



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



Report Number: 23-002660/D002.R000
Report Date: 03/13/2023
ORELAP#: OR100028
Purchase Order:
Received: 03/06/23 13:46

Customer: NW Natural Goods
Product identity: Bev- BO 023062-1
Client/Metric ID: .
Laboratory ID: 23-002660-0001

Summary

Potency:

Analyte per 355ml	Result	Limits	Units	Status	
CBD per 355ml	23.4		mg/355ml		CBD-Total per Serving Size 23.4 mg/355ml
CBG per 355ml	0.648		mg/355ml		
					THC-Total per Serving Size <LOQ
					(Reported in milligrams per serving)

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

Analyte	Result (mg/kg)	Limits (mg/kg)	Status
Multi-Residue Pesticide Profile	< LOQ for all analytes		

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.



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Customer: NW Natural Goods
Product identity: Bev- BO 023062-1
Client/Metric ID: .
Sample Date:
Laboratory ID: 23-002660-0001
Evidence of Cooling: No
Temp: 13.9
Relinquished by: hinton
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: 2302103	Analyze: 3/8/23 8:35:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 355ml	< LOQ		mg/355ml	0.360	
CBC-A per 355ml	< LOQ		mg/355ml	0.360	
CBC-Total per 355ml	< LOQ		mg/355ml	0.676	
CBD per 355ml	23.4		mg/355ml	0.360	
CBD-A per 355ml	< LOQ		mg/355ml	0.360	
CBD-Total per 355ml	23.4		mg/355ml	0.676	
CBDV per 355ml	< LOQ		mg/355ml	0.360	
CBDV-A per 355ml	< LOQ		mg/355ml	0.360	
CBDV-Total per 355ml	< LOQ		mg/355ml	0.672	
CBE per 355ml	< LOQ		mg/355ml	0.360	
CBG per 355ml	0.648		mg/355ml	0.360	
CBG-A per 355ml	< LOQ		mg/355ml	0.360	
CBG-Total per 355ml	< LOQ		mg/355ml	0.672	
CBL per 355ml	< LOQ		mg/355ml	0.360	
CBL-A per 355ml	< LOQ		mg/355ml	0.360	
CBL-Total per 355ml	< LOQ		mg/355ml	0.676	
CBN per 355ml	< LOQ		mg/355ml	0.360	
CBT per 355ml	< LOQ		mg/355ml	0.360	
Δ8-THCV per 355ml	< LOQ		mg/355ml	0.360	
Δ10-THC-9R per 355ml	< LOQ		mg/355ml	0.360	
Δ10-THC-9S per 355ml	< LOQ		mg/355ml	0.360	
Δ10-THC-Total per 355ml	< LOQ		mg/355ml	0.720	
Δ8-THC per 355ml	< LOQ		mg/355ml	0.360	
Δ9-THC per 355ml	< LOQ		mg/355ml	0.360	
exo-THC per 355ml	< LOQ		mg/355ml	0.360	
THC-A per 355ml	< LOQ		mg/355ml	0.360	
THC-Total per 355ml	< LOQ		mg/355ml	0.676	
THCV per 355ml	< LOQ		mg/355ml	0.360	
THCV-A per 355ml	< LOQ		mg/355ml	0.360	
THCV-Total per 355ml	< LOQ		mg/355ml	0.676	
Total Cannabinoids per 355ml	24.0		mg/355ml		



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2302009	03/09/23 AOAC 991.14 (Petrifilm) ^P		
Total Coliforms	< LOQ		cfu/g	10	2302009	03/09/23 AOAC 991.14 (Petrifilm) ^P		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2302010	03/10/23 AOAC 2014.05 (RAPID) ^P		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2302010	03/10/23 AOAC 2014.05 (RAPID) ^P		

Solvents Method: Residual Solvents by GC/MS^P Units µg/g Batch 2302104 Analyze 03/09/23 10:27 AM

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)^P Units mg/kg Batch 2302209 Analyze 03/13/23 01:23 PM

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



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Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic*	< LOQ	0.200	mg/kg	0.00382	2302077	03/08/23 AOAC 2013.06 (mod.) ^P	pass	
Cadmium*	< LOQ	0.200	mg/kg	0.00382	2302077	03/08/23 AOAC 2013.06 (mod.) ^P	pass	
Lead*	< LOQ	0.500	mg/kg	0.00382	2302077	03/08/23 AOAC 2013.06 (mod.) ^P	pass	
Mercury*	< LOQ	0.100	mg/kg	0.00191	2302077	03/08/23 AOAC 2013.06 (mod.) ^P	pass	

Mycotoxins

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Aflatoxin B2*	< LOQ		µg/kg	5.00	2302105	03/09/23 AOAC 2007.01 & EN 15662 (mod) ^P		
Aflatoxin B1*	< LOQ		µg/kg	5.00	2302105	03/09/23 AOAC 2007.01 & EN 15662 (mod) ^P		
Aflatoxin G1*	< LOQ		µg/kg	5.00	2302105	03/09/23 AOAC 2007.01 & EN 15662 (mod) ^P		
Aflatoxin G2*	< LOQ		µg/kg	5.00	2302105	03/09/23 AOAC 2007.01 & EN 15662 (mod) ^P		
Ochratoxin A*	< LOQ	20.0	µg/kg	5.00	2302105	03/09/23 AOAC 2007.01 & EN 15662 (mod) ^P	pass	
Total Aflatoxins*	0.000	20.0	µg/kg	20.0		03/13/23 AOAC 2007.01 & EN 15662 (mod) ^P	pass	

Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	99.4		g/100g	0.10	2302136	03/09/23 AOAC 925.10 (mod.) ^P		
Water Activity	0.990		Aw	0.030	2302119	03/09/23 AOAC 978.18 ^P		



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Abbreviations

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

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

Ⓐ = ISO/IEC 17025:2017 accredited method.

Ⓜ = TNI accredited analyte.

Units of Measure

cfu/g = Colony forming units per gram

g = g

g/ml = Gram per milliliter

g/100g = Grams per 100 Grams

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

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
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
Etozazole	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)
Fonicamid	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
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
Malaaxon	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

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 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 23-002660

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



NW Natural Goods

Company: Northwest Natural Goods
Contact: Annie Nair
Address: 11791 SE HWY 212
City: Clackamas **State:** OR **Zip Code:** 97015
 Email Results: annienair@nwnaturalgoods.com
 Ph: () -
Billing Contact (if different)
Name: **Email:**
Address:
City: **State:** **Zip:**
Ph: () -

Analysis Requested										
Pesticides - OR 59 Compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Water Activity	Moisture	Micro: Yeast and Mold	Micro: E. Coli and Total Coliform	Heavy Metals	Mycotoxins	

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*

Lab ID	Client Sample Identification	Sample date	Pesticides - OR 59 Compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Water Activity	Moisture	Micro: Yeast and Mold	Micro: E. Coli and Total Coliform	Heavy Metals	Mycotoxins	Material Type †	Weight (Units)	Comments/Metric ID
	Bev - BO 023062-1	03/03/23												362.1g	

Signature - Relinquished By:	Date	Time	Signature - Received By:	Date	Time	Lab Use Only:
Annie Nair	03/06/23		MNA	3/6	11:29	<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): 13.9 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:
MNA	3/6	11:53	NS	03/06/23	1346	

† - Material Type Codes: Plant Material (P) ; Isolate (I) ; Concentrate/Extract (C) ; Tincture/Topical (T) ; Edible (E) ; Beverage (B) ; Vapor Product (V)
 Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the [current terms of service](#) associated with this COC. By signing "Relinquished by" you are agreeing to these terms
 12423 NE Whitaker Way
 Portland, OR 97230
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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



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503-254-1794



Report Number: 23-002660/D002.R000
Report Date: 03/13/2023
ORELAP#: OR100028
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Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2302103

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0010	0.001	%	104	80.0	- 120	Acceptable	
CBDV	2	0.0011	0.001	%	107	80.0	- 120	Acceptable	
CBE	2	0.0011	0.001	%	107	80.0	- 120	Acceptable	
CBDA	1	0.0010	0.001	%	94.0	90.0	- 110	Acceptable	
CBGA	1	0.0010	0.001	%	94.7	80.0	- 120	Acceptable	
CBG	1	0.0011	0.001	%	97.9	80.0	- 120	Acceptable	
CBD	1	0.0011	0.001	%	97.1	90.0	- 110	Acceptable	
THCV	2	0.0011	0.001	%	108	80.0	- 120	Acceptable	
d8THCV	2	0.0011	0.001	%	106	80.0	- 120	Acceptable	
THCVA	2	0.0010	0.001	%	103	80.0	- 120	Acceptable	
CBN	1	0.0011	0.001	%	99.5	80.0	- 120	Acceptable	
exo-THC	2	0.0011	0.001	%	106	80.0	- 120	Acceptable	
d9THC	1	0.0011	0.001	%	105	90.0	- 110	Acceptable	
d8THC	1	0.0012	0.001	%	103	90.0	- 110	Acceptable	
9S-d10THC	1	0.0011	0.001	%	102	80.0	- 120	Acceptable	
CBL	2	0.0011	0.001	%	109	80.0	- 120	Acceptable	
9R-d10THC	1	0.0011	0.001	%	98.1	80.0	- 120	Acceptable	
CB	2	0.0011	0.001	%	107	80.0	- 120	Acceptable	
THCA	1	0.0010	0.001	%	91.4	90.0	- 110	Acceptable	
CBCA	2	0.0011	0.001	%	101	80.0	- 120	Acceptable	
CBLA	2	0.0011	0.001	%	103	80.0	- 120	Acceptable	
CBT	2	0.0011	0.001	%	106	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	
CB	<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	
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



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Laboratory Quality Control Results

J AOAC 2015 V98-6		Batch ID: 2302103						
Sample Duplicate		Sample ID: 23-002543-0001-01						
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	0.000192	0.000198	0.0001	%	2.88	< 20	Acceptable	
CBD	0.00693	0.00711	0.0001	%	2.63	< 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	
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



12423 NE Whitaker Way
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 503-254-1794



Report Number: 23-002660/D002.R000
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ORELAP#: OR100028
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Laboratory Quality Control Results

Residual Solvents				Batch ID: 2302104					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		518	572	µg/g	90.6	60 - 120	
Isobutane	ND	< 200		675	731	µg/g	92.3	60 - 120	
Butane	ND	< 200		670	731	µg/g	91.7	60 - 120	
2,2-Dimethylpropane	ND	< 200		833	936	µg/g	89.0	60 - 120	
Methanol	ND	< 200		1430	1610	µg/g	88.8	60 - 120	
Ethylene Oxide	ND	< 30		49.9	56.2	µg/g	88.8	60 - 120	
2-Methylbutane	ND	< 200		1550	1600	µg/g	96.9	60 - 120	
Pentane	ND	< 200		1550	1610	µg/g	96.3	60 - 120	
Ethanol	ND	< 200		1440	1600	µg/g	90.0	70 - 130	
Ethyl Ether	ND	< 200		1510	1610	µg/g	93.8	60 - 120	
2,2-Dimethylbutane	ND	< 30		163	173	µg/g	94.2	60 - 120	
Acetone	ND	< 200		1500	1620	µg/g	92.6	60 - 120	
2-Propanol	ND	< 200		1460	1600	µg/g	91.3	60 - 120	
Ethyl Formate	ND	< 500		1680	1610	µg/g	104.3	70 - 130	
Acetonitrile	ND	< 100		437	488	µg/g	89.5	60 - 120	
Methyl Acetate	ND	< 500		1390	1600	µg/g	86.9	70 - 130	
2,3-Dimethylbutane	ND	< 30		151	165	µg/g	91.5	60 - 120	
Dichloromethane	ND	< 60		451	487	µg/g	92.6	60 - 120	
2-Methylpentane	ND	< 30		151	160	µg/g	94.4	60 - 120	
MTBE	ND	< 500		1400	1630	µg/g	85.9	70 - 130	
3-Methylpentane	ND	< 30		136	161	µg/g	84.5	60 - 120	
Hexane	ND	< 30		183	162	µg/g	113.0	60 - 120	
1-Propanol	ND	< 500		1510	1600	µg/g	94.4	70 - 130	
Methylethylketone	ND	< 500		1450	1610	µg/g	90.1	70 - 130	
Ethyl acetate	ND	< 200		1440	1600	µg/g	90.0	60 - 120	
2-Butanol	ND	< 200		1470	1610	µg/g	91.3	60 - 120	
Tetrahydrofuran	ND	< 100		435	483	µg/g	90.1	60 - 120	
Cyclohexane	ND	< 200		1460	1610	µg/g	90.7	60 - 120	
2-methyl-1-propanol	ND	< 500		1550	1600	µg/g	96.9	70 - 130	
Benzene	ND	< 1		5.3	4.98	µg/g	106.4	60 - 120	
Isopropyl Acetate	ND	< 200		1420	1610	µg/g	88.2	60 - 120	
Heptane	ND	< 200		1440	1620	µg/g	88.9	60 - 120	
1-Butanol	ND	< 500		1600	1610	µg/g	99.4	70 - 130	
Propyl Acetate	ND	< 500		1480	1600	µg/g	92.5	70 - 130	
1,4-Dioxane	ND	< 100		441	494	µg/g	89.3	60 - 120	
2-Ethoxyethanol	ND	< 30		148	165	µg/g	89.7	60 - 120	
Methylisobutylketone	ND	< 500		1450	1610	µg/g	90.1	70 - 130	
3-Methyl-1-butanol	ND	< 500		1580	1620	µg/g	97.5	70 - 130	
Ethylene Glycol	ND	< 200		427	486	µg/g	87.9	60 - 120	
Toluene	ND	< 100		440	513	µg/g	85.8	60 - 120	
Isobutyl Acetate	ND	< 500		1460	1610	µg/g	90.7	70 - 130	
1-Pentanol	ND	< 500		1610	1630	µg/g	98.8	70 - 130	
Butyl Acetate	ND	< 500		1480	1620	µg/g	91.4	70 - 130	
Ethylbenzene	ND	< 200		880	967	µg/g	91.0	60 - 120	
m,p-Xylene	ND	< 200		903	994	µg/g	90.8	60 - 120	
o-Xylene	ND	< 200		891	992	µg/g	89.8	60 - 120	
Cumene	ND	< 30		151	171	µg/g	88.3	60 - 120	
Anisole	ND	< 500		1460	1630	µg/g	89.6	70 - 130	
DMSO	ND	< 500		1790	1610	µg/g	111.2	70 - 130	
1,2-dimethoxyethane	ND	< 50		157	173	µg/g	90.8	70 - 130	
Triethylamine	ND	< 500		1440	1620	µg/g	88.9	70 - 130	
N,N-dimethylformamide	ND	< 150		464	493	µg/g	94.1	70 - 130	
N,N-dimethylacetamide	ND	< 150		444	518	µg/g	85.7	70 - 130	
Pyridine	ND	< 50		160	186	µg/g	86.0	70 - 130	
Sulfolane	ND	< 50		136	168	µg/g	81.0	70 - 130	
1,2-Dichloroethane	ND	< 1		0.984	1	µg/g	98.4	70 - 130	
Chloroform	ND	< 1		0.952	1	µg/g	95.2	70 - 130	
Trichloroethylene	ND	< 1		0.966	1	µg/g	96.6	70 - 130	
1,1-Dichloroethane	ND	< 1		0.941	1	µg/g	94.1	70 - 130	



12423 NE Whitaker Way
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 503-254-1794



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QC - Sample Duplicate		Sample ID: 23-002655-0001						
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	206	216	200	µg/g	4.7	< 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	
Methyl ethyl ketone	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



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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.