0.2	%	99.2	85.0 - 115	Acceptable	
CBT	0.202	0.2	%	101	85.0 - 115	Acceptable	

**Method Blank**

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.01	%	< 0.01	Acceptable	
CBDV	<LOQ	0.01	%	< 0.01	Acceptable	
CBE	<LOQ	0.01	%	< 0.01	Acceptable	
CBDA	<LOQ	0.01	%	< 0.01	Acceptable	
CBGA	<LOQ	0.01	%	< 0.01	Acceptable	
CBG	<LOQ	0.01	%	< 0.01	Acceptable	
CBD	<LOQ	0.01	%	< 0.01	Acceptable	
THCV	<LOQ	0.01	%	< 0.01	Acceptable	
d8THCV	<LOQ	0.01	%	< 0.01	Acceptable	
THCVA	<LOQ	0.01	%	< 0.01	Acceptable	
CBN	<LOQ	0.01	%	< 0.01	Acceptable	
exo-THC	<LOQ	0.01	%	< 0.01	Acceptable	
d9THC	<LOQ	0.01	%	< 0.01	Acceptable	
d8THC	<LOQ	0.01	%	< 0.01	Acceptable	
CBL	<LOQ	0.01	%	< 0.01	Acceptable	
CBC	<LOQ	0.01	%	< 0.01	Acceptable	
THCA	<LOQ	0.01	%	< 0.01	Acceptable	
CBCA	<LOQ	0.01	%	< 0.01	Acceptable	
CBLA	<LOQ	0.01	%	< 0.01	Acceptable	
CBT	<LOQ	0.01	%	< 0.01	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 #: 0.00 Control : CFL-D06  
Revision Date: 05/31/2019 Effective Date: 05/31/2019

**Laboratory Quality Control Results**

J AOAC 2015 V98-6		Batch ID: 2110106						
Sample Duplicate		Sample ID: 21-013020-0004						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBD	4.24	4.22	0.1	%	0.451	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBN	0.425	0.422	0.1	%	0.766	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
d9THC	21.2	21.2	0.1	%	0.178	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.1	%	NA	< 20	Acceptable	

**Abbreviations**

- ND - None Detected at or above MRL
- RPD - Relative Percent Difference
- LOQ - Limit of Quantitation
- NA - Calculation Not Applicable given non-numerical results

**Units of Measure:**

% - Percent





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Revision: Document ID:  
 Legacy ID: Effective:

Laboratory Quality Control Results									
Residual Solvents									
Batch ID: 2110148									
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		929	948	µg/g	98.0	70	130
Isobutane	ND	< 200		1080	1260	µg/g	85.7	70	130
Butane	ND	< 200		1070	1260	µg/g	84.9	70	130
2,2-Dimethylpropane	ND	< 200		1650	1600	µg/g	103.1	70	130
Methanol	ND	< 200		1830	1610	µg/g	113.7	70	130
Ethylene Oxide	ND	< 30		94.9	95.7	µg/g	99.2	70	130
2-Methylbutane	ND	< 200		1610	1610	µg/g	100.0	70	130
Pentane	ND	< 200		1580	1610	µg/g	98.1	70	130
Ethanol	ND	< 200		1790	1610	µg/g	111.2	70	130
Ethyl Ether	ND	< 200		1640	1610	µg/g	101.9	70	130
2,2-Dimethylbutane	ND	< 30		139	164	µg/g	84.8	70	130
Acetone	ND	< 200		1600	1610	µg/g	99.4	70	130
2-Propanol	ND	< 200		1570	1610	µg/g	97.5	70	130
Acetonitrile	ND	< 100		405	484	µg/g	83.7	70	130
2,3-Dimethylbutane	ND	< 30		161	167	µg/g	96.4	70	130
Dichloromethane	ND	< 60		469	491	µg/g	95.5	70	130
2-Methylpentane	ND	< 30		145	165	µg/g	87.9	70	130
3-Methylpentane	ND	< 30		177	172	µg/g	102.9	70	130
Hexane	ND	< 30		175	167	µg/g	104.8	70	130
Ethyl acetate	ND	< 200		1660	1610	µg/g	103.1	70	130
2-Butanol	ND	< 200		1610	1610	µg/g	100.0	70	130
Tetrahydrofuran	ND	< 100		471	483	µg/g	97.5	70	130
Cyclohexane	ND	< 200		1520	1610	µg/g	94.4	70	130
Benzene	ND	< 1		4.73	5.36	µg/g	88.2	70	130
Isopropyl Acetate	ND	< 200		1600	1620	µg/g	98.8	70	130
Heptane	ND	< 200		1530	1610	µg/g	95.0	70	130
1,4-Dioxane	ND	< 100		460	489	µg/g	94.1	70	130
2-Ethoxyethanol	ND	< 30		169	167	µg/g	101.2	70	130
Ethylene Glycol	ND	< 200		510	504	µg/g	101.2	70	130
Toluene	ND	< 200		443	484	µg/g	91.5	70	130
Ethylbenzene	ND	< 200		855	960	µg/g	88.3	70	130
m,p-Xylene	ND	< 200		867	977	µg/g	88.7	70	130
o-Xylene	ND	< 200		859	982	µg/g	87.5	70	130
Cumene	ND	< 30		145	169	µg/g	85.8	70	130



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QC - Sample Duplicate Sample ID: 21-013000-0001

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	
Acetonitrile	ND	ND	100	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	
3-Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30	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	
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	
1,4-Dioxane	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Toluene	ND	ND	200	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	

**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



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Terpenes Quality Control Results

Method Reference: EP/6035				Batch ID: 2110153					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	LCS	Units	LCS % Rec	Limits	Notes
a-pinene	<LOQ	< 200		447	500	µg/g	89%	70 - 130	
Camphene	<LOQ	< 200		465	500	µg/g	93%	70 - 130	
Sabinene	<LOQ	< 200		438	500	µg/g	88%	70 - 130	
b-Phene	<LOQ	< 200		570	500	µg/g	114%	70 - 130	
b-Myrcene	<LOQ	< 200		428	500	µg/g	86%	70 - 130	
a-phellandrene	<LOQ	< 200		369	500	µg/g	74%	70 - 130	
d-3-Caene	<LOQ	< 200		463	500	µg/g	93%	70 - 130	
a-Terpinene	<LOQ	< 200		458	500	µg/g	92%	70 - 130	
p-Cymene	<LOQ	< 200		441	500	µg/g	88%	70 - 130	
D-Limonene	<LOQ	< 200		435	500	µg/g	87%	70 - 130	
Eucalyptol	<LOQ	< 200		454	500	µg/g	91%	70 - 130	
b-cis-Cimene	<LOQ	< 67		138	167	µg/g	83%	70 - 130	
b-trans-Cimene	<LOQ	< 133		297	333	µg/g	89%	70 - 130	
g-Terpinene	<LOQ	< 200		419	500	µg/g	84%	70 - 130	
Sabinene Hydrate	<LOQ	< 200		458	500	µg/g	92%	70 - 130	
Terpinolene	<LOQ	< 200		448	500	µg/g	90%	70 - 130	
D-Fenchone	<LOQ	< 200		449	500	µg/g	90%	70 - 130	
Linalool	<LOQ	< 200		534	500	µg/g	107%	70 - 130	
Fenchol	<LOQ	< 200		456	500	µg/g	91%	70 - 130	
Camphor	<LOQ	< 200		449	500	µg/g	90%	70 - 130	
Isopulego	<LOQ	< 200		394	500	µg/g	79%	70 - 130	
Isborneol	<LOQ	< 200		475	500	µg/g	95%	70 - 130	
Borneol	<LOQ	< 200		487	500	µg/g	97%	70 - 130	
DL-Menthol	<LOQ	< 200		453	500	µg/g	91%	70 - 130	
Terpineol	<LOQ	< 200		429	500	µg/g	86%	70 - 130	
Nerol	<LOQ	< 200		392	500	µg/g	78%	70 - 130	
Pulegone	<LOQ	< 200		508	500	µg/g	102%	70 - 130	
Geraniol	<LOQ	< 200		498	500	µg/g	100%	70 - 130	
Geranyl Acetate	<LOQ	< 200		438	500	µg/g	88%	70 - 130	
a-Cedrene	<LOQ	< 200		457	500	µg/g	91%	70 - 130	
b-Caryophyllene	<LOQ	< 200		469	500	µg/g	94%	70 - 130	
a-Humulene	<LOQ	< 200		479	500	µg/g	96%	70 - 130	
Valenene	<LOQ	< 200		362	500	µg/g	72%	70 - 130	
cis-Nerolidol	<LOQ	< 200		433	500	µg/g	87%	70 - 130	
a-Farnesene	<LOQ	< 200		482	500	µg/g	96%	70 - 130	
trans-Nerolidol	<LOQ	< 200		473	500	µg/g	95%	70 - 130	
Caryophyllene Oxide	<LOQ	< 200		424	500	µg/g	85%	70 - 130	
Guaiol	<LOQ	< 200		508	500	µg/g	102%	70 - 130	
Cedrol	<LOQ	< 200		473	500	µg/g	95%	70 - 130	
a-Bisabolol	<LOQ	< 200		456	500	µg/g	91%	70 - 130	

Definitions

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



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Terpenes Quality Control Results

Method Reference: EP/5035		Batch ID: 2110153					
Sample/Sample Duplicate		Sample ID: 21-013102-0001					
Analyte	Result	Org. Result	LOQ	Units	% RPD	LIMIT	Notes
a-pinene	1230	1230	197	µg/g	0%	< 20	
Camphene	289	256	197	µg/g	12%	< 20	
Sabinene	<LOQ	<LOQ	197	µg/g	0%	< 20	
b-Pinene	1600	1610	197	µg/g	1%	< 20	
b-Myrcene	2050	2000	197	µg/g	2%	< 20	
a-phellandrene	<LOQ	<LOQ	197	µg/g	0%	< 20	
d-3-Caene	<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	8600	8470	197	µg/g	2%	< 20	
Eucalyptol	241	235	197	µg/g	3%	< 20	
b-cis-OCimene	<LOQ	<LOQ	65.6	µg/g	0%	< 20	
b-trans-OCimene	<LOQ	<LOQ	131	µg/g	0%	< 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	3620	3550	197	µg/g	2%	< 20	
Fenchol	1380	1390	197	µg/g	1%	< 20	
Camphor	<LOQ	<LOQ	197	µg/g	0%	< 20	
Isopulego	<LOQ	<LOQ	197	µg/g	0%	< 20	
Isborneol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Borneol	338	331	197	µg/g	2%	< 20	
DL-Menthol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Terpineol	1510	1480	197	µg/g	2%	< 20	
Nerol	<LOQ	<LOQ	197	µg/g	0%	< 20	
Rulegone	<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	11400	11100	197	µg/g	3%	< 20	
a-Humulene	5360	5230	197	µg/g	2%	< 20	
Valenene	<LOQ	<LOQ	197	µg/g	0%	< 20	
cis-Nerolidol	<LOQ	<LOQ	197	µg/g	0%	< 20	
a-Farnesene	1270	1250	197	µg/g	2%	< 20	
trans-Nerolidol	1310	1280	197	µg/g	2%	< 20	
Caryophyllene Oxide	638	647	197	µg/g	1%	< 20	
Guaiol	8510	8350	197	µg/g	2%	< 20	
Cedrol	<LOQ	<LOQ	197	µg/g	0%	< 20	
a-Bisabolol	536	501	197	µg/g	7%	< 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	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.