



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



Report Number: 24-008988/D001.R000
Report Date: 08/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 08/15/24 14:32

Customer: NW Natural Goods
Product identity: BEV - RB 024227-1
Client/Metric ID: .
Laboratory ID: 24-008988-0001

Summary

Potency:

Analyte per 355ml	Result	Limits	Units	Status	
CBC per 355ml	0.391		mg/355ml		CBD-Total per Serving Size 53.2 mg/355ml
CBD per 355ml	53.2		mg/355ml		
CBG per 355ml	1.36		mg/355ml		Delta-9-THC-Total per <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: 24-008988/D001.R000
Report Date: 08/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 08/15/24 14:32

Customer: NW Natural Goods
Product identity: BEV - RB 024227-1
Client/Metric ID: .
Sample Date:
Laboratory ID: 24-008988-0001
Evidence of Cooling: No
Temp: 16.6
Relinquished by: BR
Serving Size #1: 362.1 g
Density: 1.020 g/ml

Sample Results

Potency per 355ml		Method: J AOAC 2015 V98-6 (mod) ^b		Units mg/se Batch: 2406252		Analyze: 8/16/24 8:51:00 PM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC per 355ml	0.391		mg/355ml	0.362		
CBC-A per 355ml	< LOQ		mg/355ml	0.362		
CBC-Total per 355ml	< LOQ		mg/355ml	0.679		
CBD per 355ml	53.2		mg/355ml	0.362		
CBD-A per 355ml ¹	< LOQ		mg/355ml	0.362		
CBD-Total per 355ml ¹	53.2		mg/355ml	0.679		
CBDV per 355ml	< LOQ		mg/355ml	0.362		
CBDV-A per 355ml	< LOQ		mg/355ml	0.362		
CBDV-Total per 355ml	< LOQ		mg/355ml	0.675		
CBE per 355ml	< LOQ		mg/355ml	0.362		
CBG per 355ml	1.36		mg/355ml	0.362		
CBG-A per 355ml	< LOQ		mg/355ml	0.362		
CBG-Total per 355ml	1.36		mg/355ml	0.675		
CBL per 355ml	< LOQ		mg/355ml	0.362		
CBL-A per 355ml	< LOQ		mg/355ml	0.362		
CBL-Total per 355ml	< LOQ		mg/355ml	0.679		
CBN per 355ml	< LOQ		mg/355ml	0.362		
CBT per 355ml	< LOQ		mg/355ml	0.362		
Δ10-THC-9R per 355ml	< LOQ		mg/355ml	0.362		
Δ10-THC-9S per 355ml	< LOQ		mg/355ml	0.362		
Δ10-THC-Total per 355ml	< LOQ		mg/355ml	0.723		
Δ8-THC per 355ml ¹	< LOQ		mg/355ml	0.362		
Δ8-THCV per 355ml	< LOQ		mg/355ml	0.362		
Δ9-THC per 355ml ¹	< LOQ		mg/355ml	0.362		
Δ9-THC-Total per 355ml	< LOQ		mg/355ml	0.679		
Δ9-THCP per 355ml	< LOQ		mg/355ml	0.362		
Δ9-THCV per 355ml	< LOQ		mg/355ml	0.362		
Δ9-THCV-A per 355ml	< LOQ		mg/355ml	0.362		
Δ9-THCV-Total per 355ml	< LOQ		mg/355ml	0.679		
exo-THC per 355ml	< LOQ		mg/355ml	0.362		
THC-A per 355ml ¹	< LOQ		mg/355ml	0.362		



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



Report Number: 24-008988/D001.R000
Report Date: 08/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 08/15/24 14:32

Potency per 355ml Method: J AOAC 2015 V98-6 (mod)^p Units mg/se Batch: 2406252 Analyze: 8/16/24 8:51:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
Total Cannabinoids per 355ml	55.0		mg/355ml		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Aerobic Plate Count	< LOQ		cfu/g	10	2406210	08/18/24 AOAC 990.12 (Petrifilm)		
E.coli	< LOQ		cfu/g	10	2406208	08/18/24 AOAC 991.14 (Petrifilm)		
Total Coliforms	< LOQ		cfu/g	10	2406208	08/18/24 AOAC 991.14 (Petrifilm)		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2406209	08/19/24 AOAC 2014.05 (RAPID)		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2406209	08/19/24 AOAC 2014.05 (RAPID)		

Solvents Method: Residual Solvents by HS-GC-MS^b Units µg/g Batch 2406271 Analyze 08/19/24 12:17 PM

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

Pesticides Method: AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 2406352 Analyze 08/21/24 11:46 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: 24-008988/D001.R000
Report Date: 08/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 08/15/24 14:32

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic ^L	< LOQ	0.200	mg/kg	0.00391	2406355	08/20/24 AOAC 2013.06 (mod.) ^P	pass	
Cadmium ^L	< LOQ	0.200	mg/kg	0.00391	2406355	08/20/24 AOAC 2013.06 (mod.) ^P	pass	
Lead ^L	< LOQ	0.500	mg/kg	0.00391	2406355	08/20/24 AOAC 2013.06 (mod.) ^P	pass	
Mercury ^L	< LOQ	0.100	mg/kg	0.00195	2406355	08/20/24 AOAC 2013.06 (mod.) ^P	pass	

Mycotoxins

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Aflatoxin B1 ^L	< LOQ		µg/kg	5.00	2406372	08/22/24 AOAC 2007.01 & EN 15662 (mod)		
Aflatoxin B2 ^L	< LOQ		µg/kg	5.00	2406372	08/22/24 AOAC 2007.01 & EN 15662 (mod)		
Aflatoxin G1 ^L	< LOQ		µg/kg	5.00	2406372	08/22/24 AOAC 2007.01 & EN 15662 (mod)		
Aflatoxin G2 ^L	< LOQ		µg/kg	5.00	2406372	08/22/24 AOAC 2007.01 & EN 15662 (mod)		
Ochratoxin A ^L	< LOQ	20.0	µg/kg	5.00	2406372	08/22/24 AOAC 2007.01 & EN 15662 (mod)	pass	
Total Aflatoxins	< LOQ	20.0	µg/kg	20.0		08/22/24 AOAC 2007.01 & EN 15662 (mod) ^P	pass	



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



Report Number: 24-008988/D001.R000
Report Date: 08/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 08/15/24 14:32

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/ml = Gram per milliliter

µg/g = Microgram per gram

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

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

mg/355ml = Milligram per 355ml

% = Percentage of sample

% 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: 24-008988/D001.R000
Report Date: 08/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 08/15/24 14:32



Hemp & Cannabis
 Chain of Custody

NW-Natural-Goods-
 1723733590

Company Details		Project Details			Testing					
Company: NW Natural Goods		Turnaround Time: 5 Business Days Req. For Micro Testing Standard			H0010 - Cannabis Heavy Metals Pro le CR	M1010 - Micro Pro le D	H0042 - A. atoxins+Cochratoxin CLCC	P2320 - Multi-Residue Pesticide Pro le (Cannabis)	H1010 - Potency Cannabis (Basic+Expanded)	H0008 - Residual Solvents (Cannabis - Oregon)
[Redacted]		Relinquishment Sampling, Courier & Shipping Options: <u>Pick-Up Courier Service</u>								
[Redacted]		Pick-Up Details								
[Redacted]		Pick-Up Location Name: <u>NW Natural Goods</u>								
[Redacted]		Receipt Information								
[Redacted]		Prelog Storage: Canna Shelves								
[Redacted]		Sample Condition: Satisfactory								
#	Sample Name	Material	Amount Provided	Reporting Unit	Serving Size					
1	BEV- FB 024227-1	Cannabinoid Beverage	4 each	mg/g & mg/serving	362.1g	✓	✓	✓	✓	✓

Relinquished By	Date	Time	Temp., °C	Received By	Date	Time	Received Temp., °C	Evidence of Cooling?
JOE MANGAN	08/15/2024	07:53	Temp., °C	BR	08/15/2024	10:24	25	No
BR	08/15/2024	13:30	16.6	jmh	08/15/2024	14:32	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



**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
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
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)



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



Report Number: 24-008988/D001.R000
 Report Date: 08/22/2024
 ORELAP#: OR100028
 Purchase Order:
 Received: 08/15/24 14:32



**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
MCPP	0.1
Mecabarm	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
Paclobotrazol	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
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: 24-008988/D001.R000
Report Date: 08/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 08/15/24 14:32



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: 24-008988/D001.R000
 Report Date: 08/22/2024
 ORELAP#: OR100028
 Purchase Order:
 Received: 08/15/24 14:32

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

Laboratory Quality Control Results

JAOAC2015 V986 Batch ID: 0

Laboratory Control Sample										
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes	
CBDVA	2	0.0009	0.0010	%	92.0	80.0	- 120	Acceptable		
CBDV	2	0.0010	0.00104	%	94.9	80.0	- 120	Acceptable		
CBE	2	0.0009	0.0010	%	95.3	80.0	- 120	Acceptable		
CBDA	1	0.0009	0.0009	%	95.6	90.0	- 110	Acceptable		
CBGA	1	0.0009	0.0009	%	97.0	80.0	- 120	Acceptable		
CBG	1	0.00102	0.00104	%	98.3	80.0	- 120	Acceptable		
CBD	1	0.00108	0.00105	%	102	90.0	- 110	Acceptable		
THCV	2	0.00102	0.00107	%	96.0	80.0	- 120	Acceptable		
d8THCV	2	0.00101	0.00105	%	96.6	80.0	- 120	Acceptable		
THCVA	2	0.0009	0.0010	%	91.1	80.0	- 120	Acceptable		
CBN	1	0.00100	0.00101	%	98.8	80.0	- 120	Acceptable		
exo-THC	2	0.0009	0.0009	%	95.3	80.0	- 120	Acceptable		
d9THC	1	0.00106	0.00106	%	100	90.0	- 110	Acceptable		
d8THC	1	0.0007	0.0008	%	97.1	90.0	- 110	Acceptable		
9S-d10THC	1	0.0009	0.0010	%	98.1	80.0	- 120	Acceptable		
CBL	2	0.0010	0.00104	%	94.5	80.0	- 120	Acceptable		
9R-d10THC	1	0.0009	0.0009	%	97.1	80.0	- 120	Acceptable		
CBC	2	0.0009	0.0010	%	96.5	80.0	- 120	Acceptable		
THCA	1	0.0009	0.0009	%	95.3	90.0	- 110	Acceptable		
CBCA	2	0.0009	0.0010	%	90.7	80.0	- 120	Acceptable		
CBLA	2	0.0009	0.0009	%	90.9	80.0	- 120	Acceptable		
d9THCP	2	0.0009	0.0010	%	96.8	80.0	- 120	Acceptable		
CBT	2	0.0010	0.00104	%	95.2	80.0	- 120	Acceptable		

Method Blank							
Analyte	Result	LOQ	Units	Limits	Evaluation	Notes	
CBDVA	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBDV	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBE	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBDA	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBGA	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBG	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBD	<LOQ	0.0001	%	< 0.0001	Acceptable		
THCV	<LOQ	0.0001	%	< 0.0001	Acceptable		
d8THCV	<LOQ	0.0001	%	< 0.0001	Acceptable		
THCVA	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBN	<LOQ	0.0001	%	< 0.0001	Acceptable		
exo-THC	<LOQ	0.0001	%	< 0.0001	Acceptable		
d9THC	<LOQ	0.0001	%	< 0.0001	Acceptable		
d8THC	<LOQ	0.0001	%	< 0.0001	Acceptable		
9S-d10THC	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBL	<LOQ	0.0001	%	< 0.0001	Acceptable		
9R-d10THC	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBC	<LOQ	0.0001	%	< 0.0001	Acceptable		
THCA	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBCA	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBLA	<LOQ	0.0001	%	< 0.0001	Acceptable		
d9THCP	<LOQ	0.0001	%	< 0.0001	Acceptable		
CBT	<LOQ	0.0001	%	< 0.0001	Acceptable		

Abbreviations

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

Units of Measure:

% - Percent



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



Report Number: 24-008988/D001.R000
Report Date: 08/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 08/15/24 14:32

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

Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 0						
Sample Duplicate		Sample ID: 24-0088120001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBD	0.00682	0.00664	0.0001	%	2.66	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent


Laboratory Quality Control Results

Residual Solvents				Batch ID: 2406271			
Method Blank				Laboratory Control Sample			
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec. Limits Notes
Propane	ND	< 200		565	585	µg/g	96.6 60 - 120
Isobutane	ND	< 200		730	770	µg/g	94.8 60 - 120
Butane	ND	< 200		755	769	µg/g	98.2 60 - 120
2,2-Dimethylpropane	ND	< 200		957	956	µg/g	100.1 60 - 120
Methanol	ND	< 200		1650	1600	µg/g	103.1 60 - 120
Ethylene Oxide	ND	< 30		55.9	57.7	µg/g	96.9 60 - 120
2-Methylbutane	ND	< 200		1620	1620	µg/g	104.3 60 - 120
Pentane	ND	< 200		1710	1610	µg/g	106.2 60 - 120
Ethanol	ND	< 200		1810	1600	µg/g	113.1 70 - 130
Ethyl Ether	ND	< 200		1720	1610	µg/g	106.8 60 - 120
2,2-Dimethylbutane	ND	< 30		214	190	µg/g	112.6 60 - 120
Acetone	ND	< 200		1730	1610	µg/g	107.5 60 - 120
2-Propanol	ND	< 200		1740	1610	µg/g	108.1 60 - 120
Ethyl Formate	ND	< 500		4340	1610	µg/g	269.6 70 - 130 Q6
Acetonitrile	ND	< 100		525	486	µg/g	108.0 60 - 120
Methyl Acetate	ND	< 500		1800	1610	µg/g	111.8 70 - 130
2,3-Dimethylbutane	ND	< 30		171	163	µg/g	104.9 60 - 120
Dichloromethane	ND	< 60		490	482	µg/g	101.7 60 - 120
2-Methylpentane	ND	< 30		210	178	µg/g	118.0 60 - 120
MTBE	ND	< 500		1760	1600	µg/g	110.0 70 - 130
3-Methylpentane	ND	< 30		580	490	µg/g	118.4 60 - 120
Hexane	ND	< 30		184	175	µg/g	105.1 60 - 120
1-Propanol	ND	< 500		1910	1610	µg/g	118.6 70 - 130
Methylethylketone	ND	< 500		1850	1600	µg/g	115.6 70 - 130
Ethyl acetate	ND	< 200		1730	1600	µg/g	108.1 60 - 120
2-Butanol	ND	< 200		1710	1610	µg/g	106.2 60 - 120
Tetrahydrofuran	ND	< 100		533	504	µg/g	105.8 60 - 120
Cyclohexane	ND	< 200		1670	1620	µg/g	103.1 60 - 120
2-methyl-1-propanol	ND	< 500		1860	1600	µg/g	116.3 70 - 130
Benzene	ND	< 1		5.21	5.08	µg/g	102.6 60 - 120
Isopropyl Acetate	ND	< 200		1730	1610	µg/g	107.5 60 - 120
Heptane	ND	< 200		1750	1610	µg/g	108.7 60 - 120
1-Butanol	ND	< 500		2070	1600	µg/g	129.4 70 - 130
Propyl Acetate	ND	< 500		1830	1600	µg/g	114.4 70 - 130
1,4-Dioxane	ND	< 100		515	488	µg/g	105.5 60 - 120
2-Ethoxyethanol	ND	< 30		160	163	µg/g	98.2 60 - 120
Methylisobutylketone	ND	< 500		1820	1610	µg/g	113.0 70 - 130
3-Methyl-1-butanol	ND	< 500		1980	1600	µg/g	123.8 70 - 130
Ethylene Glycol	ND	< 200		414	488	µg/g	84.8 60 - 120
Toluene	ND	< 100		488	492	µg/g	99.2 60 - 120
Isobutyl Acetate	ND	< 500		1910	1600	µg/g	119.4 70 - 130
1-Pentanol	ND	< 500		2330	1600	µg/g	145.6 70 - 130 Q1
Butyl Acetate	ND	< 500		1970	1600	µg/g	123.1 70 - 130
Ethylbenzene	ND	< 200		997	969	µg/g	102.9 60 - 120
m,p-Xylene	ND	< 200		959	981	µg/g	97.8 60 - 120
o-Xylene	ND	< 200		958	966	µg/g	99.2 60 - 120
Cumene	ND	< 30		153	167	µg/g	91.6 60 - 120
Anisole	ND	< 500		1600	1610	µg/g	99.4 70 - 130
DMSO	ND	< 500		1520	1600	µg/g	95.0 70 - 130
1,2-dimethoxyethane	ND	< 50		131	161	µg/g	81.4 70 - 130
Triethylamine	ND	< 500		1690	1600	µg/g	105.6 70 - 130
N,N-dimethylformamide	ND	< 150		652	484	µg/g	134.7 70 - 130 Q1
N,N-dimethylacetamide	ND	< 150		584	497	µg/g	117.5 70 - 130
Pyridine	ND	< 50		201	162	µg/g	124.1 70 - 130
Sulfolane	ND	< 50		151	166	µg/g	91.0 70 - 130
1,2-Dichloroethane	ND	< 1		1.12	1	µg/g	112.0 70 - 130
Chloroform	ND	< 1		1.1	1	µg/g	110.0 70 - 130
Trichloroethylene	ND	< 1		1.08	1	µg/g	108.0 70 - 130
1,1-Dichloroethane	ND	< 1		1.14	1	µg/g	114.0 70 - 130



QC- Sample Duplicate

Sample ID: 24-008910-0001

Analyte	Result	Org. Result	LOQ Units	RPD	Limits	Accept/Fail	Notes
Propane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2,2-Dimethylpropane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30 µg/g	0.0	< 20	Acceptable	
2-Methylbutane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100 µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500 µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60 µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
MTBE	ND	ND	500 µg/g	0.0	< 20	Acceptable	
3-Methylpentane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
1-Propanol	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Methylethylketone	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2-Butanol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Tetrahydrofuran	ND	ND	100 µg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2-methyl-1-propanol	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1 µg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
1-Butanol	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Propyl Acetate	ND	ND	500 µg/g	0.0	< 20	Acceptable	
1,4-Dioxane	ND	ND	100 µg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Methylisobutylketone	ND	ND	500 µg/g	0.0	< 20	Acceptable	
3-Methyl-1-butanol	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Toluene	ND	ND	100 µg/g	0.0	< 20	Acceptable	
Isobutyl Acetate	ND	ND	500 µg/g	0.0	< 20	Acceptable	
1-Pentanol	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Butyl Acetate	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Ethylbenzene	ND	ND	200 µg/g	0.0	< 20	Acceptable	
m,p-Xylene	ND	ND	200 µg/g	0.0	< 20	Acceptable	
o-Xylene	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Cumene	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Anisole	ND	ND	500 µg/g	0.0	< 20	Acceptable	
DMSO	ND	ND	500 µg/g	0.0	< 20	Acceptable	
1,2-dimethoxyethane	ND	ND	50 µg/g	0.0	< 20	Acceptable	
Triethylamine	ND	ND	500 µg/g	0.0	< 20	Acceptable	
N,N-dimethylformamide	ND	ND	150 µg/g	0.0	< 20	Acceptable	
N,N-dimethylacetamide	ND	ND	150 µg/g	0.0	< 20	Acceptable	
Pyridine	ND	ND	50 µg/g	0.0	< 20	Acceptable	
Sulfolane	ND	ND	50 µg/g	0.0	< 20	Acceptable	
1,2-Dichloroethane	ND	ND	1 µg/g	0.0	< 20	Acceptable	
Chloroform	ND	ND	1 µg/g	0.0	< 20	Acceptable	
Trichloroethylene	ND	ND	1 µg/g	0.0	< 20	Acceptable	
1,1-Dichloroethane	ND	ND	1 µg/g	0.0	< 20	Acceptable	

Abbreviations

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

Units of Measure:

µg/g- Microgram per gram or ppm



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



Report Number: 24-008988/D001.R000
Report Date: 08/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 08/15/24 14:32





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.