Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-010635/D002.R000
Report Date: 09/14/2023
ORELAP#: OR100028
Purchase Order:
Received: 09/07/23 11:13

Customer: NW Natural Goods
Product identity: GF 023249-1
Client/Metrc ID: .
Laboratory ID: 23-010635-0001

Summary

Potency:

Analyte per 355ml	Result	Limits	Units	Status
CBD per 355ml	21.5		mg/355ml	
CBG per 355ml	11.5		mg/355ml	

CBD-Total per Serving Size 21.5 mg/355ml

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: GF 023249-1
Client/Metrc ID: .
Sample Date:
Laboratory ID: 23-010635-0001
Evidence of Cooling: No
Temp: 19.5 °C
Relinquished by: Ramos
Serving Size #1: 362.1 g
Density: 1.020 g/ml

Sample Results

Potency per 355ml **Method:** J AOAC 2015 V98-6 (mod)[b] **Units** mg/se **Batch:** 2310817 **Analyze:** 9/11/23 5:04:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
CBC per 355ml	< LOQ		mg/355ml	0.355	
CBC-A per 355ml	< LOQ		mg/355ml	0.355	
CBC-Total per 355ml	< LOQ		mg/355ml	0.667	
CBD per 355ml	21.5		mg/355ml	0.355	
CBD-A per 355ml	< LOQ		mg/355ml	0.355	
CBD-Total per 355ml	21.5		mg/355ml	0.667	
CBDV per 355ml	< LOQ		mg/355ml	0.355	
CBDV-A per 355ml	< LOQ		mg/355ml	0.355	
CBDV-Total per 355ml	< LOQ		mg/355ml	0.663	
CBE per 355ml	< LOQ		mg/355ml	0.355	
CBG per 355ml	11.5		mg/355ml	0.355	
CBG-A per 355ml	< LOQ		mg/355ml	0.355	
CBG-Total per 355ml	11.5		mg/355ml	0.663	
CBL per 355ml	< LOQ		mg/355ml	0.355	
CBL-A per 355ml	< LOQ		mg/355ml	0.355	
CBL-Total per 355ml	< LOQ		mg/355ml	0.667	
CBN per 355ml	< LOQ		mg/355ml	0.355	
CBT per 355ml	< LOQ		mg/355ml	0.355	
Δ8-THCV per 355ml	< LOQ		mg/355ml	0.355	
Δ10-THC-9R per 355ml	< LOQ		mg/355ml	0.355	
Δ10-THC-9S per 355ml	< LOQ		mg/355ml	0.355	
Δ10-THC-Total per 355ml	< LOQ		mg/355ml	0.711	
Δ8-THC per 355ml	< LOQ		mg/355ml	0.355	
Δ9-THC per 355ml	< LOQ		mg/355ml	0.355	
delta-9-THCP per 355ml	< LOQ		mg/355ml	0.355	
exo-THC per 355ml	< LOQ		mg/355ml	0.355	
THC-A per 355ml	< LOQ		mg/355ml	0.355	
THC-Total per 355ml	< LOQ		mg/355ml	0.667	
THCV per 355ml	< LOQ		mg/355ml	0.355	
THCV-A per 355ml	< LOQ		mg/355ml	0.355	
THCV-Total per 355ml	< LOQ		mg/355ml	0.667	

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Potency per 355ml

Method: J AOAC 2015 V98-6 (mod)þ **Units** mg/se **Batch:** 2310817 **Analyze:** 9/11/23 5:04:00 PM

Analyte	Result	Limits	Units	LOQ	Notes
Total Cannabinoids per 355ml	33.0		mg/355ml		

Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Aerobic Plate Count	< LOQ		cfu/g	10	2310707	09/10/23	AOAC 990.12 (Petrifilm)þ		
E.coli	< LOQ		cfu/g	10	2310703	09/10/23	AOAC 991.14 (Petrifilm)þ		
Total Coliforms	< LOQ		cfu/g	10	2310703	09/10/23	AOAC 991.14 (Petrifilm)þ		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2310706	09/10/23	AOAC 2014.05 (RAPID)þ		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2310706	09/10/23	AOAC 2014.05 (RAPID)þ		

Solvents

Method: Residual Solvents by GC/MSþ **Units** µg/g **Batch** 2310820 **Analyze** 09/12/23 01:46 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-Dimethy butane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< LOQ		200		
2,3-Dimethy 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	
Isopropy 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)þ **Units** mg/kg **Batch** 2310775 **Analyze** 09/12/23 11:47 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	0.00371	2310725	09/08/23	AOAC 2013.06 (mod.)þ	pass	
Cadmium¥	< LOQ	0.200	mg/kg	0.00371	2310725	09/08/23	AOAC 2013.06 (mod.)þ	pass	
Lead¥	< LOQ	0.500	mg/kg	0.00371	2310725	09/08/23	AOAC 2013.06 (mod.)þ	pass	
Mercury¥	< LOQ	0.100	mg/kg	0.00185	2310725	09/08/23	AOAC 2013.06 (mod.)þ	pass	

Mycotoxins

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed	Method	Status	Notes
Aflatoxin B2¥	< LOQ		µg/kg	5.00	2310759	09/11/23	AOAC 2007.01 & EN 15662 (mod)þ		
Aflatoxin B1¥	< LOQ		µg/kg	5.00	2310759	09/11/23	AOAC 2007.01 & EN 15662 (mod)þ		
Aflatoxin G1¥	< LOQ		µg/kg	5.00	2310759	09/11/23	AOAC 2007.01 & EN 15662 (mod)þ		
Aflatoxin G2¥	< LOQ		µg/kg	5.00	2310759	09/11/23	AOAC 2007.01 & EN 15662 (mod)þ		
Ochratoxin A¥	< LOQ	20.0	µg/kg	5.00	2310759	09/11/23	AOAC 2007.01 & EN 15662 (mod)þ	pass	
Total Aflatoxins¥	0.000	20.0	µg/kg	20.0		09/14/23	AOAC 2007.01 & EN 15662 (mod)þ	pass	

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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.

þ = ISO/IEC 17025:2017 accredited method.
¥ = TNI accredited analyte.

Units of Measure

cfu/g = Colony forming units per gram
g = g
g/ml = Gram per milliliter
µg/g = Microgram per gram
µg/kg = Micrograms per kilogram = parts per billion (ppb)
mg/kg = Milligram per kilogram = parts per million (ppm)
mg/355ml = Milligram per 355ml
% = Percentage of sample
% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager

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

Compound	LOQ (mg/kg)
Abamec in	0.100
Acepha e	0.100
Acequinocyl	0.100
Ace amiprid	0.020
Ace ochlor	0.100
Acrina hrin	0.100
Alachlor	0.100
Aldicarb	0.100
Aldicarb sul oxide	0.100
Aldoxycarb (Aldicarb-sul one)	0.100
Aldrin	0.100
Ame ocr radin	0.020
Ame ryn	0.500
Aspon	0.100
Asulam	0.100
A razine	0.100
A razine-dese hyl	0.100
Azinphos-e hyl	0.020
Azinphos-me hyl	0.020
Azoxys robin	0.020
Benalaxyl	0.020
Bendiocarb	0.020
Ben luralin	0.100
Benoxacor	0.050
Bensulide	0.050
B C alpha isomer	0.100
B C be a isomer	0.100
B C del a isomer	0.500
Bi enaza e	0.020
Bi en hrin	0.020
Boscalid	0.020
Bromophos-e hyl	0.100
Bromophos-me hyl	0.200
Bromopropyla e	0.100
Bromuconazole	0.100
Bupirima e	0.020
Bupro ezin	0.050
Bu achlor	0.500
Bu ralin	0.200
Bu yla e	0.100
Cadusa os	0.020
Cap an	1.000
Carbaryl	0.050
Carbendazim	0.100
Carbo uran	0.020
Carbopheno hion	0.200
Carboxin	0.020
Car en razone-e hyl	0.100
Chloran raniliprole	0.020
Chlordane, cis-	0.200
Chlordane, rans-	0.200
Chlor enapyr	0.500
Chlor enson	0.200
Chlor envinphos	0.050
Chlorobenzila e	0.100
Chloroneb	0.200
Chlorpyri os	0.050
Chlorpyri os-me hyl	0.200
C PC	1.000

Compound	LOQ (mg/kg)
Cle hodim	0.050
Cle hodim Sul one	0.050
Cle hodim Sul oxide	0.050
Clo en ezine	0.020
Clomazone	0.020
Clo hianidin	0.200
Coumaphos	0.050
Cro oxyphos	0.020
Cyanazine	0.020
Cyano enphos	0.020
Cyan raniliprole	0.050
Cyazo amid	0.020
Cycloa e	0.100
Cy lu hrin	0.200
Cyhalo hrin, lambda	0.200
Cymoxanil	0.050
Cyperme hrin	0.200
Cyprodinil	0.100
Dac hal	0.100
Daminozide	0.100
DCPMU	0.050
DDD, o,p'-	0.100
DDD, p,p'-	0.100
DD , o,p'-	0.100
DD , p,p'-	0.100
DDT, o,p'-	0.100
DDT, p,p'-	0.100
D (Tribu os)	0.100
Del ame hrin	0.100
Desmedipham	0.100
Dialla e	0.100
Diazinon	0.020
Diazoxon	0.100
Dichlobenil	0.100
Dichlo luanid	0.100
Dichlorvos	0.100
Diclobu razol	0.050
Dico ol	0.100
Dicro ophos	0.050
Dieldrin	0.100
Die ho encarb	0.020
Die hyl oluamide (D T)	0.050
Di enoconazole	0.100
Dime henamid	0.050
Dime hoa e	0.050
Dime homorph	0.050
Diniconazole	0.200
Dino e uran	0.200
Dioxa hion	0.100
Diphenamid	0.020
Diphenylamine	0.100
Disul o on	0.100
Disul o on sul one	0.100
Disul o on sul oxide	0.100
Diuron	0.050
di enphos	0.050
ndosul an alpha	0.200
ndosul an be a	0.200
ndosul an sul a e	0.100

Compound	LOQ (mg/kg)
ndrin	0.100
PN	0.050
PTC	0.100
s envalera e/ envalera e	0.200
aconazole	0.100
hal luralin	0.100
hio encarb	0.050
hion	0.200
hirimol	0.100
ho umesa e	0.050
hoprophos	0.020
o enprox	0.020
oxazole	0.020
ridiazole	0.100
rim os	0.020
amoxadone	0.200
amphur	0.100
enamidone	0.020
enamiphos	0.020
enamiphos sul one	0.020
enamiphos sul oxide	0.020
enazaquin	0.100
enbuconazole	0.100
enchlorphos	0.100
enchlorphos-oxon	0.100
enhexamid	0.100
eni ro hion	0.100
enobucarb	0.050
enoxycarb	0.020
enpropa hrin	0.050
enpyroxima e	0.020
enson	0.100
ensul o hion	0.020
ensul o hion oxon	0.020
ensul o hion sul one	0.100
Fensulfothion-oxon-sulfone	0.020
en hion	0.050
en hion oxon	0.020
en hion oxon sul one	0.100
en hion sul one	0.050
enuron	0.020
ipronil	0.100
lonicamid	0.100
luchloralin	0.100
lucy hrina e	0.100
ludioxonil	0.200
lu enace	0.020
lumioxazin	0.100
luome uron	0.020
luopicolide	0.050
luopyram	0.020
luoxas robin	0.050
lupyradi urone	0.020
luridone	0.100
lusilazole	0.020
lu olanil	0.020
lu ria ol	0.020
luvalina e, au-	0.100
luxapyroxad	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)
omesa en	0.100
ono os	0.100
orchlor enuron	0.050
orme ana e	0.050
ura hiocarb	0.020
ep achlor	0.100
ep achlor epoxide	0.100
ep enophos	0.100
exachlorobenzene	0.100
exaconazole	0.100
exazinone	0.100
exy hiazox	0.020
mazalil	0.100
midacloprid	0.100
ndazi lam	0.020
ndoxacarb	0.020
proben os	0.100
prodione	0.100
sobenzan	0.100
socarbophos	0.500
sodrin	0.100
so enphos	0.050
so enphos-me hyl	0.020
so enphos oxon	0.050
soprocarb	0.020
sopropalin	0.200
sopro hiolane	0.050
sopro uron	0.050
soxaben	0.050
soxa lu ole	0.050
Kresoxim-me hyl	0.050
ac o en	0.500
enacil	0.100
indane (gamma B C)	0.100
inuron	0.020
Malaoxon	0.050
Mala hion	0.050
Mandipropamid	0.020
Mecarbam	0.020
Mepanipyrim	0.050
Merphos	0.500
Me alaxyl	0.050
Me aldehyde	0.050
Me conazole	0.100
Me hacri os	0.100
Me hamidophos	0.050
Me hida hion	0.050
Me hiocarb	0.050
Me hiocarb sul one	0.100
Me hiocarb sul oxide	0.100
Me homyl	0.100
Me hoxychlor	0.100
Me hoxy enozide	0.020
Me obromuron	0.050
Me olachlor	0.100
Me olcarb	0.050
Me ra enone	0.050
Me ribuzin	0.100
Mevinphos	0.100

Compound	LOQ (mg/kg)
Mexacarba e	0.020
MGK 264	0.020
Mirex	0.100
Molina e	0.050
Monocro ophos	0.100
Monolinuron	0.020
Myclobu anil	0.050
Naled	0.100
Napropamide	0.050
Neburon	0.020
Ni rapyrin	0.100
Nor lurazon	0.050
Ome hoa e	0.100
O-Phenylphenol	0.100
Oxadixyl	0.100
Oxamyl	0.100
Oxamyl-oxime	0.100
Oxychlordane	0.100
Oxydeme on-Me hyl	0.100
Oxy hioquinox	0.200
Paclobu razol	0.050
Paraoxon-e hyl	0.020
Paraoxon me hyl	0.100
Para hion e hyl	0.100
Para hion me hyl	0.200
Penconazole	0.050
Pendime halin	0.050
Pen lu en	0.020
Pen achloroaniline	0.100
Pen achloroanisole	0.100
Pen achlorobenzene (PCB)	0.100
Pentachlorothioanisole (PCTA)	0.100
Pen hiopyrad	0.020
Perme hrin	0.050
Per hane	0.100
Phenmedipham	0.050
Phen hoa e	0.050
Phora e	0.050
Phora e Sul one	0.050
Phora e Sul oxide	0.050
Phosalone	0.050
Phosme	0.100
Phosphamidon	0.050
Phoxim	0.050
Pinoxaden	0.020
Piperonyl bu oxide	0.050
Pirimicarb	0.020
Pirimiphos-me hyl	0.050
Pirimiphos-e hyl	0.020
Pralle hrin	0.100
Prochloraz	0.020
Procymidone	0.100
Pro eno os	0.100
Pro luralin	0.100
Promecarb	0.050
Prome on	0.100
Prome ryn	0.020
Propachlor	0.020

Compound	LOQ (mg/kg)
Propamocarb	0.050
Propanil	0.050
Propargi e	0.050
Propazine	0.020
Prope amphos	0.050
Propham	0.050
Propiconazole	0.050
Propoxur	0.050
Propoxycarbazone Na	0.050
Propyzamide	0.050
Pro hio os	0.100
Pyraclos robin	0.020
Pyrazophos	0.050
Pyre hrins	0.050
Pyridaben	0.020
Pyrida ol	0.100
Pyrida e	0.020
Pyrime hanil	0.050
Pyriproxi en	0.020
Pyroxasul one	0.020
Pyroxsulam	0.020
Quinalphos	0.050
Quinoxy en	0.050
Quin ozene (PCNB)	0.200
Resme hrin	0.050
Ro enone	0.050
S421	0.100
Simazine	0.100
Sime ryn	0.200
Spine oram	0.020
Spinosad	0.050
Spirodiclo en	0.100
Spiromesi en	0.050
Spiro e rama	0.050
Spiroxamine	0.020
Sul o ep	0.050
Sul oxa lor	0.050
Sulpro os	0.020
Tebuconazole	0.100
Tebu enozide	0.020
Tebu hiuron	0.020
Tecnazene	0.100
Te lu hrin	0.100
Terbu os	0.020
Terbu os sul one	0.050
Terbu os sul oxide	0.050
Terbu hylazine	0.020
Terbu ryn	0.020
Te rachlorvinphos	0.050
Te raconazole	0.050
Te radi on	0.200
Te rame hrin	0.050
Te rasul	0.100
Thiabendazole	0.100
Thiabendazole, 5-hydroxy	0.100
Thiacloprid	0.050
Thiame hoxam	0.100
Thiobencarb	0.050
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		

OQ = imi o Quan i a ion, mg/kg

ac ors a ec ing he OQ include ins rumen a ion sensi ivi y or a par icular analy e, sample size, mois ure con en (percen solids) o he sample, e ec iveness o he cleanup on he sample ex rac , and especially he ype o sample ma rix.

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Hemp & Cannabis
Chain of Custody

NW-Natural-Goods-
1694025625

ORELAP ID OR100028 ANAB ISO17025 ID AT1508

[redacted]

Project Information
Project Name N/A
PONumber N/A
Turnaround Time 5 Business Days | Req. For Micro Testing | Standard
Samples Delivered to Laboratory Schedule Pick-Up

[redacted]

#	Sample Name Test	Material	Amount Provided	Reporting Unit	Serving Size	Testing: H0010 - Potency Cannabinoid Basic + Extended Pro le	H0042 - Mycotoxins Compliance	P2320 - Pesticide - Multi-Residue Pro le	H0008 - Residual Solvents - OR	M010 - Micro Pro le D	H0013 - Heavy Metals Pro le OR (As, Cd, Pb & Hg)
1	GF 023249-1	Beverage	4 units for sale	mg/g & mg/serving	355 ml	✓	✓	✓	✓	✓	✓

Relinquished By	Date	Time	
Josh Hood	9/6/2023	11:40	Temp., °C
BR	9/7/2023	11:07	19.5

Received By	Date	Time	Received Temp., °C	Evidence of Cooling?
BR	9/7/2023	10:23		No
MRH	9/7/2023	11:13		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 Re inquished by" you are agreeing to these terms.

Columbia Laboratories
12423 NE Whitaker Way
Portland OR 97230

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Columbia LABORATORIES
A Tentamus Company

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

Report Number: 23-010635/D002.R000
Report Date: 09/14/2023
ORELAP#: OR100028
Purchase Order:
Received: 09/07/23 11:13

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

Laboratory Quality Control Results

JAOAC 2015 V98-6 — Batch ID: 2310817

Laboratory Control Sample

Analyte	LCS	Result	Spike	Units	%Rec	Limits	[redacted]	Notes
CBDVA	2	0.00101	0.0009	%	109	80.0 - 120	Acceptable	
CBDV	2	0.00106	0.0009	%	112	80.0 - 120	Acceptable	
CBE	2	0.00111	0.0010	%	112	80.0 - 120	Acceptable	
CBDA	1	0.00118	0.00109	%	109	90.0 - 110	Acceptable	
CBGA	1	0.00122	0.00110	%	110	80.0 - 120	Acceptable	
CBG	1	0.00125	0.00118	%	107	80.0 - 120	Acceptable	
CBD	1	0.00123	0.00114	%	108	90.0 - 110	Acceptable	
THCV	2	0.0007	0.0006	%	109	80.0 - 120	Acceptable	
d8THCV	2	0.0009	0.0008	%	114	80.0 - 120	Acceptable	
THCVA	2	0.00100	0.0009	%	109	80.0 - 120	Acceptable	
CBN	1	0.00123	0.00111	%	111	80.0 - 120	Acceptable	
exo-THC	2	0.00101	0.0009	%	111	80.0 - 120	Acceptable	
d9THC	1	0.00123	0.00115	%	106	90.0 - 110	Acceptable	
d8THC	1	0.00130	0.00117	%	110	90.0 - 110	Acceptable	Q1
9S-d10THC	1	0.00122	0.00115	%	106	80.0 - 120	Acceptable	
CBL	2	0.00105	0.0009	%	112	80.0 - 120	Acceptable	
9R-d10THC	1	0.0004	0.0004	%	112	80.0 - 120	Acceptable	
CBC	2	0.00110	0.00100	%	110	80.0 - 120	Acceptable	
THCA	1	0.00122	0.00111	%	111	90.0 - 110	Acceptable	Q1
CBCA	2	0.00103	0.0010	%	108	80.0 - 120	Acceptable	
CBLA	2	0.00216	0.00194	%	111	80.0 - 120	Acceptable	
d9THCP	2	0.00106	0.0009	%	112	80.0 - 120	Acceptable	
CBT	2	0.00104	0.0009	%	113	80.0 - 120	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBDV	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBE	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBDA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBGA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBG	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBD	<LOQ	0.0001	%	< 0.0001	Acceptable	
THCV	<LOQ	0.0001	%	< 0.0001	Acceptable	
d8THCV	<LOQ	0.0001	%	< 0.0001	Acceptable	
THCVA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBN	<LOQ	0.0001	%	< 0.0001	Acceptable	
exo-THC	<LOQ	0.0001	%	< 0.0001	Acceptable	
d9THC	<LOQ	0.0001	%	< 0.0001	Acceptable	
d8THC	<LOQ	0.0001	%	< 0.0001	Acceptable	
9S-d10THC	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBL	<LOQ	0.0001	%	< 0.0001	Acceptable	
9R-d10THC	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBC	<LOQ	0.0001	%	< 0.0001	Acceptable	
THCA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBCA	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBLA	<LOQ	0.0001	%	< 0.0001	Acceptable	
d9THCP	<LOQ	0.0001	%	< 0.0001	Acceptable	
CBT	<LOQ	0.0001	%	< 0.0001	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

JAOAC 2015 V98-6 Batch ID: 2310817
Sample Duplicate Sample ID 23-010635-0001

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBG	0.00318	0.00317	0.0001	%	0.368	< 20	Acceptable	
CBD	0.00597	0.00594	0.0001	%	0.462	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.0001	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.0001	%	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: 2310820

Method Blank					Laboratory Control Sample							
Analyte	Result		LOQ	Notes	Result	Spike	Units	% Rec	Limits			Notes
Propane	ND	<	200		560	584	µg/g	95.9	60	-	120	
Isobutane	ND	<	200		711	767	µg/g	92.7	60	-	120	
Butane	ND	<	200		732	782	µg/g	93.6	60	-	120	
2,2-Dimethylpropane	ND	<	200		892	939	µg/g	95.0	60	-	120	
Methanol	ND	<	200		1690	1670	µg/g	101.2	60	-	120	
Ethylene Oxide	ND	<	30		57.9	57.1	µg/g	101.4	60	-	120	
2-Methylbutane	ND	<	200		1550	1680	µg/g	92.3	60	-	120	
Pentane	ND	<	200		1540	1670	µg/g	92.2	60	-	120	
Ethanol	ND	<	200		1670	1660	µg/g	100.6	70	-	130	
Ethyl Ether	ND	<	200		1600	1670	µg/g	95.8	60	-	120	
2,2-Dimethylbutane	ND	<	30		176	189	µg/g	93.1	60	-	120	
Acetone	ND	<	200		1630	1670	µg/g	97.6	60	-	120	
2-Propanol	ND	<	200		1620	1630	µg/g	99.4	60	-	120	
Ethyl Formate	ND	<	500		1380	1600	µg/g	86.3	70	-	130	
Acetonitrile	ND	<	100		471	492	µg/g	95.7	60	-	120	
Methyl Acetate	ND	<	500		1570	1600	µg/g	98.1	70	-	130	
2,3-Dimethylbutane	ND	<	30		186	180	µg/g	103.3	60	-	120	
Dichloromethane	ND	<	60		475	488	µg/g	97.3	60	-	120	
2-Methylpentane	ND	<	30		173	182	µg/g	95.1	60	-	120	
MTBE	ND	<	500		1560	1610	µg/g	96.9	70	-	130	
3-Methylpentane	ND	<	30		160	177	µg/g	90.4	60	-	120	
Hexane	ND	<	30		169	177	µg/g	95.5	60	-	120	
1-Propanol	ND	<	500		1510	1600	µg/g	94.4	70	-	130	
Methylethylketone	ND	<	500		1550	1610	µg/g	96.3	70	-	130	
Ethyl acetate	ND	<	200		1570	1630	µg/g	96.3	60	-	120	
2-Butanol	ND	<	200		1540	1630	µg/g	94.5	60	-	120	
Tetrahydrofuran	ND	<	100		454	488	µg/g	93.0	60	-	120	
Cyclohexane	ND	<	200		1510	1610	µg/g	93.8	60	-	120	
2-methyl-1-propanol	ND	<	500		1480	1610	µg/g	91.9	70	-	130	
Benzene	ND	<	1		4.69	4.79	µg/g	97.9	60	-	120	
Isopropyl Acetate	ND	<	200		1580	1650	µg/g	95.8	60	-	120	
Heptane	ND	<	200		1510	1630	µg/g	92.6	60	-	120	
1-Butanol	ND	<	500		1330	1600	µg/g	83.1	70	-	130	
Propyl Acetate	ND	<	500		1430	1600	µg/g	89.4	70	-	130	
1,4-Dioxane	ND	<	100		460	523	µg/g	88.0	60	-	120	
2-Ethoxyethanol	ND	<	30		166	179	µg/g	92.7	60	-	120	
Methylisobutylketone	ND	<	500		1370	1600	µg/g	85.6	70	-	130	
3-Methyl-1-butanol	ND	<	500		1210	1600	µg/g	75.6	70	-	130	
Ethylene Glycol	ND	<	200		269	506	µg/g	53.2	60	-	120	Q6
Toluene	ND	<	100		446	496	µg/g	89.9	60	-	120	
Isobutyl Acetate	ND	<	500		1440	1610	µg/g	89.4	70	-	130	
1-Pentanol	ND	<	500		1500	1600	µg/g	93.8	70	-	130	
Butyl Acetate	ND	<	500		1340	1610	µg/g	83.2	70	-	130	
Ethylbenzene	ND	<	200		790	978	µg/g	80.8	60	-	120	
m,p-Xylene	ND	<	200		808	994	µg/g	81.3	60	-	120	
o-Xylene	ND	<	200		770	982	µg/g	78.4	60	-	120	
Cumene	ND	<	30		133	171	µg/g	77.8	60	-	120	
Anisole	ND	<	500		1210	1600	µg/g	75.6	70	-	130	
DMSO	ND	<	500		1170	1620	µg/g	72.2	70	-	130	
1,2-dimethoxyethane	ND	<	50		170	186	µg/g	91.4	70	-	130	
Triethylamine	ND	<	500		1380	1600	µg/g	86.3	70	-	130	
N,N-dimethylformamide	ND	<	150		410	480	µg/g	85.4	70	-	130	
N,N-dimethylacetamide	ND	<	150		343	483	µg/g	71.0	70	-	130	
Pyridine	ND	<	50		133	168	µg/g	79.2	70	-	130	
Sulfolane	ND	<	50		91.9	161	µg/g	57.1	70	-	130	Q6
1,2-Dichloroethane	ND	<	1		0.985	1	µg/g	98.5	70	-	130	
Chloroform	ND	<	1		0.86	1	µg/g	86.0	70	-	130	
Trichloroethylene	ND	<	1		0.862	1	µg/g	86.2	70	-	130	
1,1-Dichloroethane	ND	<	1		0.923	1	µg/g	92.3	70	-	130	

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QC- Sample Duplicate — Sample ID: 23-010289-0002

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	
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
Q6- Quality control outside QClimits. Data acceptable based on remaining QC.

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	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.