



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



Report Number: 24-003596/D001.R000
Report Date: 04/09/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/02/24 12:52

Customer: NW Natural Goods
Product identity: HEMP - PCH 0020
Client/Metric ID: .
Laboratory ID: 24-003596-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	10.4		mg/4g		CBD-Total per Serving Size 20.0 mg/4g
CBD per 4g	20.0		mg/4g		
CBDV per 4g	0.174		mg/4g		THC-Total per Serving Size <LOQ
CBE per 4g	0.600		mg/4g		(Reported in milligrams per serving)
CBN per 4g	0.151		mg/4g		
CBT per 4g	1.31		mg/4g		

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 - PCH 0020
Client/Metric ID: .
Sample Date:
Laboratory ID: 24-003596-0001
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: 2402558	Analyze: 4/3/24 9:57:00 PM
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	10.4		mg/4g	0.129	
CBC-A per 4g	< LOQ		mg/4g	0.129	
CBC-Total per 4g	10.4		mg/4g	0.243	
CBD per 4g	20.0		mg/4g	0.129	
CBD-A per 4g [±]	< LOQ		mg/4g	0.129	
CBD-Total per 4g [±]	20.0		mg/4g	0.243	
CBDV per 4g	0.174		mg/4g	0.129	
CBDV-A per 4g	< LOQ		mg/4g	0.129	
CBDV-Total per 4g	< LOQ		mg/4g	0.242	
CBE per 4g	0.600		mg/4g	0.129	
CBG per 4g	< LOQ		mg/4g	0.129	
CBG-A per 4g	< LOQ		mg/4g	0.129	
CBG-Total per 4g	< LOQ		mg/4g	0.242	
CBL per 4g	< LOQ		mg/4g	0.129	
CBL-A per 4g	< LOQ		mg/4g	0.129	
CBL-Total per 4g	< LOQ		mg/4g	0.243	
CBN per 4g	0.151		mg/4g	0.129	
CBT per 4g	1.31		mg/4g	0.129	
Δ8-THCV per 4g	< LOQ		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	0.259	
Δ8-THC per 4g [±]	< LOQ		mg/4g	0.129	
Δ9-THC per 4g [±]	< LOQ		mg/4g	0.129	
delta-9-THCP per 4g	< LOQ		mg/4g	0.129	
exo-THC per 4g	< LOQ		mg/4g	0.129	
THC-A per 4g [±]	< LOQ		mg/4g	0.129	
THC-Total per 4g	< LOQ		mg/4g	0.243	
THCV per 4g	< LOQ		mg/4g	0.129	
THCV-A per 4g	< LOQ		mg/4g	0.129	
THCV-Total per 4g	< LOQ		mg/4g	0.243	
Total Cannabinoids per 4g	32.7		mg/4g		



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2402505	04/05/24 AOAC 991.14 (Petrifilm)		
Total Coliforms	< LOQ		cfu/g	10	2402505	04/05/24 AOAC 991.14 (Petrifilm)		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2402506	04/06/24 AOAC 2014.05 (RAPID)		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2402506	04/06/24 AOAC 2014.05 (RAPID)		

Solvents Method: Residual Solvents by GC/MS^b Units µg/g Batch 2402688 Analyze 04/09/24 01:25 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 2402650 Analyze 04/08/24 12:14 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 [‡]	< LOQ	0.200	mg/kg	0.0187	2402605	04/05/24 AOAC 2013.06 (mod.) ^p	pass	
Cadmium [‡]	< LOQ	0.200	mg/kg	0.0187	2402605	04/05/24 AOAC 2013.06 (mod.) ^p	pass	
Lead [‡]	< LOQ	0.500	mg/kg	0.0187	2402605	04/05/24 AOAC 2013.06 (mod.) ^p	pass	
Mercury [‡]	< LOQ	0.100	mg/kg	0.00933	2402605	04/05/24 AOAC 2013.06 (mod.) ^p	pass	



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Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	18.2		g/100g	0.10	2402564	04/03/24 AOAC 925.10 (mod.)		
Water Activity	0.663		Aw	0.030	2402530	04/03/24 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 = g

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
Ametocradin	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
Diffubenzuron	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
Etoxazole	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)
Fionicamid	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
Isufenphos	0.1
Isufenphos-methyl	0.1
Isufenphos-oxon	0.1
Isoprocarb	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
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
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
Oxychloridane	0.1
Oxydemeton-Methyl	0.1
Oxyfluorfen	0.1
Pacllobutrazol	0.1
Paraoxon-ethyl	0.1
Paraoxon-methyl	0.1
Parathion-methyl	0.1
Penconazole	0.1
Pendimethalin	0.1
Perflufen	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
Pyroxsulam	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

LOQ= Limit of Quantitation
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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
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
Chain of Custody

Northwest-Natural-Goods-172002083

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>					H0008 - Residual Solvents (Cannabis - Oregon)	H0010 - Potency/Cannabinoids (Basic/Expanded)	M653 - RPAPD Yeast and Mold Count (R/M) Petri. Im	M075 - E. coli/Coliform Count (EO) Petri. Im	P2020 - Multi-Residue Pesticide Profile (Cannabis)	H0013 - Cannabis Heavy Metals Profile CR	N3600 - Water Activity & Moisture (as Loss on Drying) Food
[Redacted]					Relinquishment Sampling, Courier & Shipping Options: <u>Pick-Up Courier Service</u>											
[Redacted]					Compliance: <u>Compliance</u>											
[Redacted]					Project Name / ID: <u>HEMP - PCH0020</u>											
[Redacted]					Cannabis Type (select if applicable): <u>Industrial</u>											
[Redacted]					Pick-Up Details											
[Redacted]					Pick-Up Location Name: <u>Northwest Natural Goods</u>											
[Redacted]					[Redacted]											
[Redacted]					Receipt Information											
#	Sample Name	Material	Amount Provided	Reporting Unit	Serving Size											
1	HEMP - PCH0020	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	04/01/2024	13:08	Temp., °C	BR	04/02/2024	10:16	25	No
BR	04/02/2024	11:53	18.9	MEW	04/02/2024	12:52	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
www.columbialaboratories.com

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

Laboratory Quality Control Results
 Batch ID: 2402558

JAOAC2015 V986 Laboratory Control Sample Batch ID: 2402558										
Laboratory Control Sample										
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes	
CBDA	2	0.0328	0.0324	%	101	80.0	- 120	Acceptable		
CBDA	2	0.0346	0.0346	%	99.9	80.0	- 120	Acceptable		
CBE	2	0.0351	0.0348	%	101	80.0	- 120	Acceptable		
CBDA	1	0.0322	0.0319	%	101	90.0	- 110	Acceptable		
CBSA	1	0.0318	0.0316	%	101	80.0	- 120	Acceptable		
CBS	1	0.0368	0.0366	%	100	80.0	- 120	Acceptable		
CB	1	0.0356	0.0355	%	100	90.0	- 110	Acceptable		
THCV	2	0.0362	0.0356	%	102	80.0	- 120	Acceptable		
δ8THCV	2	0.0227	0.0226	%	100	80.0	- 120	Acceptable		
THCVA	2	0.0321	0.0317	%	101	80.0	- 120	Acceptable		
CBN	1	0.0337	0.0334	%	101	80.0	- 120	Acceptable		
exo-THC	2	0.0357	0.0355	%	101	80.0	- 120	Acceptable		
δ9THC	1	0.0373	0.0355	%	105	90.0	- 110	Acceptable		
δ8THC	1	0.0326	0.0339	%	96.2	90.0	- 110	Acceptable		
9SaTHC	1	0.0334	0.0333	%	100	80.0	- 120	Acceptable		
CB	2	0.0357	0.0352	%	102	80.0	- 120	Acceptable		
9RaTHC	1	0.0322	0.0326	%	98.8	80.0	- 120	Acceptable		
CB	2	0.0350	0.0353	%	99.3	80.0	- 120	Acceptable		
THCA	1	0.0327	0.0320	%	102	90.0	- 110	Acceptable		
CBLA	2	0.0333	0.0327	%	102	80.0	- 120	Acceptable		
CBLA	2	0.0345	0.0345	%	99.9	80.0	- 120	Acceptable		
δ9THCP	2	0.0327	0.0330	%	99.2	80.0	- 120	Acceptable		
CB	2	0.0333	0.0349	%	95.6	80.0	- 120	Acceptable		
Method Blank										
Analyte	Result	LOG	Units	Limits		Evaluation	Notes			
CBDA	<LOQ	0.00322	%	< 0.00322		Acceptable				
CBDA	<LOQ	0.00322	%	< 0.00322		Acceptable				
CBE	<LOQ	0.00322	%	< 0.00322		Acceptable				
CBDA	<LOQ	0.00322	%	< 0.00322		Acceptable				
CBSA	<LOQ	0.00322	%	< 0.00322		Acceptable				
CBS	<LOQ	0.00322	%	< 0.00322		Acceptable				
CB	<LOQ	0.00322	%	< 0.00322		Acceptable				
THCV	<LOQ	0.00322	%	< 0.00322		Acceptable				
δ8THCV	<LOQ	0.00322	%	< 0.00322		Acceptable				
THCVA	<LOQ	0.00322	%	< 0.00322		Acceptable				
CBN	<LOQ	0.00322	%	< 0.00322		Acceptable				
exo-THC	<LOQ	0.00322	%	< 0.00322		Acceptable				
δ9THC	<LOQ	0.00322	%	< 0.00322		Acceptable				
δ8THC	<LOQ	0.00322	%	< 0.00322		Acceptable				
9SaTHC	<LOQ	0.00322	%	< 0.00322		Acceptable				
CB	<LOQ	0.00322	%	< 0.00322		Acceptable				
9RaTHC	<LOQ	0.00322	%	< 0.00322		Acceptable				
CB	<LOQ	0.00322	%	< 0.00322		Acceptable				
THCA	<LOQ	0.00322	%	< 0.00322		Acceptable				
CBLA	<LOQ	0.00322	%	< 0.00322		Acceptable				
CBLA	<LOQ	0.00322	%	< 0.00322		Acceptable				
δ9THCP	<LOQ	0.00322	%	< 0.00322		Acceptable				
CB	<LOQ	0.00322	%	< 0.00322		Acceptable				

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

Units of Measure:
 %- Percent



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 503-254-1794



Report Number: 24-003596/D001.R000
Report Date: 04/09/2024
ORELAP#: OR100028
Purchase Order:
Received: 04/02/24 12:52

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

Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 2402558						
Sample Duplicate		Sample ID: 24-0035490001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDA	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
CBDA	0.0199	0.0203	0.00327	%	1.86	< 20	Acceptable	
CBSA	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
CBS	0.0153	0.0157	0.00327	%	2.57	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
deltaTHCV	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
deltaTHC	0.240	0.244	0.00327	%	1.63	< 20	Acceptable	
deltaTHC	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
9SaTHC	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
9RaTHC	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
deltaTHCP	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00327	%	NA	< 20	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent



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

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2402688					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec.	Limits	Notes
Propane	ND	< 200		441	584	µg/g	75.5	60 - 120	
Isobutane	ND	< 200		554	767	µg/g	72.2	60 - 120	
Butane	ND	< 200		559	782	µg/g	71.5	60 - 120	
2,2-Dimethylpropane	ND	< 200		671	939	µg/g	71.5	60 - 120	
Methanol	ND	< 200		1260	1600	µg/g	78.8	60 - 120	
Ethylene Oxide	ND	< 30		42.9	57.1	µg/g	75.1	60 - 120	
2-Methylbutane	ND	< 200		1240	1600	µg/g	77.5	60 - 120	
Pentane	ND	< 200		1240	1600	µg/g	77.5	60 - 120	
Ethanol	ND	< 200		1250	1600	µg/g	78.1	70 - 130	
Ethyl Ether	ND	< 200		1200	1600	µg/g	75.0	60 - 120	
2,2-Dimethylbutane	ND	< 30		123	163	µg/g	75.5	60 - 120	
Acetone	ND	< 200		1240	1610	µg/g	77.0	60 - 120	
2-Propanol	ND	< 200		1270	1600	µg/g	79.4	60 - 120	
Ethyl formate	ND	< 500		1230	1620	µg/g	75.9	70 - 130	
Acetonitrile	ND	< 100		364	481	µg/g	75.7	60 - 120	
Methyl Acetate	ND	< 500		1240	1610	µg/g	77.0	70 - 130	
2,3-Dimethylbutane	ND	< 30		125	161	µg/g	77.6	60 - 120	
Dichloromethane	ND	< 60		350	481	µg/g	72.8	60 - 120	
2-Methylpentane	ND	< 30		114	162	µg/g	70.4	60 - 120	
MTBE	ND	< 500		1220	1610	µg/g	75.8	70 - 130	
3-Methylpentane	ND	< 30		116	163	µg/g	71.2	60 - 120	
Hexane	ND	< 30		119	163	µg/g	73.0	60 - 120	
1-Propanol	ND	< 500		1320	1600	µg/g	82.5	70 - 130	
Methylethylketone	ND	< 500		1300	1610	µg/g	80.7	70 - 130	
Ethyl acetate	ND	< 200		1270	1610	µg/g	78.9	60 - 120	
2-Butanol	ND	< 200		1260	1600	µg/g	78.8	60 - 120	
Tetrahydrofuran	ND	< 100		354	487	µg/g	72.7	60 - 120	
Cyclohexane	ND	< 200		1150	1610	µg/g	71.4	60 - 120	
2-methyl-1-propanol	ND	< 500		1200	1610	µg/g	74.5	70 - 130	
Benzene	ND	< 1		3.3	4.88	µg/g	67.6	60 - 120	
Isopropyl Acetate	ND	< 200		1250	1610	µg/g	77.6	60 - 120	
Heptane	ND	< 200		1250	1600	µg/g	78.1	60 - 120	
1-Butanol	ND	< 500		1190	1610	µg/g	73.9	70 - 130	
Propyl Acetate	ND	< 500		1250	1610	µg/g	77.6	70 - 130	
1,4-Dioxane	ND	< 100		334	484	µg/g	69.0	60 - 120	
2-Ethoxyethanol	ND	< 30		128	162	µg/g	77.8	60 - 120	
Methylisobutylketone	ND	< 500		1240	1630	µg/g	76.1	70 - 130	
3-Methyl-1-butanol	ND	< 500		1180	1610	µg/g	73.3	70 - 130	
Ethylene Glycol	ND	< 200		323	498	µg/g	66.1	60 - 120	
Toluene	ND	< 100		345	489	µg/g	71.0	60 - 120	
Isobutyl Acetate	ND	< 500		1230	1610	µg/g	76.4	70 - 130	
1-Pentanol	ND	< 500		1210	1600	µg/g	75.6	70 - 130	
Butyl Acetate	ND	< 500		1210	1600	µg/g	75.6	70 - 130	
Ethylbenzene	ND	< 200		661	981	µg/g	67.7	60 - 120	
m,p-Xylene	ND	< 200		684	973	µg/g	68.2	60 - 120	
o-Xylene	ND	< 200		624	963	µg/g	64.8	60 - 120	
Cumene	ND	< 30		102	164	µg/g	62.2	60 - 120	
Anisole	ND	< 500		1030	1600	µg/g	64.4	70 - 130	Q8
DMSO	ND	< 500		1270	1610	µg/g	78.9	70 - 130	
1,2-dimethoxyethane	ND	< 50		141	170	µg/g	82.9	70 - 130	
Triethylamine	ND	< 500		1200	1600	µg/g	75.0	70 - 130	
N,N-dimethylformamide	ND	< 150		329	482	µg/g	67.2	70 - 130	Q8
N,N-dimethylacetamide	ND	< 150		337	489	µg/g	69.1	70 - 130	Q8
Pyridine	ND	< 50		113	164	µg/g	68.9	70 - 130	Q8
Sulfone	ND	< 50		112	169	µg/g	66.3	70 - 130	Q8
1,2-Dichloroethane	ND	< 1		0.817	1	µg/g	81.7	70 - 130	
Chloroform	ND	< 1		0.829	1	µg/g	82.9	70 - 130	
Trichloroethylene	ND	< 1		0.808	1	µg/g	80.8	70 - 130	
1,1-Dichloroethane	ND	< 1		0.838	1	µg/g	83.8	70 - 130	



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 Received: 04/02/24 12:52

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

QC- Sample Duplicate Sample ID: 24-003483-0001

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	
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	
Amsol	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.