Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-003350/D001.R000
Report Date: 04/13/2023
ORELAP#: OR100028
Purchase Order:
Received: 03/20/23 11:54

Customer: NW Natural Goods
Product identity: HEMP - PCH 003
Client/Metrc ID: .
Laboratory ID: 23-003350-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status
CBC per 4g	10.2		mg/4g	
CBD per 4g	20.8		mg/4g	
CBG per 4g	0.576		mg/4g	
CBT per 4g	1.44		mg/4g	

CBD-Total per Serving Size 20.8 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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Received: 03/20/23 11:54

Customer: NW Natural Goods

Product identity: HEMP - PCH 003
Client/Metrc ID: .
Sample Date:
Laboratory ID: 23-003350-0001
Evidence of Cooling: No
Temp: 19.2 °C
Relinquished by: Ramos
Serving Size #1: 4 g

Sample Results

Potency per 4g **Method:** J AOAC 2015 V98-6 (mod)[þ] **Units** mg/se **Batch:** 2305660 **Analyze:** 3/22/23 3:56:00 AM

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	10.2		mg/4g	0.124	
CBC-A per 4g	< LOQ		mg/4g	0.124	
CBC-Total per 4g	10.2		mg/4g	0.232	
CBD per 4g	20.8		mg/4g	0.124	
CBD-A per 4g	< LOQ		mg/4g	0.124	
CBD-Total per 4g	20.8		mg/4g	0.232	
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	0.576		mg/4g	0.124	
CBG-A per 4g	< LOQ		mg/4g	0.124	
CBG-Total per 4g	0.576		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	0.232	
CBN per 4g	< LOQ		mg/4g	0.124	
CBT per 4g	1.44		mg/4g	0.124	
Δ8-THCV 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	0.247	
Δ8-THC per 4g	< LOQ		mg/4g	0.124	
Δ9-THC per 4g	< LOQ		mg/4g	0.124	
exo-THC per 4g	< LOQ		mg/4g	0.124	
THC-A per 4g	< LOQ		mg/4g	0.124	
THC-Total per 4g	< LOQ		mg/4g	0.232	
THCV per 4g	< LOQ		mg/4g	0.124	
THCV-A per 4g	< LOQ		mg/4g	0.124	
THCV-Total per 4g	< LOQ		mg/4g	0.232	
Total Cannabinoids per 4g	33.1		mg/4g		

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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2305799	03/24/23	AOAC 991.14 (Petrifilm)þ		
Total Coliforms	< LOQ		cfu/g	10	2305799	03/24/23	AOAC 991.14 (Petrifilm)þ		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2305805	03/25/23	AOAC 2014.05 (RAPID)þ		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2305805	03/25/23	AOAC 2014.05 (RAPID)þ		

Solvents

Method: Residual Solvents by GC/MSþ **Units** µg/g **Batch** 2305395 **Analyze** 04/04/23 02:06 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)þ **Units** mg/kg **Batch** 2305720 **Analyze** 03/27/23 04:48 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	0.0177	2305665	03/21/23	AOAC 2013.06 (mod.)þ	pass	
Cadmium¥	< LOQ	0.200	mg/kg	0.0177	2305665	03/21/23	AOAC 2013.06 (mod.)þ	pass	
Lead¥	< LOQ	0.500	mg/kg	0.0177	2305665	03/21/23	AOAC 2013.06 (mod.)þ	pass	
Mercury¥	< LOQ	0.100	mg/kg	0.00885	2305665	03/21/23	AOAC 2013.06 (mod.)þ	pass	

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Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Moisture (Loss on Drying)	18.4		g/100g	0.10	2305399	04/11/23	AOAC 925.10 (mod.)[þ]		
Water Activity	0.694		Aw	0.030	2305379	04/07/23	AOAC 978.18[þ]		

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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.

ᵇ = 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
Aw = Water Activity
% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager

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Cannabis Multi-Residue Profile, Limits of Quantitation

Compound	LOQ (mg/kg)
Abamectin	0.100
Acephate	0.100
Acequinocyl	0.100
Acetamiprid	0.020
Acetochlor	0.100
Acrinathrin	0.100
Alachlor	0.100
Aldicarb	0.100
Aldicarb sulfoxide	0.100
Aldoxycarb (Aldicarb-sulfone)	0.100
Aldrin	0.100
Ametocrtradin	0.020
Ametryn	0.500
Aspon	0.100
Asulam	0.100
Atrazine	0.100
Atrazine-desethyl	0.100
Azinphos-ethyl	0.020
Azinphos-methyl	0.020
Azoxystrobin	0.020
Benalaxyl	0.020
Bendiocarb	0.020
Benfluralin	0.100
Benoxacor	0.050
Bensulide	0.050
BHC alpha isomer	0.100
BHC beta isomer	0.100
BHC delta isomer	0.500
Bifenazate	0.020
Bifenthrin	0.020
Boscalid	0.020
Bromophos-ethyl	0.100
Bromophos-methyl	0.200
Bromopropylate	0.100
Bromuconazole	0.100
Bupirimate	0.020
Buprofezin	0.050
Butachlor	0.500
Butralin	0.200
Butylate	0.100
Cadusafos	0.020
Captan	1.000
Carbaryl	0.050
Carbendazim	0.100
Carbofuran	0.020
Carbophenothion	0.200
Carboxin	0.020
Carfentrazone-ethyl	0.100
Chlorantraniliprole	0.020
Chlordane, cis-	0.200
Chlordane, trans-	0.200
Chlorfenapyr	0.500
Chlorfenson	0.200
Chlorfenvinphos	0.050
Chlorobenzilate	0.100
Chloroneb	0.200
Chlorpyrifos	0.050
Chlorpyrifos-methyl	0.200
CIPC	1.000

Compound	LOQ (mg/kg)
Clethodim	0.050
Clethodim Sulfone	0.050
Clethodim Sulfoxide	0.050
Clofentezine	0.020
Clomazone	0.020
Clothianidin	0.200
Coumaphos	0.050
Crotoxyphos	0.020
Cyanazine	0.020
Cyanofenphos	0.020
Cyantraniliprole	0.050
Cyazofamid	0.020
Cycloate	0.100
Cyfluthrin	0.200
Cyhalothrin, lambda	0.200
Cymoxanil	0.050
Cypermethrin	0.200
Cyprodinil	0.100
Dacthal	0.100
Daminozide	0.100
DCPMU	0.050
DDD, o,p'-	0.100
DDD, p,p'-	0.100
DDE, o,p'-	0.100
DDE, p,p'-	0.100
DDT, o,p'-	0.100
DDT, p,p'-	0.100
DEF (Tribufos)	0.100
Deltamethrin	0.100
Desmedipham	0.100
Diallate	0.100
Diazinon	0.020
Diazoxon	0.100
Dichlobenil	0.100
Dichlofluanid	0.100
Dichlorvos	0.100
Diclobutrazol	0.050
Dicofol	0.100
Dicrotophos	0.050
Dieldrin	0.100
Diethofencarb	0.020
Diethyltoluamide (DEET)	0.050
Difenoconazole	0.100
Dimethenamid	0.050
Dimethoate	0.050
Dimethomorph	0.050
Diniconazole	0.200
Dinotefuran	0.200
Dioxathion	0.100
Diphenamid	0.020
Diphenylamine	0.100
Disulfoton	0.100
Disulfoton sulfone	0.100
Disulfoton sulfoxide	0.100
Diuron	0.050
Edifenphos	0.050
Endosulfan alpha	0.200
Endosulfan beta	0.200
Endosulfan sulfate	0.100

Compound	LOQ (mg/kg)
Endrin	0.100
EPN	0.050
EPTC	0.100
Esfenvalerate/Fenvalerate	0.200
Etaconazole	0.100
Ethalfluralin	0.100
Ethiofencarb	0.050
Ethion	0.200
Ethirimol	0.100
Ethofumesate	0.050
Ethoprophos	0.020
Etofenprox	0.020
Etoxazole	0.020
Etridiazole	0.100
Etrimfos	0.020
Famoxadone	0.200
Famphur	0.100
Fenamidone	0.020
Fenamiphos	0.020
Fenamiphos sulfone	0.020
Fenamiphos sulfoxide	0.020
Fenazaquin	0.100
Fenbuconazole	0.100
Fenchlorphos	0.100
Fenchlorphos-oxon	0.100
Fenhexamid	0.100
Fenitrothion	0.100
Fenobucarb	0.050
Fenoxycarb	0.020
Fenpropathrin	0.050
Fenpyroximate	0.020
Fenson	0.100
Fensulfothion	0.020
Fensulfothion oxon	0.020
Fensulfothion sulfone	0.100
Fensulfothion-oxon-sulfone	0.020
Fenthion	0.050
Fenthion oxon	0.020
Fenthion oxon sulfone	0.100
Fenthion sulfone	0.050
Fenuron	0.020
Fipronil	0.100
Flonicamid	0.100
Fluchloralin	0.100
Flucythrinate	0.100
Fludioxonil	0.200
Flufenacet	0.020
Flumioxazin	0.100
Fluometuron	0.020
Fluopicolide	0.050
Fluopyram	0.020
Fluoxastrobin	0.050
Flupyradifurone	0.020
Fluridone	0.100
Flusilazole	0.020
Flutolanil	0.020
Flutriafol	0.020
Fluvalinate, tau-	0.100
Fluxapyroxad	0.020

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Cannabis Multi-Residue Profile, Limits of Quantitation

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
Fomesafen	0.100	Mexacarbate	0.020	Propamocarb	0.050
Fonofos	0.100	MGK 264	0.020	Propanil	0.050
Forchlorfenuron	0.050	Mirex	0.100	Propargite	0.050
Formetanate	0.050	Molinate	0.050	Propazine	0.020
Furathiocarb	0.020	Monocrotophos	0.100	Propetamphos	0.050
Heptachlor	0.100	Monolinuron	0.020	Propham	0.050
Heptachlor epoxide	0.100	Myclobutanil	0.050	Propiconazole	0.050
Heptenophos	0.100	Naled	0.100	Propoxur	0.050
Hexachlorobenzene	0.100	Napropamide	0.050	Propoxycarbazone Na	0.050
Hexaconazole	0.100	Neburon	0.020	Propyzamide	0.050
Hexazinone	0.100	Nitrapyrin	0.100	Prothiofos	0.100
Hexythiazox	0.020	Norflurazon	0.050	Pyraclostrobin	0.020
Imazalil	0.100	Omethoate	0.100	Pyrazophos	0.050
Imidacloprid	0.100	O-Phenylphenol	0.100	Pyrethrins	0.050
Indaziflam	0.020	Oxadixyl	0.100	Pyridaben	0.020
Indoxacarb	0.020	Oxamyl	0.100	Pyridafol	0.100
Iprobenfos	0.100	Oxamyl-oxime	0.100	Pyridate	0.020
Iprodione	0.100	Oxychlordane	0.100	Pyrimethanil	0.050
Isobenzan	0.100	Oxydemeton-Methyl	0.100	Pyriproxifen	0.020
Isocarbophos	0.500	Oxythioquinox	0.200	Pyroxasulfone	0.020
Isodrin	0.100	Paclobutrazol	0.050	Pyroxsulam	0.020
Isofenphos	0.050	Paraoxon-ethyl	0.020	Quinalphos	0.050
Isofenphos-methyl	0.020	Paraoxon methyl	0.100	Quinoxyfen	0.050
Isofenphos oxon	0.050	Parathion ethyl	0.100	Quintozene (PCNB)	0.200
Isoprocarb	0.020	Parathion methyl	0.200	Resmethrin	0.050
Isopropalin	0.200	Penconazole	0.050	Rotenone	0.050
Isoprothiolane	0.050	Pendimethalin	0.050	S421	0.100
Isoproturon	0.050	Penflufen	0.020	Simazine	0.100
Isoxaben	0.050	Pentachloroaniline	0.100	Simetryn	0.200
Isoxaflutole	0.050	Pentachloroanisole	0.100	Spinetoram	0.020
Kresoxim-methyl	0.050	Pentachlorobenzene (PCB)	0.100	Spinosad	0.050
Lactofen	0.500	Pentachlorothioanisole (PCTA)	0.100	Spirodiclofen	0.100
Lenacil	0.100	Penthiopyrad	0.020	Spiromesifen	0.050
Lindane (gamma BHC)	0.100	Permethrin	0.050	Spirotetramat	0.050
Linuron	0.020	Perthane	0.100	Spiroxamine	0.020
Malaoxon	0.050	Phenmedipham	0.050	Sulfotep	0.050
Malathion	0.050	Phenthoate	0.050	Sulfoxaflor	0.050
Mandipropamid	0.020	Phorate	0.050	Sulprofos	0.020
Mecarbam	0.020	Phorate Sulfone	0.050	Tebuconazole	0.100
Mepanipyrim	0.050	Phorate Sulfoxide	0.050	Tebufenozide	0.020
Merphos	0.500	Phosalone	0.050	Tebuthiuron	0.020
Metalaxyl	0.050	Phosmet	0.100	Tecnazene	0.100
Metaldehyde	0.050	Phosphamidon	0.050	Tefluthrin	0.100
Metconazole	0.100	Phoxim	0.050	Terbufos	0.020
Methacrifos	0.100	Pinoxaden	0.020	Terbufos sulfone	0.050
Methamidophos	0.050	Piperonyl butoxide	0.050	Terbufos sulfoxide	0.050
Methidathion	0.050	Pirimicarb	0.020	Terbuthylazine	0.020
Methiocarb	0.050	Pirimiphos-methyl	0.050	Terbutryn	0.020
Methiocarb sulfone	0.100	Pirimiphos-ethyl	0.020	Tetrachlorvinphos	0.050
Methiocarb sulfoxide	0.100	Prallethrin	0.100	Tetraconazole	0.050
Methomyl	0.100	Prochloraz	0.020	Tetradifon	0.200
Methoxychlor	0.100	Procymidone	0.100	Tetramethrin	0.050
Methoxyfenozide	0.020	Profenofos	0.100	Tetrasul	0.100
Metobromuron	0.050	Profluralin	0.100	Thiabendazole	0.100
Metolachlor	0.100	Promecarb	0.050	Thiabendazole, 5-hydroxy	0.100
Metolcarb	0.050	Prometon	0.100	Thiacloprid	0.050
Metrafenone	0.050	Prometryn	0.020	Thiamethoxam	0.100
Metribuzin	0.100	Propachlor	0.020	Thiobencarb	0.050
Mevinphos	0.100			Thiodicarb	0.050
				Thiophanate-methyl	0.050

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Cannabis Multi-Residue Profile, Limits of Quantitation

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
Tolclofos-methyl	0.100	Triazophos	0.020	Trifloxystrobin	0.020
Triforin	0.100	Tolylfluanid	0.050	Triticonazole	0.050
Tralkoxydim	0.100	Tridiphane	0.500	Vinclozolin	0.100
Triadimefon	0.050	Triflumizole	0.020	Zoxamide	0.020
Triallate	0.100	Trifluralin	0.100		

LOQ = Limit of Quantitation, mg/kg

Factors affecting the LOQ include instrumentation sensitivity for a particular analyte, sample size, moisture content (percent solids) of the sample, effectiveness of the cleanup on the sample extract, and especially the type of sample matrix.

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Columbia LABORATORIES A Tentamus Company

Hemp & Cannabis: Usable / Extract / Finished Product
Chain of Custody Record

ORELAP ID: **OR100028** ANAB ISO 17025 ID: **AT-1508**

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

4036

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

Billing Contact (if different)

Name: _____ **Email:** _____
Address: _____
City: _____ **State:** _____ **Zip:** _____
Ph: (____) - _____

PO Number: _____
Project ID: _____
Batch ID: _____
Sampled by: _____
Custom Reporting: _____

Source Material: ☐ - Ind. Hemp product | ☐ - Rec. Cannabis
Reporting Type: ☐ - Compliance | ☐ - R&D
Report to: ☐ - METRC | ☐ - ODA | ☐ - USDA | ☐ - Other:

Turnaround time (TAT - Business Days):
■ - 5BD | ☐ - 3BD* | ☐ - 2BD*
**Check for availability*

Lab ID	Client Sample Identification	Sample date	Pesticides - OR 59 Compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Water Activity	Moisture	Micro: Yeast and Mold	Micro: E.Coli and Total Coliform	Heavy Metals	Mycotoxins	Material Type †	Weight (Units)	Comments/Metrc ID
	HEMP - PCH 003	03/20/23		✔	✔	✔	✔	✔	✔	✔	✔			80g	

Signature - Relinquished By:	Date	Time	Signature - Received By:	Date	Time
Annie Nair	03/20/23	1030		3.20.23	1030
	3.20.23	1052	MRM	3.20	11:54

Lab Use Only:
☐ Shipped Via: _____ or ☐ Client drop off
Evidence of cooling: ☐ Yes | ☐ No - Temp (°C): 19.2
Sample in good condition: ☐ Yes | ☐ No _____
Payment: ☐ Cash | ☐ Check | ☐ CC | ☐ Net: _____
Prelog storage:

† - **Material Type Codes:** Plant Material (P) ; Isolate (I) ; Concentrate/Extract (C) ; Tincture/Topical (T) ; Edible (E) ; Beverage (B) ; Vapor Product (V)

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms

12423 NE Whitaker Way
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Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-003350/D001.R000
Report Date: 04/13/2023
ORELAP#: OR100028
Purchase Order:
Received: 03/20/23 11:54

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

Laboratory Quality Control Results

Residual Solvents Batch ID: 2305395

	Method Blank					Laboratory Control Sample							
Analyte	Result		LOQ	Notes	Result	Spike	Units	% Rec	Limits			Notes
Propane	ND	<	200		430	584	µg/g	73.6	60	-	120	
Isobutane	ND	<	200		539	767	µg/g	70.3	60	-	120	
Butane	ND	<	200		535	782	µg/g	68.4	60	-	120	
2,2-Dimethylpropane	ND	<	200		722	939	µg/g	76.9	60	-	120	
Methanol	ND	<	200		1590	1610	µg/g	98.8	60	-	120	
Ethylene Oxide	ND	<	30		43.9	57.1	µg/g	76.9	60	-	120	
2-Methylbutane	ND	<	200		1680	1600	µg/g	105.0	60	-	120	
Pentane	ND	<	200		1650	1610	µg/g	102.5	60	-	120	
Ethanol	ND	<	200		1550	1600	µg/g	96.9	70	-	130	
Ethyl Ether	ND	<	200		1610	1610	µg/g	100.0	60	-	120	
2,2-Dimethylbutane	ND	<	30		179	173	µg/g	103.5	60	-	120	
Acetone	ND	<	200		1580	1620	µg/g	97.5	60	-	120	
2-Propanol	ND	<	200		1420	1600	µg/g	88.8	60	-	120	
Ethyl Formate	ND	<	500		1990	1610	µg/g	123.6	70	-	130	
Acetonitrile	ND	<	100		461	488	µg/g	94.5	60	-	120	
Methyl Acetate	ND	<	500		1570	1610	µg/g	97.5	70	-	130	
2,3-Dimethylbutane	ND	<	30		150	165	µg/g	90.9	60	-	120	
Dichloromethane	ND	<	60		431	487	µg/g	88.5	60	-	120	
2-Methylpentane	ND	<	30		166	160	µg/g	103.8	60	-	120	
MTBE	ND	<	500		1600	1600	µg/g	100.0	70	-	130	
3-Methylpentane	ND	<	30		126	161	µg/g	78.3	60	-	120	
Hexane	ND	<	30		177	162	µg/g	109.3	60	-	120	
1-Propanol	ND	<	500		1700	1620	µg/g	104.9	70	-	130	
Methylethylketone	ND	<	500		1630	1610	µg/g	101.2	70	-	130	
Ethyl acetate	ND	<	200		1490	1600	µg/g	93.1	60	-	120	
2-Butanol	ND	<	200		1400	1610	µg/g	87.0	60	-	120	
Tetrahydrofuran	ND	<	100		436	483	µg/g	90.3	60	-	120	
Cyclohexane	ND	<	200		1490	1610	µg/g	92.5	60	-	120	
2-methyl-1-propanol	ND	<	500		1710	1630	µg/g	104.9	70	-	130	
Benzene	ND	<	1		4.73	4.98	µg/g	95.0	60	-	120	
Isopropyl Acetate	ND	<	200		1450	1610	µg/g	90.1	60	-	120	
Heptane	ND	<	200		1510	1620	µg/g	93.2	60	-	120	
1-Butanol	ND	<	500		1750	1600	µg/g	109.4	70	-	130	
Propyl Acetate	ND	<	500		1670	1620	µg/g	103.1	70	-	130	
1,4-Dioxane	ND	<	100		449	494	µg/g	90.9	60	-	120	
2-Ethoxyethanol	ND	<	30		121	165	µg/g	73.3	60	-	120	
Methylisobutylketone	ND	<	500		1670	1610	µg/g	103.7	70	-	130	
3-Methyl-1-butanol	ND	<	500		1720	1610	µg/g	106.8	70	-	130	
Ethylene Glycol	ND	<	200		352	486	µg/g	72.4	60	-	120	
Toluene	ND	<	100		420	513	µg/g	81.9	60	-	120	
Isobutyl Acetate	ND	<	500		1640	1600	µg/g	102.5	70	-	130	
1-Pentanol	ND	<	500		1830	1610	µg/g	113.7	70	-	130	
Butyl Acetate	ND	<	500		1710	1610	µg/g	106.2	70	-	130	
Ethylbenzene	ND	<	200		806	967	µg/g	83.4	60	-	120	
m,p-Xylene	ND	<	200		1260	994	µg/g	126.8	60	-	120	
o-Xylene	ND	<	200		830	992	µg/g	83.7	60	-	120	
Cumene	ND	<	30		127	171	µg/g	74.3	60	-	120	
Anisole	ND	<	500		1710	1610	µg/g	106.2	70	-	130	
DMSO	ND	<	500		1860	1610	µg/g	115.5	70	-	130	
1,2-dimethoxyethane	ND	<	50		187	172	µg/g	108.7	70	-	130	
Triethylamine	ND	<	500		1770	1620	µg/g	109.3	70	-	130	
N,N-dimethylformamide	ND	<	150		602	499	µg/g	120.6	70	-	130	
N,N-dimethylacetamide	ND	<	150		882	491	µg/g	179.6	70	-	130	
Pyridine	ND	<	50		186	171	µg/g	108.8	70	-	130	
Sulfolane	ND	<	50		164	160	µg/g	102.5	70	-	130	
1,2-Dichloroethane	ND	<	1		0.972	1	µg/g	97.2	70	-	130	
Chloroform	ND	<	1		1.03	1	µg/g	103.0	70	-	130	
Trichloroethylene	ND	<	1		0.929	1	µg/g	92.9	70	-	130	
Ethylene Oxide	ND	<	1		0.946	1	µg/g	94.6	70	-	130	
Dichloromethane	ND	<	1		1	1	µg/g	100.0	70	-	130	
Benzene	ND	<	1		0.999	1	µg/g	99.9	70	-	130	
1,1-Dichloroethane	ND	<	1		0.976	1	µg/g	97.6	70	-	130	

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

QC- Sample Duplicate — Sample ID: 3040-01

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	
Ethylene Oxide	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Benzene	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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Laboratory Quality Control Results

JAOAC 2015 V98-6 — Batch ID: 2305660

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	%Rec	Limits	Evaluation	Notes
CBDVA	2	0.0331	0.033	%	99.3	80.0 - 120	Acceptable	
CBDV	2	0.0337	0.033	%	101	80.0 - 120	Acceptable	
CBE	2	0.0336	0.033	%	101	80.0 - 120	Acceptable	
CBDA	1	0.0304	0.031	%	98.4	90.0 - 110	Acceptable	
CBGA	1	0.0254	0.026	%	98.7	80.0 - 120	Acceptable	
CBG	1	0.0309	0.031	%	99.4	80.0 - 120	Acceptable	
CBD	1	0.0300	0.027	%	109	90.0 - 110	Acceptable	
THCV	2	0.0345	0.033	%	103	80.0 - 120	Acceptable	
d8THCV	2	0.0331	0.033	%	99.2	80.0 - 120	Acceptable	
THCVA	2	0.0344	0.033	%	103	80.0 - 120	Acceptable	
CBN	1	0.0268	0.027	%	99.3	80.0 - 120	Acceptable	
exo-THC	2	0.0324	0.033	%	97.2	80.0 - 120	Acceptable	
d9THC	1	0.0314	0.031	%	101	90.0 - 110	Acceptable	
d8THC	1	0.0312	0.031	%	100	90.0 - 110	Acceptable	
9S-d10THC	1	0.0313	0.031	%	99.5	80.0 - 120	Acceptable	
CBL	2	0.0336	0.033	%	101	80.0 - 120	Acceptable	
9R-d10THC	1	0.0312	0.032	%	97.7	80.0 - 120	Acceptable	
CBC	2	0.0347	0.033	%	104	80.0 - 120	Acceptable	
THCA	1	0.0358	0.036	%	99.5	90.0 - 110	Acceptable	
CBCA	2	0.0340	0.033	%	102	80.0 - 120	Acceptable	
CBLA	2	0.0325	0.033	%	97.4	80.0 - 120	Acceptable	
CBT	2	0.0325	0.033	%	97.6	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBDV	<LOQ	0.003	%	< 0.003	Acceptable	
CBE	<LOQ	0.003	%	< 0.003	Acceptable	
CBDA	<LOQ	0.003	%	< 0.003	Acceptable	
CBGA	<LOQ	0.003	%	< 0.003	Acceptable	
CBG	<LOQ	0.003	%	< 0.003	Acceptable	
CBD	<LOQ	0.003	%	< 0.003	Acceptable	
THCV	<LOQ	0.003	%	< 0.003	Acceptable	
d8THCV	<LOQ	0.003	%	< 0.003	Acceptable	
THCVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBN	<LOQ	0.003	%	< 0.003	Acceptable	
exo-THC	<LOQ	0.003	%	< 0.003	Acceptable	
d9THC	<LOQ	0.003	%	< 0.003	Acceptable	
d8THC	<LOQ	0.003	%	< 0.003	Acceptable	
9S-d10THC	<LOQ	0.003	%	< 0.003	Acceptable	
CBL	<LOQ	0.003	%	< 0.003	Acceptable	
9R-d10THC	<LOQ	0.003	%	< 0.003	Acceptable	
CBC	<LOQ	0.003	%	< 0.003	Acceptable	
THCA	<LOQ	0.003	%	< 0.003	Acceptable	
CBCA	<LOQ	0.003	%	< 0.003	Acceptable	
CBLA	<LOQ	0.003	%	< 0.003	Acceptable	
CBT	<LOQ	0.003	%	< 0.003	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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Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC 2015 V98-6 — Batch ID: 2305660
Sample Duplicate — Sample ID: 99-004037-0001

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	0.0101	0.0099	0.003	%	1.80	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0040	0.0038	0.003	%	6.29	< 20	Acceptable	
CBD	3.02	2.90	0.003	%	4.10	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d9THC	0.245	0.239	0.003	%	2.24	< 20	Acceptable	
d8THC	0.0275	0.0260	0.003	%	5.59	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.003	%	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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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	Quantitaion 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.