



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



Report Number: 23-009475/D002.R000
Report Date: 08/18/2023
ORELAP#: OR100028
Purchase Order:
Received: 08/10/23 10:55

Customer: NW Natural Goods
Product identity: HEMP - PR 0057
Client/Metric ID: .
Laboratory ID: 23-009475-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	0.169		mg/4g		CBD-Total per Serving Size 21.2 mg/4g
CBD per 4g	21.2		mg/4g		
CBG per 4g	11.4		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 - PR 0057

Client/Metric ID: .

Sample Date:

Laboratory ID: 23-009475-0001

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) ^b					
Units mg/se Batch: 2309980 Analyze: 8/12/23 12:13:00 AM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	0.169		mg/4g	0.131	
CBC-A per 4g	< LOQ		mg/4g	0.131	
CBC-Total per 4g	< LOQ		mg/4g	0.245	
CBD per 4g	21.2		mg/4g	0.131	
CBD-A per 4g	< LOQ		mg/4g	0.131	
CBD-Total per 4g	21.2		mg/4g	0.245	
CBDV per 4g	< LOQ		mg/4g	0.131	
CBDV-A per 4g	< LOQ		mg/4g	0.131	
CBDV-Total per 4g	< LOQ		mg/4g	0.244	
CBE per 4g	< LOQ		mg/4g	0.131	
CBG per 4g	11.4		mg/4g	0.131	
CBG-A per 4g	< LOQ		mg/4g	0.131	
CBG-Total per 4g	11.4		mg/4g	0.244	
CBL per 4g	< LOQ		mg/4g	0.131	
CBL-A per 4g	< LOQ		mg/4g	0.131	
CBL-Total per 4g	< LOQ		mg/4g	0.245	
CBN per 4g	< LOQ		mg/4g	0.131	
CBT per 4g	< LOQ		mg/4g	0.131	
Δ8-THCV per 4g	< LOQ		mg/4g	0.131	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.131	
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.131	
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.261	
Δ8-THC per 4g	< LOQ		mg/4g	0.131	
Δ9-THC per 4g	< LOQ		mg/4g	0.131	
delta-9-THCP per 4g	< LOQ		mg/4g	0.131	
exo-THC per 4g	< LOQ		mg/4g	0.131	
THC-A per 4g	< LOQ		mg/4g	0.131	
THC-Total per 4g	< LOQ		mg/4g	0.245	
THCV per 4g	< LOQ		mg/4g	0.131	
THCV-A per 4g	< LOQ		mg/4g	0.131	
THCV-Total per 4g	< LOQ		mg/4g	0.245	
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	2309919	08/13/23 AOAC 991.14 (Petrifilm) ^P		
Total Coliforms	< LOQ		cfu/g	10	2309919	08/13/23 AOAC 991.14 (Petrifilm) ^P		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2309920	08/13/23 AOAC 2014.05 (RAPID) ^P		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2309920	08/13/23 AOAC 2014.05 (RAPID) ^P		

Solvents Method: Residual Solvents by GC/MS^B Units µg/g Batch 2310041 Analyze 08/15/23 02:22 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)^B Units mg/kg Batch 2310118 Analyze 08/17/23 02:33 PM

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	0.0177	2310167	08/18/23 AOAC 2013.06 (mod.) ^p	pass	
Cadmium*	< LOQ	0.200	mg/kg	0.0177	2310167	08/18/23 AOAC 2013.06 (mod.) ^p	pass	
Lead*	< LOQ	0.500	mg/kg	0.0177	2310167	08/18/23 AOAC 2013.06 (mod.) ^p	pass	
Mercury*	< LOQ	0.100	mg/kg	0.00883	2310167	08/18/23 AOAC 2013.06 (mod.) ^p	pass	

Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	18.1		g/100g	0.10	2310024	08/14/23 AOAC 925.10 (mod.) ^p		
Water Activity	0.686		Aw	0.030	2309946	08/11/23 AOAC 978.18 ^p		



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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.

^p = 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 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 Sulfoxide	0.050	PN	0.050
Acequinocyl	0.100	Clethodim Sulfoxide	0.050	PTC	0.100
Aceamiprid	0.020	Clomazone	0.020	s-envalera e/ envalera e	0.200
Aceochlor	0.100	Clofianid	0.200	aconazole	0.100
Acrinathrin	0.100	Coumaphos	0.050	halaluralin	0.100
Alachlor	0.100	Croxyphos	0.020	hioencarb	0.050
Aldicarb	0.100	Cyanazine	0.020	hion	0.200
Aldicarb sulfoxide	0.100	Cyanoenphos	0.020	hirimol	0.100
Aldoxycarb (Aldicarb-sulfoxide)	0.100	Cyaniliprole	0.050	hoimesa e	0.050
Aldrin	0.100	Cyazofluprid	0.020	hoprophos	0.020
Ametoctradin	0.020	Cycloxy	0.100	oenprox	0.020
Ametriner	0.500	Cyfluthrin	0.200	oxazole	0.020
Aspersion	0.100	Cyhalothrin, lambda	0.200	ridiazole	0.100
Asulam	0.100	Cymoxanil	0.050	rimos	0.020
Azinphos-methyl	0.100	Cypermethrin	0.200	amoxadone	0.200
Azinphos-methyl	0.020	Cyprodinil	0.100	amphur	0.100
Azinphos-methyl	0.020	Dac-hal	0.100	enamidon	0.020
Azoxystrobin	0.020	Daminozide	0.100	enamiphos	0.020
Benalaxyl	0.020	DCPMU	0.050	enamiphos sulfoxide	0.020
Bendiocarb	0.020	DDD, o,p'	0.100	enazaquin	0.100
Benluralin	0.100	DDD, p,p'	0.100	enbutaconazole	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-cyfluthrin isomer	0.100	DDT, o,p'	0.100	enhexamid	0.100
Beta-cyfluthrin isomer	0.100	DDT, p,p'	0.100	enirohion	0.100
Beta-cyfluthrin isomer	0.500	D (Tribuox)	0.100	enobucarb	0.050
Benazoxypyr	0.020	Deltamethrin	0.100	enoxyacarb	0.020
Benfluridone	0.020	Desmedipham	0.100	enpropacarb	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	Dichlomequat	0.100	ensulohion sulfoxide	0.100
Bupirimate	0.020	Dichlorvos	0.100	Fensulfthion-oxon-sulfone	0.020
Buprofezin	0.050	Diclobutylazole	0.050	enion	0.050
Buthyrate	0.500	Dicozol	0.100	enion oxon	0.020
Buthyrate	0.200	Dicrotophos	0.050	enion oxon sulfoxide	0.100
Buthyrate	0.100	Dieldrin	0.100	enion sulfoxide	0.050
Cadusafos	0.020	Diehoencarb	0.020	enuron	0.020
Captafen	1.000	Diehoencarb (D T)	0.050	ipronil	0.100
Carbaryl	0.050	Diethofenathrin	0.100	lonicamid	0.100
Carbendazim	0.100	Dimehenamid	0.050	luchloralin	0.100
Carbofenthiol	0.020	Dimehoate	0.050	lucyhrinate	0.100
Carbophenothion	0.200	Dimehomorph	0.050	ludioxonil	0.200
Carboxin	0.020	Diniconazole	0.200	luenace	0.020
Carfenthiol	0.100	Dinofenprophos	0.200	lumioxazin	0.100
Chloranil	0.020	Dioxathion	0.100	luomeuron	0.020
Chloranil	0.200	Diphenamid	0.020	luopicolide	0.050
Chloranil	0.200	Diphenylamine	0.100	luopyram	0.020
Chloranil	0.500	Disulfoton	0.100	luoxastrobin	0.050
Chloranil	0.200	Disulfoton sulfoxide	0.100	lupyradiuron	0.020
Chloranil	0.050	Disulfoton sulfoxide	0.100	luridone	0.100
Chloranil	0.100	Diuron	0.050	lusilazole	0.020
Chloranil	0.200	dienephos	0.050	luolanil	0.020
Chloranil	0.050	ndosulathion alpha	0.200	luriaol	0.020
Chloranil	0.200	ndosulathion beta	0.200	lualinate, au-	0.100
Chloranil	1.000	ndosulathion sulfoxide	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	Propoxycarbazono 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	Pyrimo 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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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-169 610052

ORELAP ID: CR1000028 ANAB ISO 17025 ID: AT1608

Project Information					Testing							
Project Name: <u>HEMP-PR0057</u> PONumber: <u>N/A</u> Turnaround Time: <u>5 Business Days (Req. For Micro Testing) (Standard)</u> Samples Delivered to Laboratory: <u>Schedule Pick-Up</u> Cannabis Type: <u>Industrial</u>					H0010 Potency Cannabinoid Basic + Extended Pro le	P2320 Pesticide - Multi-Residue Pro le	H0008 Residual Solvents - OR	H0019 Heavy Metals Pro le CR (As, Cd, Pb, & Hg)	M075 Total Coliforms + E.Coli	M085 Yeast and Mold	N180 Moisture as Loss on Drying	N650 Water Activity
#	Sample Name	Material	Amount Provided	Reporting Unit	Serving Size							
1	HEMP-PR0057	Edible	20 units for sale	mg/g & mg/ serving	4 g	✓	✓	✓	✓	✓	✓	✓

Relinquished By	Date	Time	Temp., °C	Received By	Date	Time	Received Temp. °C	Evidence of Cooling?
Charles Moore	8/9/2023	12:40	19.2	BR	8/10/2023	10:18		No
BR	8/10/2023	10:44		MRH	8/10/2023	10:49		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 OCC. By signing Relinquished by you are agreeing to these terms.

Columbia Laboratories
 12423 NE Whitaker Way
 Portland OR 97230

P (503) 254-1794 | Fax (503) 254-1452
info.columbialaboratories.com

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

Laboratory Quality Control Results

JAOAC2015 V986 Batch ID: 2309980

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDA	2	0.0322	0.0311	%	103	80.0 - 120	Acceptable	
CBV	2	0.0317	0.0307	%	103	80.0 - 120	Acceptable	
CBE	2	0.0358	0.0349	%	102	80.0 - 120	Acceptable	
CBDA	1	0.0332	0.0336	%	98.9	90.0 - 110	Acceptable	
CBGA	1	0.0335	0.0336	%	99.9	80.0 - 120	Acceptable	
CBG	1	0.0343	0.0344	%	99.6	80.0 - 120	Acceptable	
CB	1	0.0352	0.0352	%	100	90.0 - 110	Acceptable	
THCV	2	0.0230	0.0222	%	103	80.0 - 120	Acceptable	
δ8THCV	2	0.0279	0.0272	%	103	80.0 - 120	Acceptable	
THCVA	2	0.0322	0.0310	%	104	80.0 - 120	Acceptable	
CBN	1	0.0352	0.0351	%	100	80.0 - 120	Acceptable	
exo-THC	2	0.0319	0.0311	%	103	80.0 - 120	Acceptable	
δ9THC	1	0.0350	0.0345	%	102	90.0 - 110	Acceptable	
δ8THC	1	0.0322	0.0325	%	99.2	90.0 - 110	Acceptable	
9SaTHC	1	0.0354	0.0354	%	100	80.0 - 120	Acceptable	
CB	2	0.0325	0.0311	%	105	80.0 - 120	Acceptable	
9RaTHC	1	0.0322	0.0323	%	99.8	80.0 - 120	Acceptable	
CB	2	0.0322	0.0319	%	101	80.0 - 120	Acceptable	
THCA	1	0.0332	0.0331	%	100	90.0 - 110	Acceptable	
CBGA	2	0.0331	0.0325	%	102	80.0 - 120	Acceptable	
CBLA	2	0.0512	0.0500	%	102	80.0 - 120	Acceptable	
δ9THCP	2	0.0329	0.0323	%	102	80.0 - 120	Acceptable	
CB	2	0.0319	0.0314	%	101	80.0 - 120	Acceptable	

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDA	<LOQ	0.00314	%	< 0.00314	Acceptable	
CBV	<LOQ	0.00314	%	< 0.00314	Acceptable	
CBE	<LOQ	0.00314	%	< 0.00314	Acceptable	
CBDA	<LOQ	0.00314	%	< 0.00314	Acceptable	
CBGA	<LOQ	0.00314	%	< 0.00314	Acceptable	
CBG	<LOQ	0.00314	%	< 0.00314	Acceptable	
CB	<LOQ	0.00314	%	< 0.00314	Acceptable	
THCV	<LOQ	0.00314	%	< 0.00314	Acceptable	
δ8THCV	<LOQ	0.00314	%	< 0.00314	Acceptable	
THCVA	<LOQ	0.00314	%	< 0.00314	Acceptable	
CBN	<LOQ	0.00314	%	< 0.00314	Acceptable	
exo-THC	<LOQ	0.00314	%	< 0.00314	Acceptable	
δ9THC	<LOQ	0.00314	%	< 0.00314	Acceptable	
δ8THC	<LOQ	0.00314	%	< 0.00314	Acceptable	
9SaTHC	<LOQ	0.00314	%	< 0.00314	Acceptable	
CB	<LOQ	0.00314	%	< 0.00314	Acceptable	
9RaTHC	<LOQ	0.00314	%	< 0.00314	Acceptable	
CB	<LOQ	0.00314	%	< 0.00314	Acceptable	
THCA	<LOQ	0.00314	%	< 0.00314	Acceptable	
CBGA	<LOQ	0.00314	%	< 0.00314	Acceptable	
CBLA	<LOQ	0.00314	%	< 0.00314	Acceptable	
δ9THCP	<LOQ	0.00314	%	< 0.00314	Acceptable	
CB	<LOQ	0.00314	%	< 0.00314	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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Report Number: 23-009475/D002.R000
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Received: 08/10/23 10:55

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

Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 2309980						
Sample Duplicate		Sample ID: 23-0093890001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBSA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBS	0.269	0.268	0.00325	%	0.136	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
δ8THCV	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
δ9THC	0.264	0.264	0.00325	%	0.316	< 20	Acceptable	
δ8THC	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
9Sα10THC	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
9Rα10THC	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBSA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
δ9THCP	<LOQ	<LOQ	0.00325	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.00325	%	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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Laboratory Quality Control Results

Residual Solvents				Batch D: 2310041					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		501	584	µg/g	85.8	60	120
Isobutane	ND	< 200		712	767	µg/g	92.8	60	120
Butane	ND	< 200		695	782	µg/g	88.9	60	120
2,2 Dimethylpropane	ND	< 200		824	939	µg/g	87.8	60	120
Methanol	ND	< 200		1670	1670	µg/g	96.4	60	120
Ethylene Oxide	ND	< 30		51.9	57.1	µg/g	90.9	60	120
2 Methylbutane	ND	< 200		1520	1680	µg/g	90.5	60	120
Pentane	ND	< 200		1500	1670	µg/g	89.8	60	120
Ethanol	ND	< 200		1540	1660	µg/g	92.8	70	130
Ethyl Ether	ND	< 200		1510	1670	µg/g	90.4	60	120
2,2 Dimethylbutane	ND	< 30		175	189	µg/g	92.6	60	120
Acetone	ND	< 200		1530	1670	µg/g	91.6	60	120
2 Propanol	ND	< 200		1510	1630	µg/g	92.6	60	120
Ethyl Formate	ND	< 500		4620	1600	µg/g	288.8	70	130 Q6
Acetonitrile	ND	< 100		433	492	µg/g	88.0	60	120
Methyl Acetate	ND	< 500		1550	1600	µg/g	96.9	70	130
2,3 Dimethylbutane	ND	< 30		162	180	µg/g	90.0	60	120
Dichloromethane	ND	< 60		443	488	µg/g	90.8	60	120
2 Methylpentane	ND	< 30		152	182	µg/g	83.5	60	120
M BE	ND	< 500		1560	1610	µg/g	96.9	70	130
3 Methylpentane	ND	< 30		166	177	µg/g	93.8	60	120
Hexane	ND	< 30		156	177	µg/g	88.1	60	120
1 Propanol	ND	< 500		1660	1600	µg/g	103.8	70	130
Methylethylketone	ND	< 500		1510	1610	µg/g	93.8	70	130
Ethyl acetate	ND	< 200		1420	1630	µg/g	87.1	60	120
2 Butanol	ND	< 200		1440	1630	µg/g	88.3	60	120
tetrahydrofuran	ND	< 100		425	488	µg/g	87.1	60	120
Cyclohexane	ND	< 200		1410	1610	µg/g	87.6	60	120
2 methyl 1 propanol	ND	< 500		1680	1610	µg/g	104.3	70	130
Benzene	ND	< 1		3.62	4.79	µg/g	75.6	60	120
Isopropyl Acetate	ND	< 200		1430	1650	µg/g	86.7	60	120
Heptane	ND	< 200		1400	1630	µg/g	85.9	60	120
1 Butanol	ND	< 500		1750	1600	µg/g	109.4	70	130
Propyl Acetate	ND	< 500		1540	1600	µg/g	96.3	70	130
1,4 Dioxane	ND	< 100		434	523	µg/g	83.0	60	120
2 Ethoxyethanol	ND	< 30		150	179	µg/g	83.8	60	120
Methylisobutylketone	ND	< 500		1560	1600	µg/g	97.5	70	130
3 Methyl 1 butanol	ND	< 500		1690	1600	µg/g	105.6	70	130
Ethylene Glycol	ND	< 200		317	506	µg/g	62.6	60	120
oluene	ND	< 100		413	496	µg/g	83.3	60	120
Isobutyl Acetate	ND	< 500		1550	1610	µg/g	96.3	70	130
1 Pentanol	ND	< 500		1820	1600	µg/g	113.8	70	130
Butyl Acetate	ND	< 500		1570	1610	µg/g	97.5	70	130
Ethylbenzene	ND	< 200		748	978	µg/g	76.5	60	120
m,p Xylene	ND	< 200		753	994	µg/g	75.8	60	120
o Xylene	ND	< 200		730	982	µg/g	74.3	60	120
Cumene	ND	< 30		118	171	µg/g	69.0	60	120
Anisole	ND	< 500		1630	1600	µg/g	101.9	70	130
DMSO	ND	< 500		1430	1620	µg/g	88.3	70	130
1,2 dimethoxyethane	ND	< 50		170	185	µg/g	91.4	70	130
riethylamine	ND	< 500		1260	1600	µg/g	78.8	70	130
N,N dimethylformamide	ND	< 150		472	480	µg/g	98.3	70	130
N,N dimethylacetamide	ND	< 150		481	483	µg/g	99.6	70	130
Pyridine	ND	< 50		162	168	µg/g	96.4	70	130
Sulfolane	ND	< 50		163	161	µg/g	101.2	70	130
1,2 Dichloroethane	ND	< 1		0.99	1	µg/g	99.0	70	130
Chloroform	ND	< 1		0.905	1	µg/g	90.5	70	130
richloroethylene	ND	< 1		0.893	1	µg/g	89.3	70	130
1,1 Dichloroethane	ND	< 1		0.872	1	µg/g	87.2	70	130



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Revision 2 Document D 7087
 Legacy D CFL-E33Effective

QC- Sample Duplicate Sample ID: 23-009287-0001

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	
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	
M BE	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	
Methyl ethyl ketone	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	
oluene	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	
richloroethylene	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.