



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



Report Number: 23-003313/D002.R000
Report Date: 04/13/2023
ORELAP#: OR100028
Purchase Order:
Received: 04/03/23 13:01

Customer: NW Natural Goods
Product identity: HEMP- LM 0077
Client/Metric ID: .
Laboratory ID: 23-003313-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	0.200		mg/4g		CBD-Total per Serving Size 23.0 mg/4g
CBD per 4g	23.0		mg/4g		
CBG per 4g	0.652		mg/4g		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.



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 503-254-1794



Report Number: 23-003313/D002.R000
Report Date: 04/13/2023
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Received: 04/03/23 13:01

Customer: NW Natural Goods

Product identity: HEMP- LM 0077

Client/Metric ID: .

Sample Date:

Laboratory ID: 23-003313-0001

Evidence of Cooling: No

Temp: 15.1

Relinquished by: RAMOS

Serving Size #1: 4 g

Sample Results

Potency per 4g					
Method: J AOAC 2015 V98-6 (mod) ^b					
Units mg/se Batch: 2305772 Analyze: 4/5/23 9:12:00 PM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	0.200		mg/4g	0.124	
CBC-A per 4g	< LOQ		mg/4g	0.124	
CBC-Total per 4g	< LOQ		mg/4g	0.232	
CBD per 4g	23.0		mg/4g	0.124	
CBD-A per 4g	< LOQ		mg/4g	0.124	
CBD-Total per 4g	23.0		mg/4g	0.232	
CBDV per 4g	< LOQ		mg/4g	0.124	
CBDV-A per 4g	< LOQ		mg/4g	0.124	
CBDV-Total per 4g	< LOQ		mg/4g	0.231	
CBE per 4g	< LOQ		mg/4g	0.124	
CBG per 4g	0.652		mg/4g	0.124	
CBG-A per 4g	< LOQ		mg/4g	0.124	
CBG-Total per 4g	0.652		mg/4g	0.231	
CBL per 4g	< LOQ		mg/4g	0.124	
CBL-A per 4g	< LOQ		mg/4g	0.124	
CBL-Total per 4g	< LOQ		mg/4g	0.232	
CBN per 4g	< LOQ		mg/4g	0.124	
CBT per 4g	< LOQ		mg/4g	0.124	
Δ8-THCV per 4g	< LOQ		mg/4g	0.124	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.124	
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.124	
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.248	
Δ8-THC per 4g	< LOQ		mg/4g	0.124	
Δ9-THC per 4g	< LOQ		mg/4g	0.124	
exo-THC per 4g	< LOQ		mg/4g	0.124	
THC-A per 4g	< LOQ		mg/4g	0.124	
THC-Total per 4g	< LOQ		mg/4g	0.232	
THCV per 4g	< LOQ		mg/4g	0.124	
THCV-A per 4g	< LOQ		mg/4g	0.124	
THCV-Total per 4g	< LOQ		mg/4g	0.233	
Total Cannabinoids per 4g	23.9		mg/4g		



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2305487	04/06/23 AOAC 991.14 (Petrifilm) [®]		
Total Coliforms	< LOQ		cfu/g	10	2305487	04/06/23 AOAC 991.14 (Petrifilm) [®]		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2305488	04/07/23 AOAC 2014.05 (RAPID) [®]		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2305488	04/07/23 AOAC 2014.05 (RAPID) [®]		

Solvents Method: Residual Solvents by GC/MS[®] Units µg/g Batch 2305821 Analyze 04/06/23 03:33 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,4-Dioxane	< LOQ	380	100	pass		2-Butanol	< LOQ	5000	200	pass	
2-Ethoxyethanol	< LOQ	160	30.0	pass		2-Methylbutane (Isopentane)	< LOQ		200		
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass	
2,2-Dimethylbutane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< LOQ		200		
2,3-Dimethylbutane	< LOQ		30.0			3-Methylpentane	< LOQ		30.0		
Acetone	< LOQ	5000	200	pass		Acetonitrile	< LOQ	410	100	pass	
Benzene	< LOQ	2.00	1.00	pass		Butanes (sum)	< LOQ	5000	400	pass	
Cyclohexane	< LOQ	3880	200	pass		Ethyl acetate	< LOQ	5000	200	pass	
Ethyl benzene	< LOQ		200			Ethyl ether	< LOQ	5000	200	pass	
Ethylene glycol	< LOQ	620	200	pass		Ethylene oxide	< LOQ	50.0	20.0	pass	
Hexanes (sum)	< LOQ	290	150	pass		Isopropyl acetate	< LOQ	5000	200	pass	
Isopropylbenzene (Cumene)	< LOQ	70.0	30.0	pass		m,p-Xylene	< LOQ		200		
Methanol	< LOQ	3000	200	pass		Methylene chloride	< LOQ	600	60.0	pass	
Methylpropane (Isobutane)	< LOQ		200			n-Butane	< LOQ		200		
n-Heptane	< LOQ	5000	200	pass		n-Hexane	< LOQ		30.0		
n-Pentane	< LOQ		200			o-Xylene	< LOQ		200		
Pentanes (sum)	< LOQ	5000	600	pass		Propane	< LOQ	5000	200	pass	
Tetrahydrofuran	< LOQ	720	100	pass		Toluene	< LOQ	890	100	pass	
Total Xylenes	< LOQ		400			Total Xylenes and Ethyl benzene	< LOQ	2170	600	pass	

Pesticides Method: AOAC 2007.01 & EN 15662 (mod)[®] Units mg/kg Batch 2306028 Analyze 04/10/23 12:10 PM

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

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic [*]	< LOQ	0.200	mg/kg	0.0155	2305993	04/07/23 AOAC 2013.06 (mod.) [®]	pass	
Cadmium [*]	< LOQ	0.200	mg/kg	0.0155	2305993	04/07/23 AOAC 2013.06 (mod.) [®]	pass	
Lead [*]	< LOQ	0.500	mg/kg	0.0155	2305993	04/07/23 AOAC 2013.06 (mod.) [®]	pass	
Mercury [*]	< LOQ	0.100	mg/kg	0.00775	2305993	04/07/23 AOAC 2013.06 (mod.) [®]	pass	



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Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	17.3		g/100g	0.10	2305896	04/05/23 AOAC 925.10 (mod.) ^p		
Water Activity	0.654		Aw	0.030	2305666	04/05/23 AOAC 978.18 ^p		



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Abbreviations

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

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

Ⓐ = ISO/IEC 17025:2017 accredited method.

Ⓜ = TNI accredited analyte.

Units of Measure

cfu/g = Colony forming units per gram

g = g

g/100g = Grams per 100 Grams

µg/g = Microgram per gram

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

mg/4g = Milligram per 4g

% = Percentage of sample

Aw = Water Activity

% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager



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

ORELAP ID: OR100028 ANAB ISO 17025 ID: AT-1508

Document Control ID: 2832 Revision: 5
Effective: 01/04/2022

23-003313

Company: Northwest Natural Goods Contact: Annie Nair Address: 11791 SE HWY 212 City: Clackamas State: OR Zip Code: 97015 <input checked="" type="checkbox"/> Email Results: annienair@nwnaturalgoods.com <input type="checkbox"/> Ph: () - <i>Billing Contact (if different)</i> Name: Email: Address: City: State: Zip: Ph: () -			Analysis Requested Pesticides - OR 59 Compounds Pesticide Multi-Residue - 379 compounds Potency Residual Solvents Water Activity Moisture Micro: Yeast and Mold Micro: E.Coli and Total Coliform Heavy Metals Mycotoxins										PO Number: Project ID: Batch ID: Sampled by: Custom Reporting: Source Material: <input type="checkbox"/> - Ind. Hemp product <input type="checkbox"/> - Rec. Cannabis Reporting Type: <input type="checkbox"/> - Compliance <input type="checkbox"/> - R&D Report to: <input type="checkbox"/> - METRC <input type="checkbox"/> - ODA <input type="checkbox"/> - USDA <input type="checkbox"/> - Other: Turnaround time (TAT - Business Days): <input checked="" type="checkbox"/> - 5BD <input type="checkbox"/> - 3BD* <input type="checkbox"/> - 2BD* <i>*Check for availability</i>		
Lab ID	Client Sample Identification	Sample date	Pesticides - OR 59 Compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Water Activity	Moisture	Micro: Yeast and Mold	Micro: E.Coli and Total Coliform	Heavy Metals	Mycotoxins	Material Type †	Weight (Units)	Comments/Metric ID
	HEMP - LM 0077	04/03/23	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		80g	
Signature - Relinquished By: Annie Nair Date: 04/03/23 Time: 1030 Signature - Received By: [Signature] Date: 4.3.23 Time: 1030 Signature: [Signature] Date: 4.3.23 Time: 1058 Signature: [Signature] Date: 04/07/23 Time: 1301			Lab Use Only: <input type="checkbox"/> Shipped Via: _____ or <input type="checkbox"/> Client drop off Evidence of cooling: <input type="checkbox"/> Yes <input type="checkbox"/> No - Temp (°C): 15.1 Sample in good condition: <input type="checkbox"/> Yes <input type="checkbox"/> No Payment: <input type="checkbox"/> Cash <input type="checkbox"/> Check <input type="checkbox"/> CC <input type="checkbox"/> Net: Prelog storage:												

† - Material Type Codes: Plant Material (P) ; Isolate (I) ; Concentrate/Extract (C) ; Tincture/Topical (T) ; Edible (E) ; Beverage (B) ; Vapor Product (V)

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

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P: (503) 254-1794 | Fax: (503) 254-1452
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Report Number: 23-003313/D002.R000
Report Date: 04/13/2023
ORELAP#: OR100028
Purchase Order:
Received: 04/03/23 13:01

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

Laboratory Quality Control Results

JAOAC2015 V98-6									
Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0347	0.033	%	104	80.0	- 120	Acceptable	
CBDV	2	0.0338	0.033	%	101	80.0	- 120	Acceptable	
CBE	2	0.0347	0.033	%	104	80.0	- 120	Acceptable	
CBDA	1	0.0305	0.031	%	98.8	90.0	- 110	Acceptable	
CBGA	1	0.0255	0.026	%	99.1	80.0	- 120	Acceptable	
CBG	1	0.0310	0.031	%	99.7	80.0	- 120	Acceptable	
CBD	1	0.0267	0.027	%	97.1	90.0	- 110	Acceptable	
THCV	2	0.0350	0.033	%	105	80.0	- 120	Acceptable	
d8THCV	2	0.0342	0.033	%	103	80.0	- 120	Acceptable	
THCVA	2	0.0345	0.033	%	103	80.0	- 120	Acceptable	
CBN	1	0.0272	0.027	%	101	80.0	- 120	Acceptable	
exo-THC	2	0.0330	0.033	%	99.1	80.0	- 120	Acceptable	
d9THC	1	0.0328	0.031	%	105	90.0	- 110	Acceptable	
d8THC	1	0.0315	0.031	%	101	90.0	- 110	Acceptable	
9S-d10THC	1	0.0322	0.031	%	102	80.0	- 120	Acceptable	
CBL	2	0.0348	0.033	%	104	80.0	- 120	Acceptable	
9S-HHC	3	0.0317	0.033	%	95.1	80.0	- 120	Acceptable	
9R-d10THC	1	0.0300	0.032	%	93.8	80.0	- 120	Acceptable	
CBG	2	0.0344	0.033	%	103	80.0	- 120	Acceptable	
9R-HHC	3	0.0301	0.033	%	90.3	80.0	- 120	Acceptable	
THCA	1	0.0360	0.036	%	100	90.0	- 110	Acceptable	
CBCA	2	0.0353	0.033	%	106	80.0	- 120	Acceptable	
CBLA	2	0.0338	0.033	%	101	80.0	- 120	Acceptable	
d8THCO	3	0.0336	0.033	%	101	80.0	- 120	Acceptable	
CBT	2	0.0326	0.033	%	97.7	80.0	- 120	Acceptable	
d9THCO	3	0.0349	0.033	%	105	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			
9S-d10THC	<LOQ	0.003	%	< 0.003		Acceptable			
CBL	<LOQ	0.003	%	< 0.003		Acceptable			
9S-HHC	<LOQ	0.003	%	< 0.003		Acceptable			
9R-d10THC	<LOQ	0.003	%	< 0.003		Acceptable			
CBG	<LOQ	0.003	%	< 0.003		Acceptable			
9R-HHC	<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			
d8THCO	<LOQ	0.003	%	< 0.003		Acceptable			
CBT	<LOQ	0.003	%	< 0.003		Acceptable			
d9THCO	<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



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

Laboratory Quality Control Results

JAOAC2015 V98-6		Batch ID: 2305772						
Sample Duplicate		Sample ID: 23-003052-0008						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.003	%	NA	< 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	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d8THC	0.0093	0.0096	0.003	%	3.47	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
9S-HHC	0.0034	0.0036	0.003	%	6.22	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
9R-HHC	0.0048	0.0050	0.003	%	4.06	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	0.0047	0.0049	0.003	%	3.73	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d8THCO	0.0170	0.0177	0.003	%	4.11	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d9THCO	<LOQ	<LOQ	0.003	%	NA	< 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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Revision: 2 Document ID: 7087
 Legacy ID: CFL-E33Effective:

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2305821					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		463	584	µg/g	79.3	60 - 120	
Isobutane	ND	< 200		590	767	µg/g	76.9	60 - 120	
Butane	ND	< 200		594	782	µg/g	76.0	60 - 120	
2,2-Dimethylpropane	ND	< 200		764	939	µg/g	81.4	60 - 120	
Methanol	ND	< 200		1850	1610	µg/g	114.9	60 - 120	
Ethylene Oxide	ND	< 30		44.9	57.1	µg/g	78.6	60 - 120	
2-Methylbutane	ND	< 200		1730	1600	µg/g	108.1	60 - 120	
Pentane	ND	< 200		1750	1610	µg/g	108.7	60 - 120	
Ethanol	ND	< 200		1710	1600	µg/g	106.9	70 - 130	
Ethyl Ether	ND	< 200		1730	1610	µg/g	107.5	60 - 120	
2,2-Dimethylbutane	ND	< 30		181	173	µg/g	104.6	60 - 120	
Acetone	ND	< 200		1730	1620	µg/g	106.8	60 - 120	
2-Propanol	ND	< 200		1660	1600	µg/g	103.8	60 - 120	
Acetonitrile	ND	< 100		521	488	µg/g	106.8	60 - 120	
2,3-Dimethylbutane	ND	< 30		187	165	µg/g	113.3	60 - 120	
Dichloromethane	ND	< 60		516	487	µg/g	106.0	60 - 120	
2-Methylpentane	ND	< 30		164	160	µg/g	102.5	60 - 120	
3-Methylpentane	ND	< 30		173	161	µg/g	107.5	60 - 120	
Hexane	ND	< 30		173	162	µg/g	106.8	60 - 120	
Ethyl acetate	ND	< 200		1690	1600	µg/g	105.6	60 - 120	
2-Butanol	ND	< 200		1670	1610	µg/g	103.7	60 - 120	
Tetrahydrofuran	ND	< 100		508	483	µg/g	105.2	60 - 120	
Cyclohexane	ND	< 200		1670	1610	µg/g	103.7	60 - 120	
Benzene	ND	< 1		4.21	4.98	µg/g	84.5	60 - 120	
Isopropyl Acetate	ND	< 200		1660	1610	µg/g	103.1	60 - 120	
Heptane	ND	< 200		1690	1620	µg/g	104.3	60 - 120	
1,4-Dioxane	ND	< 100		498	484	µg/g	100.4	60 - 120	
2-Ethoxyethanol	ND	< 30		174	165	µg/g	105.5	60 - 120	
Ethylene Glycol	ND	< 200		400	486	µg/g	82.3	60 - 120	
Toluene	ND	< 100		481	513	µg/g	93.8	60 - 120	
Ethylbenzene	ND	< 200		937	967	µg/g	96.9	60 - 120	
m,p-Xylene	ND	< 200		1440	994	µg/g	144.9	60 - 120	Q1
o-Xylene	ND	< 200		942	982	µg/g	95.0	60 - 120	
Cumene	ND	< 30		158	171	µg/g	92.4	60 - 120	



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

QC- Sample Duplicate Sample ID: 23-003182-0004

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	
Pertane	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	100 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
 Q1- Quality control result biased high. Only non-detect samples reported.

Units of Measure:

µg/g- Microgram per gram or ppm



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



Report Number: 23-003313/D002.R000
Report Date: 04/13/2023
ORELAP#: OR100028
Purchase Order:
Received: 04/03/23 13:01





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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.