



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



Report Number: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13

Customer: NW Natural Goods
Product identity: HEMP - PR 0078
Client/Metric ID: .
Laboratory ID: 24-004650-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status	
CBD per 4g	20.6		mg/4g		CBD-Total per Serving Size 20.6 mg/4g
CBG per 4g	10.0		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: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13

Customer: NW Natural Goods
Product identity: HEMP - PR 0078
Client/Metric ID: .
Sample Date:
Laboratory ID: 24-004650-0001
Evidence of Cooling: No
Temp: 18.8
Relinquished by: ramos
Serving Size #1: 4 g

Sample Results

Potency per 4g	Method: J AOAC 2015 V98-6 (mod)	Units mg/se	Batch: 2403360	Analyze: 5/2/24 7:02:00 AM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	< LOQ		mg/4g	0.132	
CBC-A per 4g	< LOQ		mg/4g	0.132	
CBC-Total per 4g	< LOQ		mg/4g	0.248	
CBD per 4g	20.6		mg/4g	0.132	
CBD-A per 4g	< LOQ		mg/4g	0.132	
CBD-Total per 4g	20.6		mg/4g	0.248	
CBDV per 4g	< LOQ		mg/4g	0.132	
CBDV-A per 4g	< LOQ		mg/4g	0.132	
CBDV-Total per 4g	< LOQ		mg/4g	0.246	
CBE per 4g	< LOQ		mg/4g	0.132	
CBG per 4g	10.0		mg/4g	0.132	
CBG-A per 4g	< LOQ		mg/4g	0.132	
CBG-Total per 4g	10.0		mg/4g	0.246	
CBL per 4g	< LOQ		mg/4g	0.132	
CBL-A per 4g	< LOQ		mg/4g	0.132	
CBL-Total per 4g	< LOQ		mg/4g	0.248	
CBN per 4g	< LOQ		mg/4g	0.132	
CBT per 4g	< LOQ		mg/4g	0.132	
Δ8-THCV per 4g	< LOQ		mg/4g	0.132	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.132	
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.132	
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.264	
Δ8-THC per 4g	< LOQ		mg/4g	0.132	
Δ9-THC per 4g	< LOQ		mg/4g	0.132	
delta-9-THCP per 4g	< LOQ		mg/4g	0.132	
exo-THC per 4g	< LOQ		mg/4g	0.132	
THC-A per 4g	< LOQ		mg/4g	0.132	
THC-Total per 4g	< LOQ		mg/4g	0.248	
THCV per 4g	< LOQ		mg/4g	0.132	
THCV-A per 4g	< LOQ		mg/4g	0.132	
THCV-Total per 4g	< LOQ		mg/4g	0.248	
Total Cannabinoids per 4g	30.6		mg/4g		



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



Report Number: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2403302	05/03/24 AOAC 991.14 (Petrifilm)		
Total Coliforms	< LOQ		cfu/g	10	2403302	05/03/24 AOAC 991.14 (Petrifilm)		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2403303	05/04/24 AOAC 2014.05 (RAPID)		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2403303	05/04/24 AOAC 2014.05 (RAPID)		

Solvents Method: Residual Solvents by HS-GC-MS^b Units µg/g Batch 2403361 Analyze 05/02/24 01:03 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 2403465 Analyze 05/07/24 10:21 AM

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: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic [‡]	< LOQ	0.200	mg/kg	0.0174	2403350	05/01/24 AOAC 2013.06 (mod.) ^P	pass	
Cadmium [‡]	< LOQ	0.200	mg/kg	0.0174	2403350	05/01/24 AOAC 2013.06 (mod.) ^P	pass	
Lead [‡]	< LOQ	0.500	mg/kg	0.0174	2403350	05/01/24 AOAC 2013.06 (mod.) ^P	pass	
Mercury [‡]	< LOQ	0.100	mg/kg	0.00869	2403350	05/01/24 AOAC 2013.06 (mod.) ^P	pass	

Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	17.9		g/100g	0.10	2403402	05/02/24 AOAC 925.10 (mod.)		
Water Activity	0.669		Aw	0.030	2403329	05/01/24 AOAC 978.18		



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



Report Number: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13

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_w = 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: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13



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
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
Diffufenzopyr	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
Etoxazole	0.1
Etrinfos	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)

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



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



Report Number: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13



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)

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



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



Report Number: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13



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



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





Report Number: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13



**Hemp & Cannabis
 Chain of Custody**

**Northwest-Natural-
 Goods-1714431214**

ORELAP ID: **OR100028** ANAB ISO17025 ID: **AT1508**

						Testing											
						H0013 - Cannabis Heavy Metals Profile (OR)	H0008 - Residual Solvents (Cannabis - Oregon)	P2320 - Multi-Residue Pesticide Profile (Cannabis)	M076 - E. coli/Coliform Count (EC) Petrifilm	N3900 - Water Activity & Moisture (as Loss on Drying) Food	H0010 - Potency Cannabis (Basic-Expand)	M283 - RAPID Yeast and Mold Count (RYM) Petrifilm					
Company Details Company: <u>Northwest Natural Goods</u> 						Project Details Turnaround Time: <u>5 Business Days</u> Req. For Micro Testing Standard Relinquishment Sampling, Courier & Shipping Options: <u>Pick-Up Courier Service</u> Compliance: <u>Compliance</u> Project Name / ID: <u>HEMP - PR 0078</u> Pick-Up Details Pick-Up Location Name: <u>Northwest Natural Goods</u> 						Receipt Information Pre-Log Storage: <u>Canna Shelves</u>					
#	Sample Name	Material	Amount Provided	Reporting Unit	Serving Size												
1	HEMP - PR 0078	Cannabinoid Edible	20 each	mg/g & mg/serving	4g	✓	✓	✓	✓	✓	✓						

Relinquished By	Date	Time	Temp., °C	Received By	Date	Time	Received Temp., °C	Evidence of Cooling?
KRISTEN JOHNSON	04/29/2024	15:53	Temp., °C	BR	04/30/2024	10:24	25	No
BR	04/30/2024	11:25	18.8	NR	04/30/2024	12:13	25	No

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

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

Page 1 of 1
www.columbialaboratories.com



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



Report Number: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13

Revision: 4 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 0

Laboratory Control Sample										
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes	
CBDVA	2	0.0361	0.0362	%	99.8	80.0	- 120	Acceptable		
CBDV	2	0.0339	0.0343	%	98.8	80.0	- 120	Acceptable		
CBE	2	0.0313	0.0318	%	98.5	80.0	- 120	Acceptable		
CBDA	1	0.0307	0.0313	%	98.1	90.0	- 110	Acceptable		
CBGA	1	0.0304	0.0307	%	99.0	80.0	- 120	Acceptable		
CBG	1	0.0336	0.0347	%	97.0	80.0	- 120	Acceptable		
CBD	1	0.0326	0.0339	%	96.2	90.0	- 110	Acceptable		
THCV	2	0.0332	0.0341	%	97.6	80.0	- 120	Acceptable		
d8THCV	2	0.0352	0.0362	%	97.3	80.0	- 120	Acceptable		
THCVA	2	0.0318	0.0320	%	99.3	80.0	- 120	Acceptable		
CBN	1	0.0308	0.0321	%	95.8	80.0	- 120	Acceptable		
exo-THC	2	0.0314	0.0333	%	94.1	80.0	- 120	Acceptable		
d9THC	1	0.0304	0.0328	%	92.7	90.0	- 110	Acceptable		
d8THC	1	0.0300	0.0322	%	93.1	90.0	- 110	Acceptable		
9S-d10THC	1	0.0295	0.0323	%	91.5	80.0	- 120	Acceptable		
CBL	2	0.0294	0.0330	%	89.0	80.0	- 120	Acceptable		
9R-d10THC	1	0.0286	0.0315	%	90.6	80.0	- 120	Acceptable		
CBC	2	0.0321	0.0350	%	91.6	80.0	- 120	Acceptable		
THCA	1	0.0320	0.0306	%	105	90.0	- 110	Acceptable		
CBCA	2	0.0322	0.0334	%	96.3	80.0	- 120	Acceptable		
CBLA	2	0.0328	0.0340	%	96.5	80.0	- 120	Acceptable		
d9THCP	2	0.0272	0.0326	%	83.6	80.0	- 120	Acceptable		
CBT	2	0.0288	0.0357	%	80.7	80.0	- 120	Acceptable		

Method Blank							
Analyte	Result	LOQ	Units	Limits	Evaluation	Notes	
CBDVA	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBDV	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBE	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBDA	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBGA	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBG	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBD	<LOQ	0.00311	%	< 0.00311	Acceptable		
THCV	<LOQ	0.00311	%	< 0.00311	Acceptable		
d8THCV	<LOQ	0.00311	%	< 0.00311	Acceptable		
THCVA	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBN	<LOQ	0.00311	%	< 0.00311	Acceptable		
exo-THC	<LOQ	0.00311	%	< 0.00311	Acceptable		
d9THC	<LOQ	0.00311	%	< 0.00311	Acceptable		
d8THC	<LOQ	0.00311	%	< 0.00311	Acceptable		
9S-d10THC	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBL	<LOQ	0.00311	%	< 0.00311	Acceptable		
9R-d10THC	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBC	<LOQ	0.00311	%	< 0.00311	Acceptable		
THCA	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBCA	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBLA	<LOQ	0.00311	%	< 0.00311	Acceptable		
d9THCP	<LOQ	0.00311	%	< 0.00311	Acceptable		
CBT	<LOQ	0.00311	%	< 0.00311	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: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13

Revision: 4 Document ID: 7148
Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

AOAC 2015 V98-6		Batch ID: 0						
Sample Duplicate		Sample ID: 24-004627-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBG	0.00497	0.00529	0.00329	%	6.37	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBN	0.00538	0.00562	0.00329	%	4.43	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
d9THC	0.247	0.256	0.00329	%	3.78	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00329	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.00329	%	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: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13

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

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2403361			
Method Blank				Laboratory Control Sample			
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec. Limits Notes
Propane	ND	< 200		589	584	µg/g	100.9 60 - 120
Isobutane	ND	< 200		706	767	µg/g	92.0 60 - 120
Butane	ND	< 200		696	782	µg/g	89.0 60 - 120
2,2-Dimethylpropane	ND	< 200		880	939	µg/g	93.7 60 - 120
Methanol	ND	< 200		1670	1600	µg/g	104.4 60 - 120
Ethylene Oxide	ND	< 30		529	57.1	µg/g	92.6 60 - 120
2-Methylbutane	ND	< 200		1620	1600	µg/g	101.3 60 - 120
Pertane	ND	< 200		1520	1600	µg/g	95.0 60 - 120
Ethanol	ND	< 200		1530	1600	µg/g	95.6 70 - 130
Ethyl Ether	ND	< 200		1730	1600	µg/g	108.1 60 - 120
2,2-Dimethylbutane	ND	< 30		172	163	µg/g	105.5 60 - 120
Acetone	ND	< 200		1690	1610	µg/g	105.0 60 - 120
2-Propanol	ND	< 200		1640	1600	µg/g	102.5 60 - 120
Ethyl Formate	ND	< 500		1630	1620	µg/g	100.6 70 - 130
Acetonitrile	ND	< 100		481	481	µg/g	100.0 60 - 120
Methyl Acetate	ND	< 500		1670	1610	µg/g	103.7 70 - 130
2,3-Dimethylbutane	ND	< 30		164	161	µg/g	101.9 60 - 120
Dichloromethane	ND	< 60		492	481	µg/g	102.3 60 - 120
2-Methylpentane	ND	< 30		164	162	µg/g	101.2 60 - 120
MTBE	ND	< 500		1660	1610	µg/g	103.1 70 - 130
3-Methylpentane	ND	< 30		167	163	µg/g	102.5 60 - 120
Hexane	ND	< 30		172	163	µg/g	105.5 60 - 120
1-Propanol	ND	< 500		1680	1600	µg/g	105.0 70 - 130
Methylethylketone	ND	< 500		1720	1610	µg/g	106.8 70 - 130
Ethyl acetate	ND	< 200		1680	1610	µg/g	104.3 60 - 120
2-Butanol	ND	< 200		1680	1600	µg/g	105.0 60 - 120
Tetrahydrofuran	ND	< 100		524	487	µg/g	107.6 60 - 120
Cyclohexane	ND	< 200		1770	1610	µg/g	109.9 60 - 120
2-methyl-1-propanol	ND	< 500		1840	1610	µg/g	114.3 70 - 130
Benzene	ND	< 1		5.2	4.88	µg/g	106.6 60 - 120
Isopropyl Acetate	ND	< 200		1750	1610	µg/g	108.7 60 - 120
Heptane	ND	< 200		1780	1600	µg/g	111.3 60 - 120
1-Butanol	ND	< 500		1820	1610	µg/g	113.0 70 - 130
Propyl Acetate	ND	< 500		1880	1610	µg/g	116.8 70 - 130
1,4-Dioxane	ND	< 100		524	484	µg/g	108.3 60 - 120
2-Ethoxyethanol	ND	< 30		164	162	µg/g	101.2 60 - 120
Methylisobutylketone	ND	< 500		1890	1630	µg/g	116.0 70 - 130
3-Methyl-1-butanol	ND	< 500		1900	1610	µg/g	118.0 70 - 130
Ethylene Glycol	ND	< 200		406	496	µg/g	81.9 60 - 120
Toluene	ND	< 100		534	486	µg/g	109.9 60 - 120
Isobutyl Acetate	ND	< 500		1860	1610	µg/g	115.5 70 - 130
1-Pentanol	ND	< 500		1870	1600	µg/g	116.9 70 - 130
Butyl Acetate	ND	< 500		1880	1600	µg/g	117.5 70 - 130
Ethylbenzene	ND	< 200		1080	961	µg/g	112.4 60 - 120
m,p-Xylene	ND	< 200		1100	973	µg/g	113.1 60 - 120
o-Xylene	ND	< 200		1120	963	µg/g	116.3 60 - 120
Cumene	ND	< 30		187	164	µg/g	114.0 60 - 120
Anisole	ND	< 500		2000	1600	µg/g	125.0 70 - 130
DMSO	ND	< 500		1730	1610	µg/g	107.5 70 - 130
1,2-dimethoxyethane	ND	< 50		190	170	µg/g	111.8 70 - 130
Triethylamine	ND	< 500		1890	1600	µg/g	118.1 70 - 130
N,N-dimethylformamide	ND	< 150		541	482	µg/g	112.2 70 - 130
N,N-dimethylacetamide	ND	< 150		588	488	µg/g	120.5 70 - 130
Pyridine	ND	< 50		185	164	µg/g	112.8 70 - 130
Sulfolane	ND	< 50		189	169	µg/g	111.8 70 - 130



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



Report Number: 24-004650/D001.R000
 Report Date: 05/07/2024
 ORELAP#: OR100028
 Purchase Order:
 Received: 04/30/24 12:13

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

QC- Sample Duplicate

Sample ID: 24-004549-0001

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	
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	
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	244	248	200	µg/g	1.5	< 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	
Sulfone	ND	ND	50	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: 24-004650/D001.R000
Report Date: 05/07/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/30/24 12:13





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.