



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



**Report Number:** 24-005825/D004.R000  
**Report Date:** 06/04/2024  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 05/28/24 13:23

**Customer:** NW Natural Goods  
**Product identity:** HEMP - PCH 0024  
**Client/Metric ID:** .  
**Laboratory ID:** 24-005825-0001

### Summary

**Potency:**

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	9.64		mg/4g		CBD-Total per Serving Size 19.5 mg/4g
CBD per 4g	19.5		mg/4g		
CBG per 4g	0.480		mg/4g		Delta-9-THC-Total per <LOQ
CBT per 4g	0.852		mg/4g		(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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 Portland, OR 97230  
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**Customer:** NW Natural Goods  
**Product identity:** HEMP - PCH 0024  
**Client/Metric ID:** .  
**Sample Date:**  
**Laboratory ID:** 24-005825-0001  
**Evidence of Cooling:** Yes  
**Temp:** 5.4 °C  
**Serving Size #1:** 4 g

### Sample Results

Potency per 4g		Method: J AOAC 2015 V98-6 (mod) <sup>b</sup>		Units mg/se Batch: 2404204		Analyze: 5/31/24 7:05:00 PM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC per 4g	9.64		mg/4g	0.131		
CBC-A per 4g	< LOQ		mg/4g	0.131		
CBC-Total per 4g	9.64		mg/4g	0.246		
CBD per 4g	19.5		mg/4g	0.131		
CBD-A per 4g <sup>1</sup>	< LOQ		mg/4g	0.131		
CBD-Total per 4g <sup>1</sup>	19.5		mg/4g	0.246		
CBDV per 4g	< LOQ		mg/4g	0.131		
CBDV-A per 4g	< LOQ		mg/4g	0.131		
CBDV-Total per 4g	< LOQ		mg/4g	0.245		
CBE per 4g	< LOQ		mg/4g	0.131		
CBG per 4g	0.480		mg/4g	0.131		
CBG-A per 4g	< LOQ		mg/4g	0.131		
CBG-Total per 4g	0.480		mg/4g	0.245		
CBL per 4g	< LOQ		mg/4g	0.131		
CBL-A per 4g	< LOQ		mg/4g	0.131		
CBL-Total per 4g	< LOQ		mg/4g	0.246		
CBN per 4g	< LOQ		mg/4g	0.131		
CBT per 4g	0.852		mg/4g	0.131		
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.131		
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.131		
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.262		
Δ8-THC per 4g <sup>1</sup>	< LOQ		mg/4g	0.131		
Δ8-THCV per 4g	< LOQ		mg/4g	0.131		
Δ9-THC per 4g <sup>1</sup>	< LOQ		mg/4g	0.131		
Δ9-THC-Total per 4g	< LOQ		mg/4g	0.246		
Δ9-THCP per 4g	< LOQ		mg/4g	0.131		
Δ9-THCV per 4g	< LOQ		mg/4g	0.131		
Δ9-THCV-A per 4g	< LOQ		mg/4g	0.131		
Δ9-THCV-Total per 4g	< LOQ		mg/4g	0.246		
exo-THC per 4g	< LOQ		mg/4g	0.131		
THC-A per 4g <sup>1</sup>	< LOQ		mg/4g	0.131		
Total Cannabinoids per 4g	30.5		mg/4g			


**Microbiology**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2404078	05/31/24 AOAC 991.14 (Petrifilm)		
Total Coliforms	< LOQ		cfu/g	10	2404078	05/31/24 AOAC 991.14 (Petrifilm)		

**Solvents Method: Residual Solvents by HS-GC-MS<sup>b</sup> Units µg/g Batch 2404130 Analyze 05/30/24 10:39 AM**

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

**Pesticides Method: AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 2404219 Analyze 06/03/24 01:06 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 <sup>1</sup>	< LOQ	0.200	mg/kg	0.0184	2404136	05/30/24 AOAC 2013.06 (mod.) <sup>b</sup>	pass	
Cadmium <sup>1</sup>	< LOQ	0.200	mg/kg	0.0184	2404136	05/30/24 AOAC 2013.06 (mod.) <sup>b</sup>	pass	
Lead <sup>1</sup>	< LOQ	0.500	mg/kg	0.0184	2404136	05/30/24 AOAC 2013.06 (mod.) <sup>b</sup>	pass	
Mercury <sup>1</sup>	< LOQ	0.100	mg/kg	0.00921	2404136	05/30/24 AOAC 2013.06 (mod.) <sup>b</sup>	pass	

**Nutrition**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	16.8		g/100g	0.10	2404157	05/30/24 AOAC 925.10 (mod.)		
Water Activity	0.648		Aw	0.030	2404099	05/29/24 AOAC 978.18		



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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 = Gram

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

A<sub>w</sub> = Water Activity

% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner  
General Manager



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Hemp & Cannabis  
Chain of Custody

NORTHWEST-NATURAL-  
GOODS-1716503861

ORELAP ID: OR1000028 ANAB ISO 17025 ID: AT1608

					Testing											
Company Details Company: <u>NORTHWEST NATURAL GOODS</u> ██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████		Project Details Turnaround Time: <u>5 Business Days   Req. For Micro Testing   Standard</u> Relinquishment   Sampling, Courier & Shipping Options: <u>Pick-Up Courier Service</u> Compliance: <u>Compliance</u> Project Name / ID: <u>HEMP - PCH0024</u> Cannabis Type (select if applicable): <u>Industrial</u> Pick-Up Details Pick-Up Location Name: <u>NORTHWEST NATURAL GOODS</u> ██████████ ██████████ ██████████ ██████████			<table border="1"> <tr> <td>H0013 - Cannabis Heavy Metals Profile OR</td> <td>H0010 - Potency Cannabis (Basic+Expanded)</td> <td>P2320 - Multi-Residue Pesticide Profile (Cannabis)</td> <td>M075 - E. coli/Coliform Count (EC) Petri Im</td> <td>H0008 - Residual Solvents (Cannabis - Oregon)</td> <td>N3600 - Water Activity &amp; Moisture (as Loss on Drying)   Food</td> </tr> </table>						H0013 - Cannabis Heavy Metals Profile OR	H0010 - Potency Cannabis (Basic+Expanded)	P2320 - Multi-Residue Pesticide Profile (Cannabis)	M075 - E. coli/Coliform Count (EC) Petri Im	H0008 - Residual Solvents (Cannabis - Oregon)	N3600 - Water Activity & Moisture (as Loss on Drying)   Food
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#	Sample Name	Material	Amount Provided	Reporting Unit	Serving Size											
1	HEMP - PCH0024	Cannabinoid Edible	20 each	mg/g & mg/serving	4 g	✓	✓	✓	✓	✓	✓					

Relinquished By	Date	Time	Temp., °C	Received By	Date	Time	Received Temp., °C	Evidence of Cooling?
<i>TODD NORBERG</i>	<i>05/23/2024</i>	<i>15:37</i>		<i>RAT</i>	<i>05/28/2024</i>	<i>13:17</i>		<i>Yes</i>
<i>RAT</i>	<i>05/28/2024</i>	<i>13:18</i>	<i>5.4</i>	<i>MEW</i>	<i>05/28/2024</i>	<i>13:23</i>	<i>5.4</i>	<i>Yes</i>

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

Columbia Laboratories  
12423 NE Whitaker Way  
Portland, OR 97230

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



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
Dichlofenthiol	0.1
Dichlofluanid	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
Diffubenzuron	0.1
Diffuzenzopyr	0.1
Dimethenamid	0.1
Dimethoat	0.1
Dimethomorph	0.1
Dinoseb	0.1
Dinotefuran	0.1
Dioxathion	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
Etoazole	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)



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
Fluopicolide	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
Haloxypop	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
Isofenphos	0.1
Isofenphos-methyl	0.1
Isofenphos-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
MCCP	0.1
Mecabam	0.1
Mepanipirim	0.1
Mesotrione	0.1
Metalaxyl	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
Molinate	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
Paclbutrazol	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
Pyroxsulam	0.1
Quinalphos	0.1
Quinclorac	0.1
Quinoxifen	0.1
Quintozene(PCNB)	0.2
Quizalofop	0.1
Resmethrin	0.1
Rotenone	0.1
Saflufenacil	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
Sulfoxafflor	0.1
Sulprofos	0.1
Tebuconazole	0.1
Tebufenozide	0.1
Terbufos	0.1
Terbuthylazine	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

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

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.

Testing in accordance with: OAR 333-007-0390 OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430




**Laboratory Quality Control Results**

Residual Solvents				Batch ID: 2404130					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		634	584	µg/g	108.6	60 - 120	
Isobutane	ND	< 200		823	767	µg/g	107.3	60 - 120	
Butane	ND	< 200		698	782	µg/g	89.3	60 - 120	
2,2-Dimethylpropane	ND	< 200		840	939	µg/g	89.5	60 - 120	
Methanol	ND	< 200		1890	1600	µg/g	118.1	60 - 120	
Ethylene Oxide	ND	< 30		60.9	57.1	µg/g	106.7	60 - 120	
2-Methylbutane	ND	< 200		1860	1600	µg/g	116.3	60 - 120	
Pentane	ND	< 200		1850	1610	µg/g	114.9	60 - 120	
Ethanol	ND	< 200		1800	1600	µg/g	112.5	70 - 130	
Ethyl Ether	ND	< 200		1780	1600	µg/g	111.3	60 - 120	
2,2-Dimethylbutane	ND	< 30		156	162	µg/g	96.3	60 - 120	
Acetone	ND	< 200		1650	1600	µg/g	103.1	60 - 120	
2-Propanol	ND	< 200		1500	1600	µg/g	93.8	60 - 120	
Ethyl Formate	ND	< 500		1350	1630	µg/g	82.8	70 - 130	
Acetonitrile	ND	< 100		442	487	µg/g	90.8	60 - 120	
Methyl Acetate	ND	< 500		1540	1610	µg/g	95.7	70 - 130	
2,3-Dimethylbutane	ND	< 30		144	161	µg/g	89.4	60 - 120	
Dichloromethane	ND	< 60		438	483	µg/g	90.7	60 - 120	
2-Methylpentane	ND	< 30		141	164	µg/g	86.0	60 - 120	
MTBE	ND	< 500		1540	1610	µg/g	95.7	70 - 130	
3-Methylpentane	ND	< 30		144	160	µg/g	90.0	60 - 120	
Hexane	ND	< 30		154	171	µg/g	90.1	60 - 120	
1-Propanol	ND	< 500		1960	1610	µg/g	121.7	70 - 130	
Methylethylketone	ND	< 500		1850	1610	µg/g	114.9	70 - 130	
Ethyl acetate	ND	< 200		1530	1620	µg/g	94.4	60 - 120	
2-Butanol	ND	< 200		1540	1600	µg/g	96.3	60 - 120	
Tetrahydrofuran	ND	< 100		457	481	µg/g	95.0	60 - 120	
Cyclohexane	ND	< 200		1510	1610	µg/g	93.8	60 - 120	
2-methyl-1-propanol	ND	< 500		1640	1610	µg/g	101.9	70 - 130	
Benzene	ND	< 1		4.88	5.17	µg/g	94.4	60 - 120	
Isopropyl Acetate	ND	< 200		1510	1600	µg/g	94.4	60 - 120	
Heptane	ND	< 200		1520	1620	µg/g	93.8	60 - 120	
1-Butanol	ND	< 500		1660	1610	µg/g	103.1	70 - 130	
Propyl Acetate	ND	< 500		1710	1610	µg/g	106.2	70 - 130	
1,4-Dioxane	ND	< 100		464	497	µg/g	93.4	60 - 120	
2-Ethoxyethanol	ND	< 30		144	160	µg/g	90.0	60 - 120	
Methylisobutylketone	ND	< 500		1720	1620	µg/g	106.2	70 - 130	
3-Methyl-1-butanol	ND	< 500		1780	1610	µg/g	110.6	70 - 130	
Ethylene Glycol	ND	< 200		413	483	µg/g	85.5	60 - 120	
Toluene	ND	< 100		459	482	µg/g	95.2	60 - 120	
Isobutyl Acetate	ND	< 500		1740	1620	µg/g	107.4	70 - 130	
1-Pentanol	ND	< 500		1780	1610	µg/g	110.6	70 - 130	
Butyl Acetate	ND	< 500		1850	1650	µg/g	112.1	70 - 130	
Ethylbenzene	ND	< 200		912	970	µg/g	94.0	60 - 120	
m,p-Xylene	ND	< 200		905	963	µg/g	94.0	60 - 120	
o-Xylene	ND	< 200		848	961	µg/g	88.2	60 - 120	
Cumene	ND	< 30		136	164	µg/g	82.9	60 - 120	
Anisole	ND	< 500		1700	1610	µg/g	105.6	70 - 130	
DMSO	ND	< 500		1820	1610	µg/g	113.0	70 - 130	
1,2-dimethoxyethane	ND	< 50		189	170	µg/g	111.2	70 - 130	
Triethylamine	ND	< 500		1180	1620	µg/g	72.8	70 - 130	
N,N-dimethylformamide	ND	< 150		576	499	µg/g	115.4	70 - 130	
N,N-dimethylacetamide	ND	< 150		525	489	µg/g	107.4	70 - 130	
Pyridine	ND	< 50		165	167	µg/g	98.8	70 - 130	
Sulfolane	ND	< 50		161	169	µg/g	95.3	70 - 130	
1,2-Dichloroethane	ND	< 1		0.983	1	µg/g	98.3	70 - 130	
Chloroform	ND	< 1		1.11	1	µg/g	111.0	70 - 130	
Trichloroethylene	ND	< 1		1.05	1	µg/g	105.0	70 - 130	
1,1-Dichloroethane	ND	< 1		1.14	1	µg/g	114.0	70 - 130	



12423 NE Whitaker Way  
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Report Number: 24-005825/D004.R000  
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Received: 05/28/24 13:23

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

QC - Sample Duplicate

Sample ID: 24-005671-0001-01

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

Units of Measure:

µg/g- Microgram per gram or ppm



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



Report Number: 24-005825/D004.R000  
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 Received: 05/28/24 13:23

Revision: 4 Document ID: 7148  
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Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2404204

Laboratory Control Sample										
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes	
CBDVA	2	0.0281	0.0278	%	101	80.0	- 120	Acceptable		
CBDV	2	0.0318	0.0323	%	98.3	80.0	- 120	Acceptable		
CBE	2	0.0294	0.0318	%	92.4	80.0	- 120	Acceptable		
CBDA	1	0.0288	0.0300	%	96.2	90.0	- 110	Acceptable		
CBGA	1	0.0289	0.0297	%	97.4	80.0	- 120	Acceptable		
CBG	1	0.0267	0.0292	%	91.5	80.0	- 120	Acceptable		
CBD	1	0.0286	0.0316	%	90.4	90.0	- 110	Acceptable		
THCV	2	0.0310	0.0324	%	95.7	80.0	- 120	Acceptable		
d8THCV	2	0.0299	0.0314	%	95.3	80.0	- 120	Acceptable		
THCVA	2	0.0304	0.0303	%	101	80.0	- 120	Acceptable		
CBN	1	0.0290	0.0297	%	97.4	80.0	- 120	Acceptable		
exo-THC	2	0.0303	0.0313	%	96.7	80.0	- 120	Acceptable		
d9THC	1	0.0307	0.0315	%	97.4	90.0	- 110	Acceptable		
d8THC	1	0.0297	0.0308	%	96.4	90.0	- 110	Acceptable		
9S-d10THC	1	0.0298	0.0309	%	96.3	80.0	- 120	Acceptable		
CBL	2	0.0273	0.0283	%	96.4	80.0	- 120	Acceptable		
9R-d10THC	1	0.0285	0.0331	%	86.1	80.0	- 120	Acceptable		
CBC	2	0.0293	0.0303	%	96.7	80.0	- 120	Acceptable		
THCA	1	0.0308	0.0297	%	104	90.0	- 110	Acceptable		
CBCA	2	0.0303	0.0312	%	97.0	80.0	- 120	Acceptable		
CBLA	2	0.0316	0.0318	%	99.3	80.0	- 120	Acceptable		
d9THCP	2	0.0291	0.0309	%	94.2	80.0	- 120	Acceptable		
CBT	2	0.0292	0.0316	%	92.4	80.0	- 120	Acceptable		

Method Blank							
Analyte	Result	LOQ	Units	Limits	Evaluation	Notes	
CBDVA	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBDV	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBE	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBDA	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBGA	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBG	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBD	<LOQ	0.00316	%	< 0.00316	Acceptable		
THCV	<LOQ	0.00316	%	< 0.00316	Acceptable		
d8THCV	<LOQ	0.00316	%	< 0.00316	Acceptable		
THCVA	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBN	<LOQ	0.00316	%	< 0.00316	Acceptable		
exo-THC	<LOQ	0.00316	%	< 0.00316	Acceptable		
d9THC	<LOQ	0.00316	%	< 0.00316	Acceptable		
d8THC	<LOQ	0.00316	%	< 0.00316	Acceptable		
9S-d10THC	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBL	<LOQ	0.00316	%	< 0.00316	Acceptable		
9R-d10THC	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBC	<LOQ	0.00316	%	< 0.00316	Acceptable		
THCA	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBCA	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBLA	<LOQ	0.00316	%	< 0.00316	Acceptable		
d9THCP	<LOQ	0.00316	%	< 0.00316	Acceptable		
CBT	<LOQ	0.00316	%	< 0.00316	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  
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**Report Number:** 24-005825/D004.R000  
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**Laboratory Quality Control Results**

AOAC 2015 V98-6		Batch ID: 2404204						
Sample Duplicate		Sample ID: 24-005898-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBD	0.511	0.511	0.00326	%	0.0368	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
d9THC	0.0246	0.0246	0.00326	%	0.167	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00326	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.00326	%	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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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.