



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



**Report Number:** 23-000184/D002.R000  
**Report Date:** 01/20/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 01/05/23 15:26

**Customer:** NW Natural Goods  
**Product identity:** HEMP-PR 0034  
**Client/Metric ID:** .  
**Laboratory ID:** 23-000184-0001

### Summary

**Potency:**

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	0.155		mg/4g		CBD-Total per Serving Size 20.0 mg/4g
CBD per 4g	20.0		mg/4g		
CBG per 4g	9.96		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.



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



**Report Number:** 23-000184/D002.R000  
**Report Date:** 01/20/2023  
**ORELAP#:** OR100028  
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**Received:** 01/05/23 15:26

**Customer:** NW Natural Goods

**Product identity:** HEMP-PR 0034

**Client/Metric ID:** .

**Sample Date:**

**Laboratory ID:** 23-000184-0001

**Evidence of Cooling:** No

**Temp:** 21.8

**Relinquished by:** client

**Serving Size #1:** 4 g

### Sample Results

Potency per 4g					
Method: J AOAC 2015 V98-6 (mod) <sup>b</sup>		Units mg/se		Batch: 2300415	
				Analyze: 1/12/23 9:47:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	0.155		mg/4g	0.128	
CBC-A per 4g	< LOQ		mg/4g	0.128	
CBC-Total per 4g	< LOQ		mg/4g	0.240	
CBD per 4g	20.0		mg/4g	0.128	
CBD-A per 4g	< LOQ		mg/4g	0.128	
CBD-Total per 4g	20.0		mg/4g	0.240	
CBDV per 4g	< LOQ		mg/4g	0.128	
CBDV-A per 4g	< LOQ		mg/4g	0.128	
CBDV-Total per 4g	< LOQ		mg/4g	0.238	
CBE per 4g	< LOQ		mg/4g	0.128	
CBG per 4g	9.96		mg/4g	0.128	
CBG-A per 4g	< LOQ		mg/4g	0.128	
CBG-Total per 4g	9.96		mg/4g	0.238	
CBL per 4g	< LOQ		mg/4g	0.128	
CBL-A per 4g	< LOQ		mg/4g	0.128	
CBL-Total per 4g	< LOQ		mg/4g	0.240	
CBN per 4g	< LOQ		mg/4g	0.128	
CBT per 4g	< LOQ		mg/4g	0.128	
Δ8-THCV per 4g	< LOQ		mg/4g	0.128	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.128	
Δ8-THC per 4g	< LOQ		mg/4g	0.128	
Δ9-THC per 4g	< LOQ		mg/4g	0.128	
exo-THC per 4g	< LOQ		mg/4g	0.128	
THC-A per 4g	< LOQ		mg/4g	0.128	
THC-Total per 4g	< LOQ		mg/4g	0.240	
THCV per 4g	< LOQ		mg/4g	0.128	
THCV-A per 4g	< LOQ		mg/4g	0.128	
THCV-Total per 4g	< LOQ		mg/4g	0.240	
Total Cannabinoids per 4g	30.3		mg/4g		



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**Microbiology**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2300190	01/11/23 AOAC 991.14 (Petrifilm) <sup>®</sup>		
Total Coliforms	< LOQ		cfu/g	10	2300190	01/11/23 AOAC 991.14 (Petrifilm) <sup>®</sup>		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2300191	01/11/23 AOAC 2014.05 (RAPID) <sup>®</sup>		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2300191	01/11/23 AOAC 2014.05 (RAPID) <sup>®</sup>		

**Solvents** Method: Residual Solvents by GC/MS<sup>®</sup> Units µg/g Batch 2300609 Analyze 01/19/23 02:53 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)<sup>®</sup> Units mg/kg Batch 2300507 Analyze 01/17/23 11:01 AM

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	0.0166	2300511	01/17/23 AOAC 2013.06 (mod.) <sup>®</sup>	pass	
Cadmium	< LOQ	0.200	mg/kg	0.0166	2300511	01/17/23 AOAC 2013.06 (mod.) <sup>®</sup>	pass	
Lead	< LOQ	0.500	mg/kg	0.0166	2300511	01/17/23 AOAC 2013.06 (mod.) <sup>®</sup>	pass	
Mercury	< LOQ	0.100	mg/kg	0.00832	2300511	01/17/23 AOAC 2013.06 (mod.) <sup>®</sup>	pass	



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**Nutrition**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	18.3		g/100g	0.10	2300272	01/09/23 AOAC 925.10 (mod.) <sup>p</sup>		
Water Activity	0.694		Aw	0.030	2300253	01/09/23 AOAC 978.18 <sup>p</sup>		



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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.

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

**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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**P2320 Multi-Residue Pesticide Profile  
Cannabis**

Analyte	LOQ (mg/kg)
2,4-D	0.1
Abamectin	0.1
Acephate	0.2
Acequinocyl	0.2
Acetamiprid	0.1
Acetochlor	0.2
Acrinathrin	0.1
Alachlor	0.1
Aldicarb	0.1
Aldoxycarb	0.1
Aldrin	0.1
Ametoctradin	0.1
Ametryn	0.1
Anilazine	0.1
Aspon	0.1
Asulam	0.1
Atrazine	0.1
Atrazine-desethyl	0.1
Azinphos-ethyl	0.1
Azinphos-methyl	0.1
Azoxystrobin	0.1
Benalaxyl	0.1
Bendiocarb	0.1
Benoxacor	0.1
Bensulide	0.1
Bentazon	0.1
Bifenazate	0.1
Bifenox	0.1
Bifenthrin	0.1
Binapacryl	0.1
Boscalid	0.1
Bromacil	0.1
Bromophos-ethyl	0.1
Bromopropylate	0.1
Bromoxynil	0.1
Bupirimate	0.1
Buprofezin	0.1
Butachlor	0.1
Butylate	0.1
Cadusafos	0.1
Captan	0.2
Carbaryl	0.1
Carbendazim	0.1
Carbofuran	0.1
Carbofuran 3-hydroxy	0.1
Carbophenothion	0.1
Carbophenothion-methyl	0.1
Carboxin	0.1

Analyte	LOQ (mg/kg)
Chlorantraniliprol	0.1
Chlordane, cis-	0.1
Chlordane, trans-	0.1
Chlorfenapyr	0.1
Chlorfenvinphos	0.1
Chlorobenzilate	0.1
Chlorpyrifos-ethyl	0.1
Chlorpyrifos-methyl	0.1
Chlorthal-dimethyl (Dacthal)	0.1
Clethodim	0.1
Clethodim sulfone	0.1
Clethodim sulfoxide	0.1
Clofentezine	0.1
Clomazone	0.1
Clopyralid	0.1
Clothianidin	0.1
Coumaphos	0.1
Crotoxyphos	0.1
Cyanofenphos	0.1
Cyanophos	0.1
Cyantraniliprole	0.1
Cyazofamid	0.1
Cyfluthrin	0.1
Cyhalothrin, lambda	0.1
Cymoxanil	0.1
Cypermethrin	0.1
Cyprodinil	0.1
DDD, o,p'-	0.1
DDD, p,p'-	0.1
DDE, o,p'-	0.1
DDE, p,p'-	0.1
DDT, o,p'-	0.1
DDT, p,p'-	0.1
DEET	0.1
Deltamethrin	0.1
Demeton-S	0.1
Demeton-s-methyl	0.1
Demeton-S-methyl-sulfone	0.1
Desmedipham	0.1
Diazinon	0.1
Dicamba	0.1
Dichlofenthion	0.1
Dichlofluandil	0.1
Dichlorbenzamid	0.1
Dichlorvos	0.1
Diclofop	0.1
Diclofop-methyl	0.1
Dicrotophos	0.1

Analyte	LOQ (mg/kg)
Dieldrin	0.1
Diethofencarb	0.1
Difenoconazol	0.1
Diflubenzuron	0.1
Diflufenzopyr	0.1
Dimethenamid	0.1
Dimethoat	0.1
Dimethomorph	0.1
Dinoseb	0.1
Dinotefuran	0.1
Dioxaathion	0.1
Diphenamid	0.1
Diphenylamine (DPA)	0.1
Disulfoton	0.1
Disulfoton-sulfone	0.1
Disulfoton-Sulfoxide	0.1
Diuron	0.1
DNOC	0.1
Edifenphos	0.1
Endosulfan (alpha isomer)	0.1
Endosulfan (beta isomer)	0.1
Endosulfan-sulfate	0.1
Endrin	0.1
EPN	0.1
EPTC	0.1
Esfenvalerate/Fenvalerate	0.1
Ethiofencarb	0.1
Ethion	0.1
Ethofumesate	0.1
Ethoprophos	0.1
Etofenprox	0.1
Etoxazole	0.1
Etrimfos	0.1
Famoxadone	0.1
Famphur	0.1
Fenamiphos	0.1
Fenamiphos-Sulfone	0.1
Fenamiphos-Sulfoxide	0.1
Fenazaquin	0.1
Fenbuconazole	0.1
Fenhexamid	0.1
Fenobucarb	0.1
Fenoxycarb	0.1
Fenpropathrin	0.1
Fensulfothion	0.1
Fenthion	0.1
Fenuron	0.1
Fipronil	0.1

LOQ= Limit of Quantitation  
mg/kg= milligram per kilogram (ppm)



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**P2320 Multi-Residue Pesticide Profile  
Cannabis**

Analyte	LOQ (mg/kg)
Flonicamid	0.1
Fluazifop	0.1
Fluazinam	0.1
Flucythrinate	0.1
Fludioxonil	0.1
Flufenacet	0.1
Flumioxazin	0.1
Flupicolide	0.1
Fluopyram	0.1
Fluoxastrobin	0.1
Flupyradifurone	0.1
Fluridone	0.1
Fluroxypyr	0.1
Fluthiacet-methyl	0.1
Flutolanil	0.1
Flutriafol	0.1
Fluvalinate	0.1
Fluxapyroxad	0.1
Fomesafen	0.1
Formetanate	0.1
Furathiocarb	0.1
Haloxypol	0.1
Heptachlor	0.1
Heptachlor epoxide	0.1
Hexaconazole	0.1
Hexazinone	0.1
Hexythiazox	0.1
Hydropene	0.1
Imazalil	0.1
Imazethapyr	0.1
Imidacloprid	0.1
Indaziflam	0.1
Indoxacarb	0.1
Iprobenfos	0.1
Iprodion	0.1
Isobenzan	0.1
Isufenphos	0.1
Isufenphos-methyl	0.1
Isufenphos-oxon	0.1
Isoprocab	0.1
Isoprothiolane	0.1
Isoproturon	0.1
Isoxaben	0.1
Kresoxim-methyl	0.1
Lindane	0.1
Linuron	0.1
Malaoxon	0.1
Malathion	0.1

Analyte	LOQ (mg/kg)
Mandipropamid	0.1
MCPA	0.1
MCPB	0.1
MCPP	0.1
Mecabarm	0.1
Mepanipyrim	0.1
Mesotrione	0.1
Metaxyl	0.1
Methamidophos	0.1
Methiocarb	0.1
Methiocarb sulfone	0.1
Methiocarb sulfoxide	0.1
Methomyl	0.1
Methoxyfenozide	0.1
Metolachlor	0.1
Metolcarb	0.1
Metrafenone	0.1
Mevinphos	0.1
MGK 264	0.1
Molinat	0.1
Monocrotophos	0.1
Monolinuron	0.1
Myclobutanil	0.1
Naled	0.1
Napropamide	0.1
Neburon	0.1
Norflurazon	0.1
Novaluron	0.1
Omethoat	0.1
Oryzalin	0.1
Oxadiazon	0.1
Oxadixyl	0.1
Oxamyl	0.1
Oxamyl-oxime	0.1
Oxychlorane	0.1
Oxydemeton-Methyl	0.1
Oxyfluorfen	0.1
Paclobutrazol	0.1
Paraoxon-ethyl	0.1
Paraoxon-methyl	0.1
Parathion-methyl	0.1
Penconazole	0.1
Pendimethalin	0.1
Penflufen	0.1
Penthiopyrad	0.1
Permethrin	0.1
Perthane	0.1
Phenmedipham	0.1

Analyte	LOQ (mg/kg)
Phenothrin	0.1
Phenthoate	0.1
Phorate	0.1
Phorate-Sulfone	0.1
Phorate-Sulfoxide	0.1
Phosalone	0.1
Phosmet	0.1
Phosphamidon	0.1
Phoxim	0.1
Pinoxaden	0.1
Piperonyl Butoxide	0.1
Pirimicarb	0.1
Pirimiphos-ethyl	0.1
Pirimiphos-methyl	0.1
Prallethrin	0.1
Prochloraz	0.1
Procymidone	0.1
Profenofos	0.1
Promecarb	0.1
Prometon	0.1
Prometryn	0.1
Propachlor	0.1
Propamocarb	0.1
Propanil	0.1
Propazine	0.1
Propetamophos	0.1
Propham	0.1
Propiconazole	0.1
Propoxur	0.1
Propyzamide	0.1
Prothiofos	0.1
Pyraclostrobin	0.1
Pyraflufen Ethyl	0.1
Pyrazophos	0.1
Pyrethrin	0.1
Pyridaben	0.1
Pyrimethanil	0.1
Pyriproxifen	0.1
Pyroxasulfone	0.1
Pyroxulam	0.1
Quinalphos	0.1
Quinclorac	0.1
Quinoxifen	0.1
Quintozene(PCNB)	0.2
Quizalofop	0.1
Resmethrin	0.1
Rotenone	0.1
Safufenacil	0.1

LOQ= Limit of Quantitation  
mg/kg= milligram per kilogram (ppm)



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**P2320 Multi-Residue Pesticide Profile  
 Cannabis**

Analyte	LOQ (mg/kg)
Sebuthylazin	0.1
Sethoxydim	0.1
Simazine	0.1
Simetryn	0.1
Spinetoram J/L	0.1
Spinosyn A/D	0.1
Spirodiclofen	0.1
Spiromesifen	0.1
Spirotetramat	0.1
Spiroxamine	0.1
Sulfentrazone	0.1
Sulfotep	0.1
Sulfoxaflor	0.1
Sulprofos	0.1
Tebuconazole	0.1
Tebufenozide	0.1
Terbufos	0.1
Terbutylazine	0.1
Terbutryn	0.1
Tetrachlorvinphos	0.1
Tetraconazole	0.1
Tetramethrin	0.1
Thiabendazol	0.1
Thiabendazol-5-hydroxy	0.1
Thiacloprid	0.1
Thiamethoxam	0.1
Thiobencarb	0.1
Thiodicarb	0.1
Thiometon	0.1
Thiophanate-methyl	0.2
Tolfenpyrad	0.1
Tolyfluanid	0.1
Triadimefon	0.1
Triadimenol	0.1
Triazophos	0.1
Trifloxystrobin	0.1
Triflumizole	0.1
Triticonazole	0.1
Zoxamid	0.1

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

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

NWNATURALGOODS 23-000184  
ision: 5  
4/2022



NW Natural Goods

**Sampled by:**  
**Custom Reporting:**

**Source Material:**  - Ind. Hemp product |  - Rec. Cannabis  
**Reporting Type:**  - Compliance |  - R&D  
**Report to:**  - METRC |  - ODA |  - USDA |  
 - Other:

**Turnaround time (TAT - Business Days):**  
 - 5BD |  - 3BD\* |  - 2BD\*  
\*Check for availability

Company: Northwest Natural Goods			Analysis Requested										Material		Weight (Units)	Comments/Metric ID
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	Type †			
	HEMP - PR 0034	01/05/23	✓	✓	✓	✓	✓	✓	✓	✓	✓			80g		
Signature - Relinquished By:			Date	Time	Signature - Received By:			Date	Time	Lab Use Only:						
Annie Nair			01/05/23	1035	[Signature]			1.5	1035	<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): <u>21.8</u> 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: _____						
[Signature]			1.5.23	1109	RBS			01/05/23	1526							

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

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

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www.columbiaboratories.com



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

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2300415

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	2	0.0333	0.033	%	99.7	80.0 - 120	Acceptable	
CBDV	2	0.0355	0.035	%	100	80.0 - 120	Acceptable	
CBE	2	0.0336	0.035	%	96.0	80.0 - 120	Acceptable	
CBDA	1	0.0334	0.032	%	104	90.0 - 110	Acceptable	
CBGA	1	0.0333	0.032	%	104	80.0 - 120	Acceptable	
CBG	1	0.0345	0.033	%	105	80.0 - 120	Acceptable	
CBD	1	0.0338	0.032	%	104	90.0 - 110	Acceptable	
THCV	2	0.0344	0.035	%	96.9	80.0 - 120	Acceptable	
d8THCV	2	0.0357	0.034	%	104	80.0 - 120	Acceptable	
THCVA	2	0.0329	0.033	%	99.6	80.0 - 120	Acceptable	
CBN	1	0.0355	0.034	%	105	80.0 - 120	Acceptable	
exo-THC	2	0.0325	0.032	%	100	80.0 - 120	Acceptable	
d9THC	1	0.0357	0.035	%	102	90.0 - 110	Acceptable	
d8THC	1	0.0319	0.033	%	95.1	90.0 - 110	Acceptable	
CBL	2	0.0350	0.035	%	101	80.0 - 120	Acceptable	
d10THC	1	0.0163	0.016	%	103	80.0 - 120	Acceptable	
CBG	2	0.0341	0.035	%	98.5	80.0 - 120	Acceptable	
THCA	1	0.0344	0.032	%	109	90.0 - 110	Acceptable	
CBCA	2	0.0339	0.034	%	98.7	80.0 - 120	Acceptable	
CBLA	2	0.0348	0.035	%	99.8	80.0 - 120	Acceptable	
CBT	2	0.0343	0.035	%	97.6	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	
d10THC	<LOQ	0.003	%	< 0.003	Acceptable	
CBG	<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



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**Report Number:** 23-000184/D002.R000  
**Report Date:** 01/20/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 01/05/23 15:26

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

Laboratory Quality Control Results

J AOAC 2015 V98-6		Batch ID: 2300415						
Sample Duplicate		Sample ID: 23-000165-0002						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	0.0083	0.0084	0.003	%	1.20	< 20	Acceptable	
CBE	0.0071	0.0070	0.003	%	2.10	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0041	0.0039	0.003	%	3.10	< 20	Acceptable	
CBD	0.532	0.535	0.003	%	0.673	< 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	0.0219	0.0216	0.003	%	1.27	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	0.0191	0.0193	0.003	%	0.576	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	0.0045	0.0049	0.003	%	7.64	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBT	0.0133	0.0127	0.003	%	4.93	< 20	Acceptable	

**Abbreviations**

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

**Units of Measure:**



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

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2300609					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		594	572	µg/g	103.8	60 - 120	
Isobutane	ND	< 200		683	731	µg/g	93.4	60 - 120	
Butane	ND	< 200		673	731	µg/g	92.1	60 - 120	
2,2-Dimethylpropane	ND	< 200		901	936	µg/g	96.3	60 - 120	
Methanol	ND	< 200		1630	1620	µg/g	100.6	60 - 120	
Ethylene Oxide	ND	< 30		55.3	56.2	µg/g	98.4	60 - 120	
2-Methylbutane	ND	< 200		1430	1610	µg/g	88.8	60 - 120	
Pentane	ND	< 200		1440	1600	µg/g	90.0	60 - 120	
Ethanol	ND	< 200		1320	1610	µg/g	82.0	70 - 130	
Ethyl Ether	ND	< 200		1490	1630	µg/g	91.4	60 - 120	
2,2-Dimethylbutane	ND	< 30		163	171	µg/g	95.3	60 - 120	
Acetone	ND	< 200		1530	1630	µg/g	93.9	60 - 120	
2-Propanol	ND	< 200		1620	1620	µg/g	100.0	60 - 120	
Acetonitrile	ND	< 100		448	498	µg/g	90.0	60 - 120	
2,3-Dimethylbutane	ND	< 30		157	171	µg/g	91.8	60 - 120	
Dichloromethane	ND	< 60		452	483	µg/g	93.6	60 - 120	
2-Methylpentane	ND	< 30		156	168	µg/g	92.9	60 - 120	
3-Methylpentane	ND	< 30		142	167	µg/g	85.0	60 - 120	
Hexane	ND	< 30		211	182	µg/g	115.9	60 - 120	
Ethyl acetate	ND	< 200		1560	1610	µg/g	96.9	60 - 120	
2-Butanol	ND	< 200		1540	1600	µg/g	96.3	60 - 120	
Tetrahydrofuran	ND	< 100		410	483	µg/g	84.9	60 - 120	
Cyclohexane	ND	< 200		1620	1610	µg/g	100.6	60 - 120	
Benzene	ND	< 1		4.55	5.02	µg/g	90.6	60 - 120	
Isopropyl Acetate	ND	< 200		1570	1620	µg/g	96.9	60 - 120	
Heptane	ND	< 200		1710	1610	µg/g	106.2	60 - 120	
1,4-Dioxane	ND	< 100		504	491	µg/g	102.6	60 - 120	
2-Ethoxyethanol	ND	< 30		148	181	µg/g	81.8	60 - 120	
Ethylene Glycol	ND	< 200		452	484	µg/g	93.4	60 - 120	
Toluene	ND	< 100		431	485	µg/g	88.9	60 - 120	
Ethylbenzene	ND	< 200		902	969	µg/g	93.1	60 - 120	
m,p-Xylene	ND	< 200		898	994	µg/g	90.3	60 - 120	
o-Xylene	ND	< 200		833	967	µg/g	86.1	60 - 120	
Cumene	ND	< 30		136	171	µg/g	79.5	60 - 120	



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

QC - Sample Duplicate		Sample ID: 22-015761-0001						
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	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

**Units of Measure:**

µg/g - Microgram per gram or ppm



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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.