



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



**Report Number:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44

**Customer:** NW Natural Goods  
**Product identity:** Bev BO 023123-1  
**Client/Metric ID:** .  
**Laboratory ID:** 23-005449-0001

### Summary

**Potency:**

Analyte per 355ml	Result	Limits	Units	Status	
CBD per 355ml	24.2		mg/355ml		CBD-Total per Serving Size 24.2 mg/355ml
CBG per 355ml	0.652		mg/355ml		
					THC-Total per Serving Size <LOQ
					(Reported in milligrams per serving)

**Residual Solvents:**

*All analytes passing and less than LOQ.*

**Pesticides:**

Analyte	Result (mg/kg)	Limits (mg/kg)	Status
Multi-Residue Pesticide Profile	< LOQ for all analytes		

**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:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44

**Customer:** NW Natural Goods

**Product identity:** Bev BO 023123-1

**Client/Metric ID:** .

**Sample Date:**

**Laboratory ID:** 23-005449-0001

**Evidence of Cooling:** No

**Temp:** 21.3 °C

**Relinquished by:** Ramos

**Serving Size #1:** 362.1 g

**Density:** 1.020 g/ml

### Sample Results

Potency per 355ml	Method: J AOAC 2015 V98-6 (mod) <sup>b</sup>	Units mg/se	Batch: 2307137	Analyze: 5/8/23 5:15:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 355ml	< LOQ		mg/355ml	0.360	
CBC-A per 355ml	< LOQ		mg/355ml	0.360	
CBC-Total per 355ml	< LOQ		mg/355ml	0.676	
CBD per 355ml	24.2		mg/355ml	0.360	
CBD-A per 355ml	< LOQ		mg/355ml	0.360	
CBD-Total per 355ml	24.2		mg/355ml	0.676	
CBDV per 355ml	< LOQ		mg/355ml	0.360	
CBDV-A per 355ml	< LOQ		mg/355ml	0.360	
CBDV-Total per 355ml	< LOQ		mg/355ml	0.672	
CBE per 355ml	< LOQ		mg/355ml	0.360	
CBG per 355ml	0.652		mg/355ml	0.360	
CBG-A per 355ml	< LOQ		mg/355ml	0.360	
CBG-Total per 355ml	< LOQ		mg/355ml	0.672	
CBL per 355ml	< LOQ		mg/355ml	0.360	
CBL-A per 355ml	< LOQ		mg/355ml	0.360	
CBL-Total per 355ml	< LOQ		mg/355ml	0.676	
CBN per 355ml	< LOQ		mg/355ml	0.360	
CBT per 355ml	< LOQ		mg/355ml	0.360	
Δ8-THCV per 355ml	< LOQ		mg/355ml	0.360	
Δ10-THC-9R per 355ml	< LOQ		mg/355ml	0.360	
Δ10-THC-9S per 355ml	< LOQ		mg/355ml	0.360	
Δ10-THC-Total per 355ml	< LOQ		mg/355ml	0.720	
Δ8-THC per 355ml	< LOQ		mg/355ml	0.360	
Δ9-THC per 355ml	< LOQ		mg/355ml	0.360	
exo-THC per 355ml	< LOQ		mg/355ml	0.360	
THC-A per 355ml	< LOQ		mg/355ml	0.360	
THC-Total per 355ml	< LOQ		mg/355ml	0.676	
THCV per 355ml	< LOQ		mg/355ml	0.360	
THCV-A per 355ml	< LOQ		mg/355ml	0.360	
THCV-Total per 355ml	< LOQ		mg/355ml	0.676	
Total Cannabinoids per 355ml	24.8		mg/355ml		



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



**Report Number:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44

**Microbiology**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2307057	05/08/23 AOAC 991.14 (Petrifilm) <sup>P</sup>		
Total Coliforms	< LOQ		cfu/g	10	2307057	05/08/23 AOAC 991.14 (Petrifilm) <sup>P</sup>		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2307058	05/09/23 AOAC 2014.05 (RAPID) <sup>P</sup>		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2307058	05/09/23 AOAC 2014.05 (RAPID) <sup>P</sup>		

**Solvents** Method: Residual Solvents by GC/MS<sup>P</sup> Units µg/g Batch 2307166 Analyze 05/10/23 11:30 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-Dimethyl butane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< LOQ		200		
2,3-Dimethyl butane	< 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	
Isopropyl benzene (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	

**Pesticides** Method: AOAC 2007.01 & EN 15662 (mod)<sup>P</sup> Units mg/kg Batch 2307135 Analyze 05/09/23 03:57 PM

Analyte	Result	Limits	Status	Notes
Multi-Residue Pesticide Profile	< LOQ for all analytes			



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



**Report Number:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44

### Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic*	< LOQ	0.200	mg/kg	0.00394	2307210	05/10/23 AOAC 2013.06 (mod.) <sup>P</sup>	pass	
Cadmium*	< LOQ	0.200	mg/kg	0.00394	2307210	05/10/23 AOAC 2013.06 (mod.) <sup>P</sup>	pass	
Lead*	< LOQ	0.500	mg/kg	0.00394	2307210	05/10/23 AOAC 2013.06 (mod.) <sup>P</sup>	pass	
Mercury*	< LOQ	0.100	mg/kg	0.00197	2307210	05/10/23 AOAC 2013.06 (mod.) <sup>P</sup>	pass	

### Mycotoxins

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Aflatoxin B2*	< LOQ		µg/kg	5.00	2307230	05/12/23 AOAC 2007.01 & EN 15662 (mod) <sup>P</sup>		
Aflatoxin B1*	< LOQ		µg/kg	5.00	2307230	05/12/23 AOAC 2007.01 & EN 15662 (mod) <sup>P</sup>		
Aflatoxin G1*	< LOQ		µg/kg	5.00	2307230	05/12/23 AOAC 2007.01 & EN 15662 (mod) <sup>P</sup>		
Aflatoxin G2*	< LOQ		µg/kg	5.00	2307230	05/12/23 AOAC 2007.01 & EN 15662 (mod) <sup>P</sup>		
Ochratoxin A*	< LOQ	20.0	µg/kg	5.00	2307230	05/12/23 AOAC 2007.01 & EN 15662 (mod) <sup>P</sup>	pass	
Total Aflatoxins*	0.000	20.0	µg/kg	20.0		05/11/23 AOAC 2007.01 & EN 15662 (mod) <sup>P</sup>	pass	

### Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	99.4		g/100g	0.10	2307114	05/08/23 AOAC 925.10 (mod.) <sup>P</sup>		
Water Activity	0.980		Aw	0.030	2307086	05/08/23 AOAC 978.18 <sup>P</sup>		



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



**Report Number:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44

### 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.

<sup>p</sup> = ISO/IEC 17025:2017 accredited method.

<sup>¥</sup> = TNI accredited analyte.

### Units of Measure

cfu/g = Colony forming units per gram

g = g

g/ml = Gram per milliliter

g/100g = Grams per 100 Grams

µg/g = Microgram per gram

µg/kg = Micrograms per kilogram = parts per billion (ppb)

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

mg/355ml = Milligram per 355ml

% = Percentage of sample

Aw = Water Activity

% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner  
General Manager



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



**Report Number:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44



Hemp & Cannabis: Usable / Extract / Finished Product  
 Chain of Custody, Record

NW-Natural-Goods-  
 1683238240

OREIAP ID OR1000028 ANAB ISO 17025 IDAT1508

	Project Information Project Name <u>N/A</u> PO Number <u>N/A</u> Turnaround Time <u>5 Business Days (standard) (required for microbial testing)</u> Samples Delivered to Laboratory <u>Schedule Pick-Up</u>				Testing				
	Pick-Up Location Street Address <u>11791 SE HWY 212</u> City, State, Zip <u>Clackamas, Oregon 97015</u>				M1010 Micro Profile D	Mycotoxins (Cannabis/Hemp Compliance)	Pesticide - Multi-Residue Profile	Potency Cannabinoid Basic + Extended Profile	Residual Solvents - OR
#	Sample Name	Matrix	Amount Provided	Reporting Unit	Serving Size				
1	B0023123-1	Beverage	4	mg/g & mg/-serving	355 ml	✓	✓	✓	✓

Relinquished By	Date	Time	Temp., °C	Received By	Date	Time	Received Temp., °C	Evidence of Cooling?
<i>Annie Hair</i>	5/4/2023	15:10		<i>BR</i>	5/5/2023	10:34		<i>No</i>
<i>BR</i>	5/5/2023	11:11	21.3	<i>ARH</i>	5/5/2023	11:47		<i>No</i>

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the [current terms of service](#) associated with this OOC. By signing "Relinquished by" you are agreeing to these terms.

Columbia Laboratories  
 12423 NE Whitaker Way  
 Portland, OR 97230

P (503) 254-1794 | F (503) 254-1452  
[info@columbialaboratories.com](mailto:info@columbialaboratories.com)

Page 1 of 1  
[www.columbialaboratories.com](http://www.columbialaboratories.com)



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



**Report Number:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44

Revision 1 Documen D 7148  
 Legacy D Workshee Valida ed 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2307137

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0010	0.001	%	104	80.0	- 120	Acceptable	
CBDV	2	0.0010	0.001	%	108	80.0	- 120	Acceptable	
CBE	2	0.0011	0.001	%	106	80.0	- 120	Acceptable	
CBDA	1	0.0010	0.001	%	99.9	90.0	- 110	Acceptable	
CBGA	1	0.0008	0.001	%	100	80.0	- 120	Acceptable	
CBG	1	0.0010	0.001	%	107	80.0	- 120	Acceptable	
CBD	1	0.0009	0.001	%	107	90.0	- 110	Acceptable	
THCV	2	0.0007	0.001	%	106	80.0	- 120	Acceptable	
d8THCV	2	0.0009	0.001	%	107	80.0	- 120	Acceptable	
THCVA	2	0.0010	0.001	%	104	80.0	- 120	Acceptable	
CBN	1	0.0009	0.001	%	107	80.0	- 120	Acceptable	
exo-THC	2	0.0010	0.001	%	105	80.0	- 120	Acceptable	
d9THC	1	0.0011	0.001	%	107	90.0	- 110	Acceptable	
d8THC	1	0.0011	0.001	%	109	90.0	- 110	Acceptable	
9S-d10THC	1	0.0011	0.001	%	106	80.0	- 120	Acceptable	
CBL	2	0.0010	0.001	%	108	80.0	- 120	Acceptable	
9R-d10THC	1	0.0010	0.001	%	100	80.0	- 120	Acceptable	
CBC	2	0.0010	0.001	%	106	80.0	- 120	Acceptable	
THCA	1	0.0010	0.001	%	93.4	90.0	- 110	Acceptable	
CBCA	2	0.0010	0.001	%	103	80.0	- 120	Acceptable	
CBLA	2	0.0010	0.001	%	104	80.0	- 120	Acceptable	
d9THCP	2	0.0010	0.001	%	107	80.0	- 120	Acceptable	
CBT	2	0.0010	0.001	%	106	80.0	- 120	Acceptable	

Method Blank						
Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBDV	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBE	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBDA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBGA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBG	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBD	<LOQ	0.0001	%	< 0.0001	Acceptable	
THCV	<LOQ	0.0001	%	< 0.0001	Acceptable	
d8THCV	<LOQ	0.0001	%	< 0.0001	Acceptable	
THCVA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBN	<LOQ	0.0001	%	< 0.0001	Acceptable	
exo-THC	<LOQ	0.0001	%	< 0.0001	Acceptable	
d9THC	<LOQ	0.0001	%	< 0.0001	Acceptable	
d8THC	<LOQ	0.0001	%	< 0.0001	Acceptable	
9S-d10THC	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBL	<LOQ	0.0001	%	< 0.0001	Acceptable	
9R-d10THC	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBC	<LOQ	0.0001	%	< 0.0001	Acceptable	
THCA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBCA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBLA	<LOQ	0.0001	%	< 0.0001	Acceptable	
d9THCP	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBT	<LOQ	0.0001	%	< 0.0001	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:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44

Revision 1 Document D 7148  
Legacy D Worksheet Validated 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6		Batch ID: 2307137						
Sample Duplicate		Sample ID: 23-005482-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBD	0.0170	0.0174	0.0001	%	2.86	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d9THC	0.0085	0.0088	0.0001	%	3.77	< 20	Acceptable	
d8THC	0.0019	0.0019	0.0001	%	2.30	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.0001	%	NA	< 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: 23-005449/D002.R000  
 Report Date: 05/12/2023  
 ORELAP#: OR100028  
 Purchase Order:  
 Received: 05/05/23 11:44

Revision: 2 Document ID: 7087  
 Legacy ID: CFL-E33Effective:

Laboratory Quality Control Results

Residual Solvents				Batch D: 2307166					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		532	584	µg/g	91.1	60 - 120	
Isobutane	ND	< 200		680	767	µg/g	88.7	60 - 120	
Butane	ND	< 200		678	782	µg/g	86.7	60 - 120	
2,2-Dimethylpropane	ND	< 200		879	939	µg/g	93.6	60 - 120	
Methanol	ND	< 200		1350	1610	µg/g	83.9	60 - 120	
Ethylene Oxide	ND	< 30		53.1	57.1	µg/g	93.0	60 - 120	
2-Methylbutane	ND	< 200		1270	1600	µg/g	79.4	60 - 120	
Pentane	ND	< 200		1280	1610	µg/g	79.5	60 - 120	
Ethanol	ND	< 200		1270	1600	µg/g	79.4	70 - 130	
Ethyl Ether	ND	< 200		1290	1610	µg/g	80.1	60 - 120	
2,2-Dimethylbutane	ND	< 30		138	173	µg/g	79.8	60 - 120	
Acetone	ND	< 200		1280	1620	µg/g	79.0	60 - 120	
2-Propanol	ND	< 200		1260	1600	µg/g	78.8	60 - 120	
Ethyl Formate	ND	< 500		1760	1610	µg/g	109.3	70 - 130	
Acetonitrile	ND	< 100		381	488	µg/g	78.1	60 - 120	
Methyl Acetate	ND	< 500		1400	1610	µg/g	87.0	70 - 130	
2,3-Dimethylbutane	ND	< 30		134	165	µg/g	81.2	60 - 120	
Dichloromethane	ND	< 60		387	487	µg/g	79.5	60 - 120	
2-Methylpentane	ND	< 30		122	160	µg/g	76.3	60 - 120	
MTBE	ND	< 500		1450	1600	µg/g	90.6	70 - 130	
3-Methylpentane	ND	< 30		128	161	µg/g	79.5	60 - 120	
Hexane	ND	< 30		123	162	µg/g	79.6	60 - 120	
1-Propanol	ND	< 500		1470	1620	µg/g	90.7	70 - 130	
Methyl ethyl ketone	ND	< 500		1450	1610	µg/g	90.1	70 - 130	
Ethyl acetate	ND	< 200		1240	1600	µg/g	77.5	60 - 120	
2-Butanol	ND	< 200		1230	1610	µg/g	76.4	60 - 120	
Tetrahydrofuran	ND	< 100		377	483	µg/g	78.1	60 - 120	
Cyclohexane	ND	< 200		1270	1610	µg/g	78.9	60 - 120	
2-methyl-1-propanol	ND	< 500		1450	1630	µg/g	89.0	70 - 130	
Benzene	ND	< 1		3.83	4.98	µg/g	76.9	60 - 120	
Isopropyl Acetate	ND	< 200		1230	1610	µg/g	76.4	60 - 120	
Heptane	ND	< 200		1280	1620	µg/g	77.8	60 - 120	
1-Butanol	ND	< 500		1450	1600	µg/g	90.6	70 - 130	
Propyl Acetate	ND	< 500		1450	1620	µg/g	89.5	70 - 130	
1,4-Dioxane	ND	< 100		372	494	µg/g	75.3	60 - 120	
2-Ethoxyethanol	ND	< 30		126	165	µg/g	76.4	60 - 120	
Methylisobutylketone	ND	< 500		1400	1610	µg/g	87.0	70 - 130	
3-Methyl-1-butanol	ND	< 500		1390	1610	µg/g	86.3	70 - 130	
Ethylene Glycol	ND	< 200		25.4	488	µg/g	52.3	60 - 120	Q6
Toluene	ND	< 100		385	513	µg/g	71.2	60 - 120	
Isobutyl Acetate	ND	< 500		1400	1600	µg/g	87.5	70 - 130	
1-Pentanol	ND	< 500		1380	1610	µg/g	85.7	70 - 130	
Butyl Acetate	ND	< 500		1400	1610	µg/g	87.0	70 - 130	
Ethylbenzene	ND	< 200		715	967	µg/g	73.9	60 - 120	
m,p-Xylene	ND	< 200		783	994	µg/g	77.4	60 - 120	
o-Xylene	ND	< 200		715	992	µg/g	72.1	60 - 120	
Cumene	ND	< 30		127	171	µg/g	74.3	60 - 120	
Anisole	ND	< 500		1340	1610	µg/g	83.2	70 - 130	
DMSO	ND	< 500		794	1610	µg/g	49.3	70 - 130	Q6
1,2-dimethoxyethane	ND	< 50		157	172	µg/g	91.3	70 - 130	
Triethylamine	ND	< 500		1270	1620	µg/g	78.4	70 - 130	
N,N-dimethylformamide	ND	< 150		389	499	µg/g	78.0	70 - 130	
N,N-dimethylacetamide	ND	< 150		311	491	µg/g	63.3	70 - 130	Q6
Pyridine	ND	< 50		141	171	µg/g	82.5	70 - 130	
Silolane	ND	< 50		104	160	µg/g	65.0	70 - 130	Q6
1,2-Dichloroethane	ND	< 1		1.04	1	µg/g	104.0	70 - 130	
Chloroform	ND	< 1		1	1	µg/g	100.0	70 - 130	
Trichloroethylene	ND	< 1		0.976	1	µg/g	97.6	70 - 130	
1,1-Dichloroethane	ND	< 1		1.01	1	µg/g	101.0	70 - 130	



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



**Report Number:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44

Revision: 2 Document ID: 7087  
 Legacy ID: CFL-E33Effective:

QC- Sample Duplicate		Sample ID: 23-005392-0001						
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  
 Q6- Quality control outside QClimits. Data acceptable based on remaining QC.

Units of Measure:

µg/g- Microgram per gram or ppm



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



**Report Number:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44





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



**Report Number:** 23-005449/D002.R000  
**Report Date:** 05/12/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/05/23 11:44

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.