



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



Report Number: 24-005253/D001.R000
Report Date: 05/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 05/14/24 11:00

Customer: NW Natural Goods
Product identity: HEMP - PCH 0023
Client/Metric ID: .
Laboratory ID: 24-005253-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	9.64		mg/4g		CBD-Total per Serving Size 18.9 mg/4g
CBD per 4g	18.9		mg/4g		
CBG per 4g	0.484		mg/4g		Delta-9-THC-Total per <LOQ
CBT per 4g	0.872		mg/4g		(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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Received: 05/14/24 11:00

Customer: NW Natural Goods
Product identity: HEMP - PCH 0023
Client/Metric ID: .
Sample Date:
Laboratory ID: 24-005253-0001
Evidence of Cooling: No
Temp: 25 °C
Serving Size #1: 4 g

Sample Results

Potency per 4g		Method: J AOAC 2015 V98-6 (mod) ^b		Units mg/se Batch: 2403761		Analyze: 5/16/24 6:05:00 AM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC per 4g	9.64		mg/4g	0.129		
CBC-A per 4g	< LOQ		mg/4g	0.129		
CBC-Total per 4g	9.64		mg/4g	0.242		
CBD per 4g	18.9		mg/4g	0.129		
CBD-A per 4g ¹	< LOQ		mg/4g	0.129		
CBD-Total per 4g ¹	18.9		mg/4g	0.242		
CBDV per 4g	< LOQ		mg/4g	0.129		
CBDV-A per 4g	< LOQ		mg/4g	0.129		
CBDV-Total per 4g	< LOQ		mg/4g	0.241		
CBE per 4g	< LOQ		mg/4g	0.129		
CBG per 4g	0.484		mg/4g	0.129		
CBG-A per 4g	< LOQ		mg/4g	0.129		
CBG-Total per 4g	0.484		mg/4g	0.241		
CBL per 4g	< LOQ		mg/4g	0.129		
CBL-A per 4g	< LOQ		mg/4g	0.129		
CBL-Total per 4g	< LOQ		mg/4g	0.242		
CBN per 4g	< LOQ		mg/4g	0.129		
CBT per 4g	0.872		mg/4g	0.129		
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.129		
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.129		
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.258		
Δ8-THC per 4g ¹	< LOQ		mg/4g	0.129		
Δ8-THCV per 4g	< LOQ		mg/4g	0.129		
Δ9-THC per 4g ¹	< LOQ		mg/4g	0.129		
Δ9-THC-Total per 4g	< LOQ		mg/4g	0.242		
Δ9-THCP per 4g	< LOQ		mg/4g	0.129		
Δ9-THCV per 4g	< LOQ		mg/4g	0.129		
Δ9-THCV-A per 4g	< LOQ		mg/4g	0.129		
Δ9-THCV-Total per 4g	< LOQ		mg/4g	0.242		
exo-THC per 4g	< LOQ		mg/4g	0.129		
THC-A per 4g ¹	< LOQ		mg/4g	0.129		
Total Cannabinoids per 4g	29.9		mg/4g			



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2403698	05/17/24 AOAC 991.14 (Petrifilm)		
Total Coliforms	< LOQ		cfu/g	10	2403698	05/17/24 AOAC 991.14 (Petrifilm)		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2403699	05/18/24 AOAC 2014.05 (RAPID)		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2403699	05/18/24 AOAC 2014.05 (RAPID)		

Solvents Method: Residual Solvents by HS-GC-MS^b Units µg/g Batch 2403762 Analyze 05/16/24 12:38 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 2403903 Analyze 05/22/24 01:25 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 ¹	< LOQ	0.200	mg/kg	0.0189	2403796	05/17/24 AOAC 2013.06 (mod.) ^b	pass	
Cadmium ¹	< LOQ	0.200	mg/kg	0.0189	2403796	05/17/24 AOAC 2013.06 (mod.) ^b	pass	
Lead ¹	< LOQ	0.500	mg/kg	0.0189	2403796	05/17/24 AOAC 2013.06 (mod.) ^b	pass	
Mercury ¹	< LOQ	0.100	mg/kg	0.00943	2403796	05/17/24 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)	17.3		g/100g	0.10	2403803	05/16/24 AOAC 925.10 (mod.)		
Water Activity	0.648		Aw	0.030	2403806	05/17/24 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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**Hemp & Cannabis
Chain of Custody**

Northwest-Natural-Goods-1715638968

ORELAP ID: **OR100028** ANAB ISO17025 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 - PCH0023</u> Cannabis Type (select if applicable): <u>Industrial</u> Pick-Up Details Pick-Up Location Name: <u>Northwest Natural Goods</u>				H070 - E. coli/Coliform Count (EC) Petrifilm	H0015 - Cannabis Heavy Metals Profile OR	H0010 - Potency Cannabis (Basic-Expandable)	H0006 - Residual Solvents (Cannabis - Oregon)	M285 - RAPID Yeast and Mold Count (RYM) Petrifilm	N3600 - Water Activity & Moisture (as Loss on Drying) Food	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- PCH0023	Cannabinoid Edible	20 each	mg/g & mg/serving	4 g	✓	✓	✓	✓	✓	✓	✓				

Relinquished By	Date	Time	Temp., °C	Received By	Date	Time	Received Temp., °C	Evidence of Cooling?
KRISTEN JOHNSON	05/13/2024	15:22	Temp., °C	BR	05/14/2024	10:14	25	No
BR	05/14/2024	10:43	20.4	NR	05/14/2024	11:00	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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Portland, OR 97230

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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
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)

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Testing in accordance with: OAR 333-007-0390 OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



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
Mecabam	0.1
Mepanipirim	0.1
Mesotrione	0.1
Metalaxyl	0.1
Methamidophos	0.1
Methiocarb	0.1
Methiocarb sulfone	0.1
Methiocarb sulfoxide	0.1
Methomyl	0.1
Methoxyfenozide	0.1
Metolachlor	0.1
Metolcarb	0.1
Metrafenone	0.1
Mevinphos	0.1
MGK 264	0.1
Molinate	0.1
Monocrotophos	0.1
Monolinuron	0.1
Myclobutanil	0.1
Naled	0.1
Napropamide	0.1
Neburon	0.1
Norflurazon	0.1
Novaluron	0.1
Omethoat	0.1
Oryzalin	0.1
Oxadiazon	0.1
Oxadixyl	0.1
Oxamyl	0.1
Oxamyl-oxime	0.1
Oxychlorane	0.1
Oxydemeton-Methyl	0.1
Oxyfluorfen	0.1
Paclbutrazol	0.1
Paraoxon-ethyl	0.1
Paraoxon-methyl	0.1
Parathion-methyl	0.1
Penconazole	0.1
Pendimethalin	0.1
Penflufen	0.1
Penthiopyrad	0.1
Permethrin	0.1
Perthane	0.1
Phenmedipham	0.1

Analyte	LOQ (mg/kg)
Phenothrin	0.1
Phenthoate	0.1
Phorate	0.1
Phorate-Sulfone	0.1
Phorate-Sulfoxide	0.1
Phosalone	0.1
Phosmet	0.1
Phosphamidon	0.1
Phoxim	0.1
Pinoxaden	0.1
Piperonyl Butoxide	0.1
Pirimicarb	0.1
Pirimiphos-ethyl	0.1
Pirimiphos-methyl	0.1
Prallethrin	0.1
Prochloraz	0.1
Procymidone	0.1
Profenofos	0.1
Promecarb	0.1
Prometon	0.1
Prometryn	0.1
Propachlor	0.1
Propamocarb	0.1
Propanil	0.1
Propazine	0.1
Propetamophos	0.1
Propham	0.1
Propiconazole	0.1
Propoxur	0.1
Propyzamide	0.1
Prothiofos	0.1
Pyraclostrobin	0.1
Pyraflufen Ethyl	0.1
Pyrazophos	0.1
Pyrethrin	0.1
Pyridaben	0.1
Pyrimethanil	0.1
Pyriproxifen	0.1
Pyroxasulfone	0.1
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)



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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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Testing in accordance with: OAR 333-007-0390 OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



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Received: 05/14/24 11:00

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

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2403761

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDA	2	0.0362	0.0358	%	101	80.0 - 120	Acceptable	
CBV	2	0.0341	0.0340	%	100	80.0 - 120	Acceptable	
CB	2	0.0313	0.0315	%	99.4	80.0 - 120	Acceptable	
CBDA	1	0.0310	0.0314	%	98.6	90.0 - 110	Acceptable	
CBGA	1	0.0306	0.0310	%	98.8	80.0 - 120	Acceptable	
CBG	1	0.0342	0.0351	%	97.5	80.0 - 120	Acceptable	
CB	1	0.0333	0.0342	%	97.3	90.0 - 110	Acceptable	
THCV	2	0.0339	0.0336	%	101	80.0 - 120	Acceptable	
Δ8THCV	2	0.0356	0.0360	%	98.9	80.0 - 120	Acceptable	
THCVA	2	0.0321	0.0318	%	101	80.0 - 120	Acceptable	
CBN	1	0.0322	0.0327	%	98.5	80.0 - 120	Acceptable	
exo-THC	2	0.0328	0.0331	%	99.1	80.0 - 120	Acceptable	
Δ9THC	1	0.0328	0.0335	%	98.0	90.0 - 110	Acceptable	
Δ8THC	1	0.0321	0.0328	%	97.8	90.0 - 110	Acceptable	
9SΔ10THC	1	0.0321	0.0329	%	97.7	80.0 - 120	Acceptable	
CB	2	0.0325	0.0331	%	98.4	80.0 - 120	Acceptable	
9RΔ10THC	1	0.0313	0.0321	%	97.6	80.0 - 120	Acceptable	
CB	2	0.0342	0.0349	%	98.1	80.0 - 120	Acceptable	
THCA	1	0.0311	0.0310	%	101	90.0 - 110	Acceptable	
CBCA	2	0.0336	0.0336	%	100	80.0 - 120	Acceptable	
CBLA	2	0.0339	0.0339	%	99.9	80.0 - 120	Acceptable	
Δ9THCP	2	0.0316	0.0324	%	97.3	80.0 - 120	Acceptable	
CB	2	0.0335	0.0351	%	95.5	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBV	<LOQ	0.00329	%	< 0.00329	Acceptable	
CB	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBDA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBGA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBG	<LOQ	0.00329	%	< 0.00329	Acceptable	
CB	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCV	<LOQ	0.00329	%	< 0.00329	Acceptable	
Δ8THCV	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCVA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBN	<LOQ	0.00329	%	< 0.00329	Acceptable	
exo-THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
Δ9THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
Δ8THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
9SΔ10THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
CB	<LOQ	0.00329	%	< 0.00329	Acceptable	
9RΔ10THC	<LOQ	0.00329	%	< 0.00329	Acceptable	
CB	<LOQ	0.00329	%	< 0.00329	Acceptable	
THCA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBCA	<LOQ	0.00329	%	< 0.00329	Acceptable	
CBLA	<LOQ	0.00329	%	< 0.00329	Acceptable	
Δ9THCP	<LOQ	0.00329	%	< 0.00329	Acceptable	
CB	<LOQ	0.00329	%	< 0.00329	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: 24-005253/D001.R000
Report Date: 05/22/2024
ORELAP#: OR100028
Purchase Order:
Received: 05/14/24 11:00

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

Laboratory Quality Control Results

AOAC 2015 V98-6		Batch ID: 2403761						
Sample Duplicate		Sample ID: 24-005236-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBV	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBG	0.00800	0.00872	0.00307	%	8.58	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBN	0.00534	0.00527	0.00307	%	1.28	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
d9THC	0.266	0.263	0.00307	%	1.05	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
9Sa10THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
9Rd10THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CB	0.00406	0.00401	0.00307	%	1.13	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	

Abbreviations

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

Units of Measure:

- % - Percent



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



Report Number: 24-005253/D001.R000
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Purchase Order:
Received: 05/14/24 11:00

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

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
Pertane	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		353	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	
Pertane	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2,2-Dimethylbutane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200 µg/g	0.0	< 20	Acceptable	
2-Propanol	ND	ND	200 µg/g	0.0	< 20	Acceptable	
Ethyl Formate	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100 µg/g	0.0	< 20	Acceptable	
Methyl Acetate	ND	ND	500 µg/g	0.0	< 20	Acceptable	
2,3-Dimethylbutane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60 µg/g	0.0	< 20	Acceptable	
2-Methylpentane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
MTBE	ND	ND	500 µg/g	0.0	< 20	Acceptable	
3-Methylpentane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
1-Propanol	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Methylethylketone	ND	ND	500 µg/g	0.0	< 20	Acceptable	
Ethyl acetate	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
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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.