



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



Report Number: 24-004706/D001.R000
Report Date: 05/08/2024
ORELAP#: OR100028
Purchase Order:
Received: 05/01/24 11:19

Customer: NW Natural Goods
Product identity: HEMP - RB 0136
Client/Metric ID: .
Laboratory ID: 24-004706-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status	
CBD per 4g	24.6		mg/4g		CBD-Total per Serving Size 24.6 mg/4g
CBG per 4g	0.640		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.



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Customer: NW Natural Goods
Product identity: HEMP - RB 0136
Client/Metric ID: .
Sample Date:
Laboratory ID: 24-004706-0001
Evidence of Cooling: No
Temp: 25 °C
Serving Size #1: 4 g

Sample Results

Potency per 4g	Method: J AOAC 2015 V98-6 (mod)	Units mg/se	Batch: 2403412	Analyze: 5/3/24 4:26:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	< LOQ		mg/4g	0.123	
CBC-A per 4g	< LOQ		mg/4g	0.123	
CBC-Total per 4g	< LOQ		mg/4g	0.232	
CBD per 4g	24.6		mg/4g	0.123	
CBD-A per 4g	< LOQ		mg/4g	0.123	
CBD-Total per 4g	24.6		mg/4g	0.232	
CBDV per 4g	< LOQ		mg/4g	0.123	
CBDV-A per 4g	< LOQ		mg/4g	0.123	
CBDV-Total per 4g	< LOQ		mg/4g	0.230	
CBE per 4g	< LOQ		mg/4g	0.123	
CBG per 4g	0.640		mg/4g	0.123	
CBG-A per 4g	< LOQ		mg/4g	0.123	
CBG-Total per 4g	0.640		mg/4g	0.230	
CBL per 4g	< LOQ		mg/4g	0.123	
CBL-A per 4g	< LOQ		mg/4g	0.123	
CBL-Total per 4g	< LOQ		mg/4g	0.232	
CBN per 4g	< LOQ		mg/4g	0.123	
CBT per 4g	< LOQ		mg/4g	0.123	
Δ8-THCV per 4g	< LOQ		mg/4g	0.123	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.123	
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.123	
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.247	
Δ8-THC per 4g	< LOQ		mg/4g	0.123	
Δ9-THC per 4g	< LOQ		mg/4g	0.123	
delta-9-THCP per 4g	< LOQ		mg/4g	0.123	
exo-THC per 4g	< LOQ		mg/4g	0.123	
THC-A per 4g	< LOQ		mg/4g	0.123	
THC-Total per 4g	< LOQ		mg/4g	0.232	
THCV per 4g	< LOQ		mg/4g	0.123	
THCV-A per 4g	< LOQ		mg/4g	0.123	
THCV-Total per 4g	< LOQ		mg/4g	0.232	
Total Cannabinoids per 4g	25.3		mg/4g		



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2403341	05/04/24 AOAC 991.14 (Petrifilm)		
Total Coliforms	< LOQ		cfu/g	10	2403341	05/04/24 AOAC 991.14 (Petrifilm)		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2403342	05/05/24 AOAC 2014.05 (RAPID)		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2403342	05/05/24 AOAC 2014.05 (RAPID)		

Solvents Method: Residual Solvents by HS-GC-MS^b Units µg/g Batch 2403438 Analyze 05/06/24 03:02 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			

Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic [‡]	< LOQ	0.200	mg/kg	0.0180	2403380	05/02/24 AOAC 2013.06 (mod.) ^b	pass	
Cadmium [‡]	< LOQ	0.200	mg/kg	0.0180	2403380	05/02/24 AOAC 2013.06 (mod.) ^b	pass	
Lead [‡]	< LOQ	0.500	mg/kg	0.0180	2403380	05/02/24 AOAC 2013.06 (mod.) ^b	pass	
Mercury [‡]	< LOQ	0.100	mg/kg	0.00900	2403380	05/02/24 AOAC 2013.06 (mod.) ^b	pass	



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Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	17.8		g/100g	0.10	2403402	05/02/24 AOAC 925.10 (mod.)		
Water Activity	0.679		Aw	0.030	2403446	05/06/24 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_w = 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
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
Difflubenzuron	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
Etioazole	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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Testing in accordance with: OAR 333-007-0390 OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



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**P2320 Multi-Residue Pesticide Profile
 Cannabis**

Analyte	LOQ (mg/kg)
Flonicamid	0.1
Fluazifop	0.1
Fluazinam	0.1
Flucythrinate	0.1
Fludioxonil	0.1
Flufenacet	0.1
Flumioxazin	0.1
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
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
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

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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

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Hemp & Cannabis
Chain of Custody

Northwest-Natural-Goods-1714570306

ORELAP ID: OR100028 ANAB ISO 17025 ID: AT1508

Company Details		Project Details				Testing						
Company: <u>Northwest Natural Goods</u>		Turnaround Time: <u>5 Business Days</u> Req. For Micro Testing <u>Standard</u> Relinquishment Sampling, Courier & Shipping Options: <u>Pick-Up Courier Service</u> Compliance: <u>Compliance</u> Project Name / ID: <u>HEMP-RB-0136</u> Cannabis Type (select if applicable): <u>Industrial</u> Pick-Up Details Pick-Up Location Name: <u>Northwest Natural Goods</u>				H0010 - Potency Cannabis (Basic-Expanded)	N3000 - Water Activity & Moisture (as Loss on Drying) Food	H0015 - Cannabis Heavy Metals Profile OR	M203 - RAPID Yeast and Mold Count (RYM) Petrifilm	M075 - E. coli/Coliform Count (EC) Petrifilm	H0008 - Residual Solvents (Cannabis - Oregon)	P2320 - Multi-Residue Pesticide Profile (Cannabis)
Receipt Information Pre-Log Storage: <u>Canna Shelves</u>												
#	Sample Name	Material	Amount Provided	Reporting Unit	Serving Size	✓	✓	✓	✓	✓	✓	
1	HEMP-RB-0136	Cannabimxd 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	05/01/2024	06:31	Temp., °C	BR	05/01/2024	10:32	25	No
BR	05/01/2024	11:04	17.1	NR	05/01/2024	11:19	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
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P: (503) 254-1794
info@columbialaboratories.com

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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	0.0356	0.0358	%	99.3	80.0 - 120	Acceptable	
CBDV	2	0.0331	0.0340	%	97.5	80.0 - 120	Acceptable	
CBE	2	0.0310	0.0315	%	98.2	80.0 - 120	Acceptable	
CBDA	1	0.0308	0.0309	%	99.8	90.0 - 110	Acceptable	
CBGA	1	0.0304	0.0304	%	99.9	80.0 - 120	Acceptable	
CBG	1	0.0341	0.0344	%	99.2	80.0 - 120	Acceptable	
CBD	1	0.0329	0.0335	%	98.4	90.0 - 110	Acceptable	
THCV	2	0.0332	0.0336	%	98.9	80.0 - 120	Acceptable	
d8THCV	2	0.0350	0.0360	%	97.2	80.0 - 120	Acceptable	
THCVA	2	0.0314	0.0318	%	98.8	80.0 - 120	Acceptable	
CBN	1	0.0318	0.0320	%	99.5	80.0 - 120	Acceptable	
exo-THC	2	0.0320	0.0331	%	96.7	80.0 - 120	Acceptable	
d9THC	1	0.0321	0.0324	%	98.9	90.0 - 110	Acceptable	
d8THC	1	0.0315	0.0323	%	97.5	90.0 - 110	Acceptable	
9S-d10THC	1	0.0315	0.0322	%	97.7	80.0 - 120	Acceptable	
CBL	2	0.0305	0.0331	%	92.2	80.0 - 120	Acceptable	
9R-d10THC	1	0.0306	0.0314	%	97.6	80.0 - 120	Acceptable	
CBC	2	0.0334	0.0349	%	95.9	80.0 - 120	Acceptable	
THCA	1	0.0311	0.0304	%	102	90.0 - 110	Acceptable	
CBCA	2	0.0328	0.0336	%	97.4	80.0 - 120	Acceptable	
CBLA	2	0.0328	0.0339	%	96.9	80.0 - 120	Acceptable	
d9THCP	2	0.0298	0.0324	%	91.8	80.0 - 120	Acceptable	
CBT	2	0.0318	0.0351	%	90.8	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBDV	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBE	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBDA	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBGA	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBG	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBD	<LOQ	0.00324	%	< 0.00324	Acceptable	
THCV	<LOQ	0.00324	%	< 0.00324	Acceptable	
d8THCV	<LOQ	0.00324	%	< 0.00324	Acceptable	
THCVA	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBN	<LOQ	0.00324	%	< 0.00324	Acceptable	
exo-THC	<LOQ	0.00324	%	< 0.00324	Acceptable	
d9THC	<LOQ	0.00324	%	< 0.00324	Acceptable	
d8THC	<LOQ	0.00324	%	< 0.00324	Acceptable	
9S-d10THC	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBL	<LOQ	0.00324	%	< 0.00324	Acceptable	
9R-d10THC	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBC	<LOQ	0.00324	%	< 0.00324	Acceptable	
THCA	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBCA	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBLA	<LOQ	0.00324	%	< 0.00324	Acceptable	
d9THCP	<LOQ	0.00324	%	< 0.00324	Acceptable	
CBT	<LOQ	0.00324	%	< 0.00324	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: 24-004706/D001.R000
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Revision: 4 Document ID: 7148
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Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 0						
Sample Duplicate		Sample ID: 24-0046840001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBG	0.00878	0.00887	0.00311	%	1.04	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
d9THC	0.250	0.251	0.00311	%	0.639	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBC	0.00333	0.00336	0.00311	%	0.649	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00311	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.00311	%	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: 2403438			
Method Blank				Laboratory Control Sample			
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec Limits Notes
Propane	ND	< 200		587	584	µg/g	100.5 60 - 120
Isobutane	ND	< 200		697	767	µg/g	90.9 60 - 120
Butane	ND	< 200		777	782	µg/g	99.4 60 - 120
2,2-Dimethylpropane	ND	< 200		998	939	µg/g	106.3 60 - 120
Methanol	ND	< 200		1590	1600	µg/g	99.4 60 - 120
Ethylene Oxide	ND	< 30		52.2	57.1	µg/g	91.4 60 - 120
2-Methylbutane	ND	< 200		1710	1600	µg/g	106.9 60 - 120
Pentane	ND	< 200		1640	1610	µg/g	101.9 60 - 120
Ethanol	ND	< 200		1590	1600	µg/g	99.4 70 - 130
Ethyl Ether	ND	< 200		1820	1600	µg/g	113.8 60 - 120
2,2-Dimethylbutane	ND	< 30		184	162	µg/g	113.6 60 - 120
Acetone	ND	< 200		1760	1600	µg/g	110.0 60 - 120
2-Propanol	ND	< 200		1690	1600	µg/g	105.6 60 - 120
Ethyl Formate	ND	< 500		4730	1630	µg/g	290.2 70 - 130 Q7
Acetonitrile	ND	< 100		494	487	µg/g	101.4 60 - 120
Methyl Acetate	ND	< 500		1780	1610	µg/g	110.6 70 - 130
2,3-Dimethylbutane	ND	< 30		168	161	µg/g	104.3 60 - 120
Dichloromethane	ND	< 60		523	483	µg/g	108.3 60 - 120
2-Methylpentane	ND	< 30		176	164	µg/g	107.3 60 - 120
MTBE	ND	< 500		1780	1610	µg/g	110.6 70 - 130
3-Methylpentane	ND	< 30		149	160	µg/g	93.1 60 - 120
Hexane	ND	< 30		167	171	µg/g	97.7 60 - 120
1-Propanol	ND	< 500		1800	1610	µg/g	111.8 70 - 130
Methylethylketone	ND	< 500		1680	1610	µg/g	104.3 70 - 130
Ethyl acetate	ND	< 200		1710	1620	µg/g	105.6 60 - 120
2-Butanol	ND	< 200		1670	1600	µg/g	104.4 60 - 120
Tetrahydrofuran	ND	< 100		525	481	µg/g	109.1 60 - 120
Cyclohexane	ND	< 200		1870	1610	µg/g	116.1 60 - 120
2-methyl-1-propanol	ND	< 500		2070	1610	µg/g	128.6 70 - 130
Benzene	ND	< 1		5.95	5.17	µg/g	115.1 60 - 120
Isopropyl Acetate	ND	< 200		1800	1600	µg/g	112.5 60 - 120
Heptane	ND	< 200		1850	1620	µg/g	114.2 60 - 120
1-Butanol	ND	< 500		2090	1610	µg/g	129.8 70 - 130
Propyl Acetate	ND	< 500		1880	1610	µg/g	116.8 70 - 130
1,4-Dioxane	ND	< 100		552	497	µg/g	111.1 60 - 120
2-Ethoxyethanol	ND	< 30		161	160	µg/g	100.6 60 - 120
Methylisobutylketone	ND	< 500		1940	1620	µg/g	119.8 70 - 130
3-Methyl-1-butanol	ND	< 500		2100	1610	µg/g	130.4 70 - 130 Q1
Ethylene Glycol	ND	< 200		361	483	µg/g	74.7 60 - 120
Toluene	ND	< 100		566	482	µg/g	117.4 60 - 120
Isobutyl Acetate	ND	< 500		1830	1620	µg/g	113.0 70 - 130
1-Pentanol	ND	< 500		2080	1610	µg/g	129.2 70 - 130
Butyl Acetate	ND	< 500		1910	1650	µg/g	115.8 70 - 130
Ethylbenzene	ND	< 200		1070	970	µg/g	110.3 60 - 120
m,p-Xylene	ND	< 200		1060	963	µg/g	110.1 60 - 120
o-Xylene	ND	< 200		1140	961	µg/g	118.6 60 - 120
Cumene	ND	< 30		204	164	µg/g	124.4 60 - 120 Q1
Anisole	ND	< 500		2210	1610	µg/g	137.3 70 - 130 Q1
DMSO	ND	< 500		1700	1610	µg/g	105.6 70 - 130
1,2-dimethoxyethane	ND	< 50		191	170	µg/g	112.4 70 - 130
Triethylamine	ND	< 500		1650	1620	µg/g	101.9 70 - 130
N,N-dimethylformamide	ND	< 150		582	499	µg/g	116.6 70 - 130
N,N-dimethylacetamide	ND	< 150		617	489	µg/g	126.2 70 - 130
Pyridine	ND	< 50		187	167	µg/g	112.0 70 - 130
Sulfolane	ND	< 50		208	169	µg/g	123.1 70 - 130
1,2-Dichloroethane	ND	< 1		1.14	1	µg/g	114.0 70 - 130
Chloroform	ND	< 1		1.06	1	µg/g	106.0 70 - 130
Trichloroethylene	ND	< 1		1	1	µg/g	100.0 70 - 130
1,1-Dichloroethane	ND	< 1		1.13	1	µg/g	113.0 70 - 130



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Received: 05/01/24 11:19

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QC - Sample Duplicate

Sample ID: 24-004706-0001

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



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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.