



Customer: NW Natural Goods
Product identity: HEMP - HB 0111
Client/Metric ID: .
Laboratory ID: 24-005228-0001

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	0.636		mg/4g		
					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.


Customer: NW Natural Goods

Product identity: HEMP - HB 0111

Client/Metric ID: .

Sample Date:
Laboratory ID: 24-005228-0001

Evidence of Cooling: No

Temp: 18.6

Relinquished by: client

Serving Size #1: 4 g

Sample Results

Potency per 4g		Method: J AOAC 2015 V98-6 (mod) ^b	Units mg/se	Batch: 2403711	Analyze: 5/14/24 6:17:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	< LOQ		mg/4g	0.124	
CBC-A per 4g	< LOQ		mg/4g	0.124	
CBC-Total per 4g	< LOQ		mg/4g	0.233	
CBD per 4g	24.6		mg/4g	0.124	
CBD-A per 4g ¹	< LOQ		mg/4g	0.124	
CBD-Total per 4g ¹	24.6		mg/4g	0.233	
CBDV per 4g	< LOQ		mg/4g	0.124	
CBDV-A per 4g	< LOQ		mg/4g	0.124	
CBDV-Total per 4g	< LOQ		mg/4g	0.231	
CBE per 4g	< LOQ		mg/4g	0.124	
CBG per 4g	0.636		mg/4g	0.124	
CBG-A per 4g	< LOQ		mg/4g	0.124	
CBG-Total per 4g	0.636		mg/4g	0.231	
CBL per 4g	< LOQ		mg/4g	0.124	
CBL-A per 4g	< LOQ		mg/4g	0.124	
CBL-Total per 4g	< LOQ		mg/4g	0.233	
CBN per 4g	< LOQ		mg/4g	0.124	
CBT per 4g	< LOQ		mg/4g	0.124	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.124	
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.124	
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.248	
Δ8-THC per 4g ¹	< LOQ		mg/4g	0.124	
Δ8-THCV per 4g	< LOQ		mg/4g	0.124	
Δ9-THC per 4g ¹	< LOQ		mg/4g	0.124	
Δ9-THC-Total per 4g	< LOQ		mg/4g	0.233	
Δ9-THCP per 4g	< LOQ		mg/4g	0.124	
Δ9-THCV per 4g	< LOQ		mg/4g	0.124	
Δ9-THCV-A per 4g	< LOQ		mg/4g	0.124	
Δ9-THCV-Total per 4g	< LOQ		mg/4g	0.233	
exo-THC per 4g	< LOQ		mg/4g	0.124	
THC-A per 4g ¹	< LOQ		mg/4g	0.124	
Total Cannabinoids per 4g	25.3		mg/4g		



Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2403651	05/16/24 AOAC 991.14 (Petrifilm)		
Total Coliforms	< LOQ		cfu/g	10	2403651	05/16/24 AOAC 991.14 (Petrifilm)		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2403652	05/17/24 AOAC 2014.05 (RAPID)		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2403652	05/17/24 AOAC 2014.05 (RAPID)		

Solvents

Method: Residual Solvents by HS-GC-MS^b Units µg/g Batch 2403762 Analyze 05/16/24 12:37 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 ¹	< 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 2403861 Analyze 05/20/24 01:35 PM

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



Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic ^L	< LOQ	0.200	mg/kg	0.0166	2403796	05/17/24 AOAC 2013.06 (mod.) ^p	pass	
Cadmium ^L	< LOQ	0.200	mg/kg	0.0166	2403796	05/17/24 AOAC 2013.06 (mod.) ^p	pass	
Lead ^L	< LOQ	0.500	mg/kg	0.0166	2403796	05/17/24 AOAC 2013.06 (mod.) ^p	pass	
Mercury ^L	< LOQ	0.100	mg/kg	0.00830	2403796	05/17/24 AOAC 2013.06 (mod.) ^p	pass	

Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	18.0		g/100g	0.10	2403710	05/14/24 AOAC 925.10 (mod.)		
Water Activity	0.668		Aw	0.030	2403675	05/14/24 AOAC 978.18		

**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


**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
Bifenoxy	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
Crotoxypfos	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
Etioazole	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)

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Updated: 09.12.2022


**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
Flutriaol	0.1
Fluvalinate	0.1
Fluxapyroxad	0.1
Fomesafen	0.1
Formetanate	0.1
Furathiocarb	0.1
Haloxypyr	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
Mecabam	0.1
Mepanipyrim	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
Oxychlordane	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
Saflufenacil	0.1

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



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
Sulfoxaflor	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
Tolylfluanid	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)

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Updated: 09.12.2022



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



Report Number: 24-005228/D001.R000
Report Date: 05/20/2024
ORELAP#: OR100028
Purchase Order:
Received: 05/13/24 14:42



Hemp & Cannabis
Chain of Custody

Northwest-Natural-
Goods-1715353201

ORELAP ID: **OR1000028** ANAB ISO 17025 ID: **AT1508**

Company Details Company: <u>Northwest Natural Goods</u> [Redacted] [Redacted] [Redacted] [Redacted] [Redacted] [Redacted] [Redacted] [Redacted]			Project Details Turnaround Time: <u>5 Business Days Reg. For Micro Testing Standard</u> Relinquishment Sampling, Courier & Shipping Options: <u>Pick-Up Courier Service</u> Compliance: <u>Compliance</u> Project Name / ID: <u>HEMP - HB 0111</u> Cannabis Type (select if applicable): <u>Industrial</u> Pick-Up Details Pick-Up Location Name: <u>Northwest Natural Goods</u> [Redacted] [Redacted] [Redacted] Receipt Information			Test ng N3500 - Water Activity & Moisture (as Loss on Drying) Food M075 - E. coli/Coliform Count (EC) Petrifilm P2320 - Multi-Residue Pesticide Profile (Cannabis) H0013 - Cannabis Heavy Metals Profile OR H0008 - Residual Solvents (Cannabis - Oregon) M283 - RAPID Yeast and Mold Count (RYM) Petrifilm H0010 - Potency Cannabis (Basic+Expanded)					
#	Sample Name	Material	Amount Provided	Reporting Unit	Serving Size	Additional Test Requests and Sample Comments					
1	HEMP - HB 0111	Cannab no d Ed b e	20 each	mg/g & mg/serv ng	4 g	TH S S FOR MONDAY 5/13					
						✓	✓	✓	✓	✓	✓

Relinquished By	Date	Time	Temp., °C	Received By	Date	Time	Received Temp., °C	Evidence of Cooling?
KRISTEN JOHNSON	05/10/2024	08:00	Temp., °C	BR	05/13/2024	10:06	25	No
BR	05/13/2024	12:01	18.6	rbt	05/13/2024	14:42	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

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www.columbialaboratories.com


Laboratory Quality Control Results

I AOAC 2015 V98-6									
Batch ID: 2403711									
Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0366	0.0358	%	102	80.0	- 120	Acceptable	
CBDV	2	0.0345	0.0340	%	101	80.0	- 120	Acceptable	
CBE	2	0.0316	0.0315	%	100	80.0	- 120	Acceptable	
CBDA	1	0.0310	0.0309	%	100	90.0	- 110	Acceptable	
CBGA	1	0.0307	0.0304	%	101	80.0	- 120	Acceptable	
CBG	1	0.0345	0.0344	%	100	80.0	- 120	Acceptable	
CBD	1	0.0339	0.0335	%	101	90.0	- 110	Acceptable	
THCV	2	0.0342	0.0336	%	102	80.0	- 120	Acceptable	
d8THCV	2	0.0361	0.0360	%	100	80.0	- 120	Acceptable	
THCVA	2	0.0324	0.0318	%	102	80.0	- 120	Acceptable	
CBN	1	0.0323	0.0320	%	101	80.0	- 120	Acceptable	
exo-THC	2	0.0331	0.0331	%	100	80.0	- 120	Acceptable	
d9THC	1	0.0330	0.0324	%	102	90.0	- 110	Acceptable	
d8THC	1	0.0321	0.0323	%	99.4	90.0	- 110	Acceptable	
9S-d10THC	1	0.0323	0.0322	%	100	80.0	- 120	Acceptable	
CBL	2	0.0328	0.0331	%	99.1	80.0	- 120	Acceptable	
9R-d10THC	1	0.0312	0.0314	%	99.5	80.0	- 120	Acceptable	
CBC	2	0.0347	0.0349	%	99.6	80.0	- 120	Acceptable	
THCA	1	0.0312	0.0304	%	103	90.0	- 110	Acceptable	
CBCA	2	0.0339	0.0336	%	101	80.0	- 120	Acceptable	
CBLA	2	0.0341	0.0339	%	101	80.0	- 120	Acceptable	
d9THCP	2	0.0322	0.0324	%	99.3	80.0	- 120	Acceptable	
CBT	2	0.0337	0.0351	%	96.0	80.0	- 120	Acceptable	
Method Blank									
Analyte		Result	LOQ	Units		Limits		Evaluation	Notes
CBDVA		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBDV		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBE		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBDA		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBGA		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBG		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBD		<LOQ	0.00328	%		< 0.00328		Acceptable	
THCV		<LOQ	0.00328	%		< 0.00328		Acceptable	
d8THCV		<LOQ	0.00328	%		< 0.00328		Acceptable	
THCVA		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBN		<LOQ	0.00328	%		< 0.00328		Acceptable	
exo-THC		<LOQ	0.00328	%		< 0.00328		Acceptable	
d9THC		<LOQ	0.00328	%		< 0.00328		Acceptable	
d8THC		<LOQ	0.00328	%		< 0.00328		Acceptable	
9S-d10THC		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBL		<LOQ	0.00328	%		< 0.00328		Acceptable	
9R-d10THC		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBC		<LOQ	0.00328	%		< 0.00328		Acceptable	
THCA		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBCA		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBLA		<LOQ	0.00328	%		< 0.00328		Acceptable	
d9THCP		<LOQ	0.00328	%		< 0.00328		Acceptable	
CBT		<LOQ	0.00328	%		< 0.00328		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

AOAC 2015 V98-6			Batch ID: 2403711					
Sample Duplicate			Sample ID: 24-005147-0002					
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBE	0.0243	0.0246	0.00317	%	1.46	< 20	Acceptable	
CBDA	0.0666	0.0677	0.00317	%	1.64	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBD	0.162	0.165	0.00317	%	1.63	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00317	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.00317	%	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: 2403762				
Method Blank					Laboratory Control Sample				
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		460	584	µg/g	78.8	60 - 120	
Isobutane	ND	< 200		618	767	µg/g	80.6	60 - 120	
Butane	ND	< 200		646	782	µg/g	82.6	60 - 120	
2,2-Dimethylpropane	ND	< 200		794	939	µg/g	84.6	60 - 120	
Methanol	ND	< 200		1140	1600	µg/g	71.3	60 - 120	
Ethylene Oxide	ND	< 30		47.8	57.1	µg/g	83.7	60 - 120	
2-Methylbutane	ND	< 200		1210	1600	µg/g	75.6	60 - 120	
Pentane	ND	< 200		1230	1610	µg/g	76.4	60 - 120	
Ethanol	ND	< 200		1230	1600	µg/g	76.9	70 - 130	
Ethyl Ether	ND	< 200		1250	1600	µg/g	78.1	60 - 120	
2,2-Dimethylbutane	ND	< 30		129	162	µg/g	79.6	60 - 120	
Acetone	ND	< 200		1200	1600	µg/g	75.0	60 - 120	
2-Propanol	ND	< 200		1250	1600	µg/g	78.1	60 - 120	
Ethyl Formate	ND	< 500		1350	1630	µg/g	82.8	70 - 130	
Acetonitrile	ND	< 100		379	487	µg/g	77.8	60 - 120	
Methyl Acetate	ND	< 500		1420	1610	µg/g	88.2	70 - 130	
2,3-Dimethylbutane	ND	< 30		123	161	µg/g	76.4	60 - 120	
Dichloromethane	ND	< 60		373	483	µg/g	77.2	60 - 120	
2-Methylpentane	ND	< 30		125	164	µg/g	76.2	60 - 120	
MTBE	ND	< 500		1450	1610	µg/g	90.1	70 - 130	
3-Methylpentane	ND	< 30		124	160	µg/g	77.5	60 - 120	
Hexane	ND	< 30		134	171	µg/g	78.4	60 - 120	
1-Propanol	ND	< 500		1470	1610	µg/g	91.3	70 - 130	
Methylethylketone	ND	< 500		1450	1610	µg/g	90.1	70 - 130	
Ethyl acetate	ND	< 200		1300	1620	µg/g	80.2	60 - 120	
2-Butanol	ND	< 200		1310	1600	µg/g	81.9	60 - 120	
Tetrahydrofuran	ND	< 100		387	481	µg/g	80.5	60 - 120	
Cyclohexane	ND	< 200		1370	1610	µg/g	85.1	60 - 120	
2-methyl-1-propanol	ND	< 500		1350	1610	µg/g	83.9	70 - 130	
Benzene	ND	< 1		4.32	5.17	µg/g	83.6	60 - 120	
Isopropyl Acetate	ND	< 200		1380	1600	µg/g	86.3	60 - 120	
Heptane	ND	< 200		1370	1620	µg/g	84.6	60 - 120	
1-Butanol	ND	< 500		1320	1610	µg/g	82.0	70 - 130	
Propyl Acetate	ND	< 500		1370	1610	µg/g	85.1	70 - 130	
1,4-Dioxane	ND	< 100		410	497	µg/g	82.5	60 - 120	
2-Ethoxyethanol	ND	< 30		130	160	µg/g	81.3	60 - 120	
Methylisobutylketone	ND	< 500		1320	1620	µg/g	81.5	70 - 130	
3-Methyl-1-butanol	ND	< 500		1250	1610	µg/g	77.6	70 - 130	
Ethylene Glycol	ND	< 200		355	483	µg/g	73.5	60 - 120	
Toluene	ND	< 100		411	482	µg/g	85.3	60 - 120	
Isobutyl Acetate	ND	< 500		1320	1620	µg/g	81.5	70 - 130	
1-Pentanol	ND	< 500		1240	1610	µg/g	77.0	70 - 130	
Butyl Acetate	ND	< 500		1360	1650	µg/g	82.4	70 - 130	
Ethylbenzene	ND	< 200		808	970	µg/g	83.3	60 - 120	
m,p-Xylene	ND	< 200		799	963	µg/g	83.0	60 - 120	
o-Xylene	ND	< 200		819	961	µg/g	85.2	60 - 120	
Cumene	ND	< 30		140	164	µg/g	85.4	60 - 120	
Anisole	ND	< 500		1120	1610	µg/g	69.6	70 - 130	Q6
DMSO	ND	< 500		1280	1610	µg/g	79.5	70 - 130	
1,2-dimethoxyethane	ND	< 50		151	170	µg/g	88.8	70 - 130	
Triethylamine	ND	< 500		1120	1620	µg/g	69.1	70 - 130	Q6
N,N-dimethylformamide	ND	< 150		424	499	µg/g	85.0	70 - 130	
N,N-dimethylacetamide	ND	< 150		333	489	µg/g	68.1	70 - 130	Q6
Pyridine	ND	< 50		120	167	µg/g	71.9	70 - 130	
Sulfolane	ND	< 50		97.9	169	µg/g	57.9	70 - 130	Q6
1,2-Dichloroethane	ND	< 1		0.822	1	µg/g	82.2	70 - 130	
Chloroform	ND	< 1		0.865	1	µg/g	86.5	70 - 130	
Trichloroethylene	ND	< 1		0.846	1	µg/g	84.6	70 - 130	
1,1-Dichloroethane	ND	< 1		0.851	1	µg/g	85.1	70 - 130	


QC - Sample Duplicate
Sample ID: 24-004985-0001-01

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

Abbreviations

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

Units of Measure:

µg/g- Microgram per gram or ppm



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



Report Number: 24-005228/D001.R000
Report Date: 05/20/2024
ORELAP#: OR100028
Purchase Order:
Received: 05/13/24 14:42





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.