



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



**Report Number:** 23-007471/D002.R000  
**Report Date:** 06/30/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 06/23/23 11:37

**Customer:** NW Natural Goods  
**Product identity:** HEMP - BB 0104  
**Client/Metric ID:** .  
**Laboratory ID:** 23-007471-0001

### Summary

**Potency:**

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	0.233		mg/4g		CBD-Total per Serving Size 27.6 mg/4g
CBD per 4g	27.6		mg/4g		
CBG per 4g	0.836		mg/4g		THC-Total per Serving Size <LOQ
					(Reported in milligrams per serving)

**Residual Solvents:**

*All analytes passing and less than LOQ.*

**Pesticides:**

Analyte	Result (mg/kg)	Limits (mg/kg)	Status
Multi-Residue Pesticide Profile	< LOQ for all analytes		

**Metals:**

*Less than LOQ for all analytes.*

**Microbiology:**

*Less than LOQ for all analytes.*



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**Customer:** NW Natural Goods

**Product identity:** HEMP - BB 0104

**Client/Metric ID:** .

**Sample Date:**

**Laboratory ID:** 23-007471-0001

**Evidence of Cooling:** No

**Temp:** 21.0

**Relinquished by:** ramos

**Serving Size #1:** 4 g

### Sample Results

Potency per 4g					
Method: J AOAC 2015 V98-6 (mod) <sup>b</sup>					
Units mg/se Batch: 2308611					
Analyze: 6/28/23 12:41:00 AM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	0.233		mg/4g	0.127	
CBC-A per 4g	< LOQ		mg/4g	0.127	
CBC-Total per 4g	< LOQ		mg/4g	0.238	
CBD per 4g	27.6		mg/4g	0.127	
CBD-A per 4g	< LOQ		mg/4g	0.127	
CBD-Total per 4g	27.6		mg/4g	0.238	
CBDV per 4g	< LOQ		mg/4g	0.127	
CBDV-A per 4g	< LOQ		mg/4g	0.127	
CBDV-Total per 4g	< LOQ		mg/4g	0.237	
CBE per 4g	< LOQ		mg/4g	0.127	
CBG per 4g	0.836		mg/4g	0.127	
CBG-A per 4g	< LOQ		mg/4g	0.127	
CBG-Total per 4g	0.836		mg/4g	0.237	
CBL per 4g	< LOQ		mg/4g	0.127	
CBL-A per 4g	< LOQ		mg/4g	0.127	
CBL-Total per 4g	< LOQ		mg/4g	0.238	
CBN per 4g	< LOQ		mg/4g	0.127	
CBT per 4g	< LOQ		mg/4g	0.127	
Δ8-THCV per 4g	< LOQ		mg/4g	0.127	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.127	
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.127	
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.254	
Δ8-THC per 4g	< LOQ		mg/4g	0.127	
Δ9-THC per 4g	< LOQ		mg/4g	0.127	
delta-9-THCP per 4g	< LOQ		mg/4g	0.127	
exo-THC per 4g	< LOQ		mg/4g	0.127	
THC-A per 4g	< LOQ		mg/4g	0.127	
THC-Total per 4g	< LOQ		mg/4g	0.238	
THCV per 4g	< LOQ		mg/4g	0.127	
THCV-A per 4g	< LOQ		mg/4g	0.127	
THCV-Total per 4g	< LOQ		mg/4g	0.238	
Total Cannabinoids per 4g	28.7		mg/4g		



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**Microbiology**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2308521	06/26/23 AOAC 991.14 (Petrifilm) <sup>P</sup>		
Total Coliforms	< LOQ		cfu/g	10	2308521	06/26/23 AOAC 991.14 (Petrifilm) <sup>P</sup>		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2308522	06/26/23 AOAC 2014.05 (RAPID) <sup>P</sup>		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2308522	06/26/23 AOAC 2014.05 (RAPID) <sup>P</sup>		

**Solvents** Method: Residual Solvents by GC/MS<sup>B</sup> Units µg/g Batch 2308587 Analyze 06/27/23 12:02 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,4-Dioxane	< LOQ	380	100	pass		2-Butanol	< LOQ	5000	200	pass	
2-Ethoxyethanol	< LOQ	160	30.0	pass		2-Methylbutane (Isopentane)	< LOQ		200		
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass	
2,2-Dimethyl butane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< LOQ		200		
2,3-Dimethyl butane	< 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	
Isopropyl benzene (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)<sup>B</sup> Units mg/kg Batch 2308641 Analyze 06/30/23 10:25 AM

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



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**Metals**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic*	< LOQ	0.200	mg/kg	0.0167	2308688	06/29/23 AOAC 2013.06 (mod.) <sup>p</sup>	pass	
Cadmium*	< LOQ	0.200	mg/kg	0.0167	2308688	06/29/23 AOAC 2013.06 (mod.) <sup>p</sup>	pass	
Lead*	< LOQ	0.500	mg/kg	0.0167	2308688	06/29/23 AOAC 2013.06 (mod.) <sup>p</sup>	pass	
Mercury*	< LOQ	0.100	mg/kg	0.00835	2308688	06/29/23 AOAC 2013.06 (mod.) <sup>p</sup>	pass	

**Nutrition**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	18.6		g/100g	0.10	2308610	06/27/23 AOAC 925.10 (mod.) <sup>p</sup>		
Water Activity	0.704		Aw	0.030	2308597	06/27/23 AOAC 978.18 <sup>p</sup>		



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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.

<sup>p</sup> = ISO/IEC 17025:2017 accredited method.

<sup>¥</sup> = 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 Mult-Residue Profile, Limits of Quantitation

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
Abamectin	0.100	Clethodim	0.050	ndrin	0.100
Acephale	0.100	Clethodim Sul one	0.050	PN	0.050
Acequinocyl	0.100	Clethodim Sul oxide	0.050	PTC	0.100
Aceamiprid	0.020	Clofenazine	0.020	s-envalera e/ envalera e	0.200
Aceochlor	0.100	Clomazone	0.020	aconazole	0.100
Acrinahrin	0.100	Clofianid	0.200	halaluralin	0.100
Alachlor	0.100	Coumaphos	0.050	hioencarb	0.050
Aldicarb	0.100	Croxyphos	0.020	hion	0.200
Aldicarb sul oxide	0.100	Cyanazine	0.020	hirimol	0.100
Aldoxycarb (Aldicarb-sul one)	0.100	Cyanoenphos	0.020	houmesa e	0.050
Aldrin	0.100	Cyaniliprole	0.050	hoprophos	0.020
Ameocradin	0.020	Cyazoamid	0.020	oenprox	0.020
Amerin	0.500	Cycloa e	0.100	oxazole	0.020
Aspon	0.100	Cyluhrin	0.200	ridiazole	0.100
Asulam	0.100	Cyhalohrin, lambda	0.200	rimos	0.020
Azinphos-methyl	0.100	Cymoxanil	0.050	amoxadone	0.200
Azinphos-methyl	0.100	Cypermethrin	0.200	amphur	0.100
Azinphos-methyl	0.020	Cyprodinil	0.100	enamidone	0.020
Azinphos-methyl	0.020	Dacal	0.100	enamiphos	0.020
Azoxystrobin	0.020	Daminozide	0.100	enamiphos sul one	0.020
Benalaxyl	0.020	DCPMU	0.050	enamiphos sul oxide	0.020
Bendiocarb	0.020	DDD, o,p'-	0.100	enazaquin	0.100
Benluralin	0.100	DDD, p,p'-	0.100	enbuconazole	0.100
Benoxacor	0.050	DD, o,p'-	0.100	enchlorphos	0.100
Bensulide	0.050	DD, p,p'-	0.100	enchlorphos-oxon	0.100
Beta-cyhalothrin isomer	0.100	DDT, o,p'-	0.100	enhexamid	0.100
Beta-cyhalothrin isomer	0.100	DDT, p,p'-	0.100	enirohion	0.100
Beta-cyhalothrin isomer	0.500	D (Tribofos)	0.100	enobucarb	0.050
Benazoxen	0.020	Delamethrin	0.100	enoxyacarb	0.020
Benfluridone	0.020	Desmedipham	0.100	enpropachlor	0.050
Boscalid	0.020	Diallate	0.100	enpyroximate	0.020
Bromophos-methyl	0.100	Diazinon	0.020	enson	0.100
Bromophos-methyl	0.200	Diazoxon	0.100	ensulohion	0.020
Bromopropylate	0.100	Dichlobenil	0.100	ensulohion oxon	0.020
Bromuconazole	0.100	Dichlofuanid	0.100	ensulohion sul one	0.100
Bupirimate	0.020	Dichlorvos	0.100	Fensulfthion-oxon-sulfone	0.020
Buprofezin	0.050	Diclobutylazole	0.050	enbion	0.050
Buthydrate	0.500	Dicozol	0.100	enbion oxon	0.020
Buthydrate	0.200	Dicrophos	0.050	enbion oxon sul one	0.100
Buthydrate	0.100	Dieldrin	0.100	enbion sul one	0.050
Cadusafos	0.020	Diehoencarb	0.020	enuron	0.020
Captafen	1.000	Diehynolamide (D-T)	0.050	ipronil	0.100
Carbaryl	0.050	Diencoconazole	0.100	lonicamid	0.100
Carbendazim	0.100	Dimehenamid	0.050	luchloralin	0.100
Carbofuran	0.020	Dimehoaxen	0.050	lucyhrinate	0.100
Carbophenothion	0.200	Dimehomorph	0.050	ludioxonil	0.200
Carboxin	0.020	Diniconazole	0.200	luenace	0.020
Carfenthiotrifluthrin	0.100	Dinoseb	0.200	lumioxazin	0.100
Chloraniliprole	0.020	Dioxahion	0.100	luomeuron	0.020
Chlordane, cis-	0.200	Diphenamid	0.020	luopicolide	0.050
Chlordane, trans-	0.200	Diphenylamine	0.100	luopyram	0.020
Chlorantraniliprole	0.500	Disulofen	0.100	luoxastrobin	0.050
Chlorantraniliprole	0.200	Disulofen sul one	0.100	lupyradiuron	0.020
Chlorantraniliprole	0.050	Disulofen sul oxide	0.100	luridone	0.100
Chlorantraniliprole	0.100	Diuron	0.050	lusilazole	0.020
Chlorantraniliprole	0.200	dienephos	0.050	luolanil	0.020
Chlorantraniliprole	0.050	ndosul an alpha	0.200	luriaol	0.020
Chlorantraniliprole	0.200	ndosul an beta	0.200	lualinate, au-	0.100
Chlorantraniliprole	1.000	ndosul an sul a e	0.100	luxaproxad	0.020



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Cannab s Mu t -Res due Prof e, L m ts of Quant tat on

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
omesa en	0.100	Mexacarba e	0.020	Propamocarb	0.050
ono os	0.100	MGK 264	0.020	Propanil	0.050
orchlor enuron	0.050	Mirex	0.100	Propargi e	0.050
orme ana e	0.050	Molina e	0.050	Propazine	0.020
ura hiocarb	0.020	Monocro ophos	0.100	Prope amphos	0.050
ep achlor	0.100	Monolinuron	0.020	Propham	0.050
ep achlor epoxide	0.100	Myclobu anil	0.050	Propiconazole	0.050
ep enphos	0.100	Naled	0.100	Propoxur	0.050
exachlorobenzene	0.100	Napropamide	0.050	Propoxycarbazone Na	0.050
exaconazole	0.100	Neburon	0.020	Propyzamide	0.050
exazinone	0.100	Ni rapyrin	0.100	Pro hio os	0.100
exy hiazox	0.020	Nor lurazon	0.050	Pyraclos robin	0.020
mazalil	0.100	Ome hoa e	0.100	Pyrazophos	0.050
midacloprid	0.100	O-Phenylphenol	0.100	Pyre hrins	0.050
ndazi lam	0.020	Oxadixyl	0.100	Pyridaben	0.020
ndoxacarb	0.020	Oxamyl	0.100	Pyrida ol	0.100
proben os	0.100	Oxamyl-oxime	0.100	Pyrida e	0.020
prodione	0.100	Oxychlorthane	0.100	Pyrima hanil	0.050
sobenzan	0.100	Oxydeme on-Me hyl	0.100	Pyriproxi en	0.020
socarbophos	0.500	Oxy hioquinox	0.200	Pyroxasul one	0.020
sodrin	0.100	Paclobu razol	0.050	Pyroxulam	0.020
so enphos	0.050	Paraaxon-e hyl	0.020	Quinalphos	0.050
so enphos-me hyl	0.020	Paraaxon me hyl	0.100	Quinoxy en	0.050
so enphos oxon	0.050	Para hion e hyl	0.100	Quin ozene (PCNB)	0.200
soproc carb	0.020	Para hion me hyl	0.200	Resme hrin	0.050
sopropalin	0.200	Penconazole	0.050	Ro enone	0.050
sopro hiolane	0.050	Pendime halin	0.050	S421	0.100
sopro uron	0.050	Pen lu en	0.020	Simazine	0.100
soxaben	0.050	Pen achloroaniline	0.100	Sime ryn	0.200
soxa lu ole	0.050	Pen achloroanisole	0.100	Spine oram	0.020
Kresoxim-me hyl	0.050	Pen achlorobenzene (PCB)	0.100	Spinosad	0.050
ac o en	0.500	Pentachlorothioanisole (PCTA)	0.100	Spirodiclo en	0.100
enacil	0.100	Pen hiopyrad	0.020	Spiromesi en	0.050
indane (gamma B C)	0.100	Perme hrin	0.050	Spiro e rama	0.050
inuron	0.020	Per hane	0.100	Spiroxamine	0.020
Malaaxon	0.050	Phenmedipham	0.050	Sul o ep	0.050
Mala hion	0.050	Phen hoa e	0.050	Sul oxa lor	0.050
Mandipropamid	0.020	Phora e	0.050	Sulpro os	0.020
Mecarbam	0.020	Phora e Sul one	0.050	Tebuconazole	0.100
Mepanipyrim	0.050	Phora e Sul oxide	0.050	Tebu enozide	0.020
Merphos	0.500	Phosalone	0.050	Tebu hiuron	0.020
Me alaxyl	0.050	Phosme	0.100	Tecnazene	0.100
Me aldehyde	0.050	Phosphamidon	0.050	Te lu hrin	0.100
Me conazole	0.100	Phoxim	0.050	Terbu os	0.020
Me hacri os	0.100	Pinoxaden	0.020	Terbu os sul one	0.050
Me hamidophos	0.050	Piperonyl bu oxide	0.050	Terbu os sul oxide	0.050
Me hida hion	0.050	Pirimicarb	0.020	Terbu hylazine	0.020
Me hiocarb	0.050	Pirimiphos-me hyl	0.050	Terbu ryn	0.020
Me hiocarb sul one	0.100	Pirimiphos-e hyl	0.020	Te rachlorvinphos	0.050
Me hiocarb sul oxide	0.100	Pralle hrin	0.100	Te raconazole	0.050
Me homyl	0.100	Prochloraz	0.020	Te radi on	0.200
Me hoxychlor	0.100	Procyimidone	0.100	Te rame hrin	0.050
Me hoxy enozide	0.020	Pro eno os	0.100	Te rasul	0.100
Me obromuron	0.050	Pro luralin	0.100	Thiabendazole	0.100
Me olachlor	0.100	Promecarb	0.050	Thiabendazole, 5-hydroxy	0.100
Me olcarb	0.050	Prome on	0.100	Thiacloprid	0.050
Me ra enone	0.050	Prome ryn	0.020	Thiame hoxam	0.100
Me ribuzin	0.100	Propachlor	0.020	Thiobencarb	0.050
Mevinphos	0.100			Thiodicarb	0.050
				Thiophana e-me hyl	0.050



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Cannab s Mu t-Res due Prof e, L m ts of Quant tat on

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
Tolclo os-me hyl	0.100	Triazophos	0.020	Tri loxys robin	0.020
Tri orin	0.100	Tolyl luanid	0.050	Tri iconazole	0.050
Tralkoxydim	0.100	Tridiphane	0.500	Vinclozolin	0.100
Triadime on	0.050	Tri lumizole	0.020	Zoxamide	0.020
Trialla e	0.100	Tri luralin	0.100		

LOQ= Limit of Quantitation, mg/kg

Factors affecting the LOQ include instrument sensitivity or 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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Hemp & Cannabis  
 Chain of Custody

Northwest-Natural-  
 Goods-1887526757

ORELAP ID: OR1000028 ANAB ID: P0251D: A1E98

Project Information				Testing						
Project Name: HEMP-BB0104 PO Number: N/A Turnaround Time: 5 Business Days (standard) required for microbial testing Samples Delivered to Laboratory: Schedule 1 Pick-Up Cannabis Type: Industrial				H001 Potency-Cannabidiol (Base) - Extended Profile P230 Pesticides - Multi-Residue Profile H008 Residual Solvents - OF H009 Heavy Metals Profile (Pb, As, Cd, Hg & Hg) M075 Total Coliforms - E-Coli P230 Yeast and Mold N180 Moisture as Loss on Drying						
#	Sample Name	Material	Amount Provided	Testing Comments						
1	HEMP- BB0104	Edible	20 units for sale	I used to be able to select water activity as well as Moisture loss- now I am unable? I need both these tests if possible, Thank You						

Relinquished By	Date	Time	Temp, °C	Received By	Date	Time	Received Temp, °C	Evidence of Cooling?
Kristen Johnson	6/23/2023	06:25		BR	6/23/2023	10:23		No
BR	6/23/2023	11:09	21.0	rd	6/23/2023	11:35		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  
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P: (503) 254-1794 | Fax: (503) 254-1182  
[info@columbialaboratories.com](mailto:info@columbialaboratories.com)

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Revision 2 Document D 7087  
 Legacy D CFL-E33Effective

Laboratory Quality Control Results

Residual Solvents				Batch D: 2308587					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		468	584	µg/g	80.1	60 - 120	
Isobutane	ND	< 200		605	767	µg/g	78.9	60 - 120	
Butane	ND	< 200		620	782	µg/g	79.3	60 - 120	
2,2-Dimethylpropane	ND	< 200		759	939	µg/g	80.8	60 - 120	
Methanol	ND	< 200		1380	1640	µg/g	84.1	60 - 120	
Ethylene Oxide	ND	< 30		49	57.1	µg/g	85.8	60 - 120	
2-Methylbutane	ND	< 200		1270	1600	µg/g	79.4	60 - 120	
Pentane	ND	< 200		1310	1620	µg/g	80.9	60 - 120	
Ethanol	ND	< 200		1410	1610	µg/g	87.6	70 - 130	
Ethyl Ether	ND	< 200		1350	1610	µg/g	83.9	60 - 120	
2,2-Dimethylbutane	ND	< 30		143	168	µg/g	85.1	60 - 120	
Acetone	ND	< 200		1360	1620	µg/g	84.0	60 - 120	
2-Propanol	ND	< 200		1430	1600	µg/g	89.4	60 - 120	
Acetonitrile	ND	< 100		403	484	µg/g	83.3	60 - 120	
2,3-Dimethylbutane	ND	< 30		146	162	µg/g	90.1	60 - 120	
Dichloromethane	ND	< 60		419	483	µg/g	86.7	60 - 120	
2-Methylpentane	ND	< 30		152	174	µg/g	87.4	60 - 120	
3-Methylpentane	ND	< 30		151	168	µg/g	89.9	60 - 120	
Hexane	ND	< 30		146	168	µg/g	86.9	60 - 120	
Ethyl acetate	ND	< 200		1430	1600	µg/g	89.4	60 - 120	
2-Butanol	ND	< 200		1460	1600	µg/g	91.3	60 - 120	
Tetrahydrofuran	ND	< 100		462	514	µg/g	89.9	60 - 120	
Cyclohexane	ND	< 200		1410	1600	µg/g	88.1	60 - 120	
Benzene	ND	< 1		3.83	5.12	µg/g	74.8	60 - 120	
Isopropyl Acetate	ND	< 200		1440	1620	µg/g	88.9	60 - 120	
Heptane	ND	< 200		1440	1610	µg/g	89.4	60 - 120	
1,4-Dioxane	ND	< 100		431	493	µg/g	87.4	60 - 120	
2-Ethoxyethanol	ND	< 30		151	163	µg/g	92.6	60 - 120	
Ethylene Glycol	ND	< 200		442	483	µg/g	91.5	60 - 120	
Toluene	ND	< 100		449	493	µg/g	91.1	60 - 120	
Ethylbenzene	ND	< 200		883	969	µg/g	91.1	60 - 120	
m,p-Xylene	ND	< 200		856	968	µg/g	88.4	60 - 120	
o-Xylene	ND	< 200		903	976	µg/g	92.5	60 - 120	
Cumene	ND	< 30		150	162	µg/g	92.6	60 - 120	



12423 NE Whitaker Way  
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Revision 2 Document D 7087  
Legacy D CFL-E33Effective

QC- Sample Duplicate Sample ID: 23-007429-0001

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	
Acetonitrile	ND	ND	100 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	
3-Methylpentane	ND	ND	30 µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30 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	
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	
1,4-Dioxane	ND	ND	100 µg/g	0.0	< 20	Acceptable	
2-Ethoxyethanol	ND	ND	30 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	
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	

**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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Revision 4 Documen D 7148  
Legacy D Workshee Valida ed 04/20/2021

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2308611

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0313	0.0316	%	99.1	80.0	- 120	Acceptable	
CBDV	2	0.0318	0.0315	%	101	80.0	- 120	Acceptable	
CBE	2	0.0346	0.0348	%	99.4	80.0	- 120	Acceptable	
CBDA	1	0.0323	0.0333	%	97.1	90.0	- 110	Acceptable	
CBGA	1	0.0319	0.0330	%	96.5	80.0	- 120	Acceptable	
CBG	1	0.0365	0.0380	%	96.1	80.0	- 120	Acceptable	
CBD	1	0.0366	0.0370	%	99.1	90.0	- 110	Acceptable	
THCV	2	0.0239	0.0236	%	101	80.0	- 120	Acceptable	
d8THCV	2	0.0275	0.0279	%	98.6	80.0	- 120	Acceptable	
THCVA	2	0.0309	0.0308	%	100	80.0	- 120	Acceptable	
CBN	1	0.0332	0.0350	%	94.9	80.0	- 120	Acceptable	
exo-THC	2	0.0275	0.0283	%	97.0	80.0	- 120	Acceptable	
d9THC	1	0.0344	0.0361	%	95.3	90.0	- 110	Acceptable	
d8THC	1	0.0426	0.0450	%	94.9	90.0	- 110	Acceptable	
9S-d10THC	1	0.0245	0.0255	%	96.0	80.0	- 120	Acceptable	
CBL	2	0.0317	0.0311	%	102	80.0	- 120	Acceptable	
9S-HHC	3	0.0300	0.0333	%	90.0	80.0	- 120	Acceptable	
9R-d10THC	1	0.0315	0.0329	%	95.6	80.0	- 120	Acceptable	
CBC	2	0.0291	0.0293	%	99.4	80.0	- 120	Acceptable	
9R-HHC	3	0.0285	0.0333	%	85.4	80.0	- 120	Acceptable	
THCA	1	0.0318	0.0331	%	96.2	90.0	- 110	Acceptable	
CBCA	2	0.0322	0.0320	%	101	80.0	- 120	Acceptable	
CBLA	2	0.0304	0.0302	%	100	80.0	- 120	Acceptable	
d9THCP	2	0.0321	0.0326	%	98.7	80.0	- 120	Acceptable	
d8THCO	3	0.0321	0.0333	%	96.4	80.0	- 120	Acceptable	
CBT	2	0.0319	0.0326	%	97.7	80.0	- 120	Acceptable	
d9THCO	3	0.0295	0.0333	%	88.4	80.0	- 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBDV	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBE	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBDA	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBGA	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBG	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBD	<LOQ	0.00304	%	< 0.00304	Acceptable	
THCV	<LOQ	0.00304	%	< 0.00304	Acceptable	
d8THCV	<LOQ	0.00304	%	< 0.00304	Acceptable	
THCVA	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBN	<LOQ	0.00304	%	< 0.00304	Acceptable	
exo-THC	<LOQ	0.00304	%	< 0.00304	Acceptable	
d9THC	<LOQ	0.00304	%	< 0.00304	Acceptable	
d8THC	<LOQ	0.00304	%	< 0.00304	Acceptable	
9S-d10THC	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBL	<LOQ	0.00304	%	< 0.00304	Acceptable	
9S-HHC	<LOQ	0.00304	%	< 0.00304	Acceptable	
9R-d10THC	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBC	<LOQ	0.00304	%	< 0.00304	Acceptable	
9R-HHC	<LOQ	0.00304	%	< 0.00304	Acceptable	
THCA	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBCA	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBLA	<LOQ	0.00304	%	< 0.00304	Acceptable	
d9THCP	<LOQ	0.00304	%	< 0.00304	Acceptable	
d8THCO	<LOQ	0.00304	%	< 0.00304	Acceptable	
CBT	<LOQ	0.00304	%	< 0.00304	Acceptable	
d9THCO	<LOQ	0.00304	%	< 0.00304	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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Laboratory Quality Control Results

J AOAC 2015 V98-6		Batch ID: 2308611						
Sample Duplicate		Sample ID: 23-007454-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBG	0.0105	0.0108	0.00307	%	2.43	< 20	Acceptable	
CBD	0.0981	0.0970	0.00307	%	1.14	< 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	0.00530	0.00524	0.00307	%	1.28	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
d9THC	0.0797	0.0783	0.00307	%	1.70	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
9S-HHC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CB	0.0223	0.0220	0.00307	%	1.49	< 20	Acceptable	
9R-HHC	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
d8THCO	<LOQ	<LOQ	0.00307	%	NA	< 20	Acceptable	
CBT	0.00972	0.00960	0.00307	%	1.23	< 20	Acceptable	
d9THCO	<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



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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.