



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



Report Number: 23-012876/D002.R000
Report Date: 11/07/2023
ORELAP#: OR100028
Purchase Order:
Received: 10/31/23 12:03

Customer: NW Natural Goods
Product identity: HEMP - BB 0113
Client/Metric ID: .
Laboratory ID: 23-012876-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	0.212		mg/4g		CBD-Total per Serving Size 25.8 mg/4g
CBD per 4g	25.8		mg/4g		
CBDV per 4g	0.132		mg/4g		THC-Total per Serving Size <LOQ
CBG per 4g	0.716		mg/4g		(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 0113

Client/Metric ID: .

Sample Date:

Laboratory ID: 23-012876-0001

Evidence of Cooling: No

Temp: 15.9 °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: 2312433 Analyze: 11/2/23 12:30:00 AM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	0.212		mg/4g	0.128	
CBC-A per 4g	< LOQ		mg/4g	0.128	
CBC-Total per 4g	< LOQ		mg/4g	0.240	
CBD per 4g	25.8		mg/4g	0.128	
CBD-A per 4g	< LOQ		mg/4g	0.128	
CBD-Total per 4g	25.8		mg/4g	0.240	
CBDV per 4g	0.132		mg/4g	0.128	
CBDV-A per 4g	< LOQ		mg/4g	0.128	
CBDV-Total per 4g	< LOQ		mg/4g	0.239	
CBE per 4g	< LOQ		mg/4g	0.128	
CBG per 4g	0.716		mg/4g	0.128	
CBG-A per 4g	< LOQ		mg/4g	0.128	
CBG-Total per 4g	0.716		mg/4g	0.239	
CBL per 4g	< LOQ		mg/4g	0.128	
CBL-A per 4g	< LOQ		mg/4g	0.128	
CBL-Total per 4g	< LOQ		mg/4g	0.240	
CBN per 4g	< LOQ		mg/4g	0.128	
CBT per 4g	< LOQ		mg/4g	0.128	
Δ8-THCV per 4g	< LOQ		mg/4g	0.128	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.128	
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.128	
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.256	
Δ8-THC per 4g	< LOQ		mg/4g	0.128	
Δ9-THC per 4g	< LOQ		mg/4g	0.128	
delta-9-THCP per 4g	< LOQ		mg/4g	0.128	
exo-THC per 4g	< LOQ		mg/4g	0.128	
THC-A per 4g	< LOQ		mg/4g	0.128	
THC-Total per 4g	< LOQ		mg/4g	0.240	
THCV per 4g	< LOQ		mg/4g	0.128	
THCV-A per 4g	< LOQ		mg/4g	0.128	
THCV-Total per 4g	< LOQ		mg/4g	0.240	
Total Cannabinoids per 4g	26.9		mg/4g		



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2312381	11/03/23 AOAC 991.14 (Petrifilm) ^P		
Total Coliforms	< LOQ		cfu/g	10	2312381	11/03/23 AOAC 991.14 (Petrifilm) ^P		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2312382	11/03/23 AOAC 2014.05 (RAPID) ^P		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2312382	11/03/23 AOAC 2014.05 (RAPID) ^P		

Solvents Method: Residual Solvents by GC/MS^P Units µg/g Batch 2312430 Analyze 11/02/23 12:13 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)^P Units mg/kg Batch 2312528 Analyze 11/06/23 03:15 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	0.0157	2312470	11/03/23 AOAC 2013.06 (mod.) ^p	pass	
Cadmium*	< LOQ	0.200	mg/kg	0.0157	2312470	11/03/23 AOAC 2013.06 (mod.) ^p	pass	
Lead*	< LOQ	0.500	mg/kg	0.0157	2312470	11/03/23 AOAC 2013.06 (mod.) ^p	pass	
Mercury*	< LOQ	0.100	mg/kg	0.00785	2312470	11/03/23 AOAC 2013.06 (mod.) ^p	pass	

Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	18.5		g/100g	0.10	2312448	11/03/23 AOAC 925.10 (mod.) ^p		
Water Activity	0.681		Aw	0.030	2312434	11/02/23 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	Clofentazine	0.020	PTC	0.100
Aceamiprid	0.020	Clomazone	0.020	s-envalera e/ envalera e	0.200
Aceochlor	0.100	Clofentanil	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	Cyanocephos	0.020	hirimol	0.100
Aldoxycarb (Aldicarb-sulfoxide)	0.100	Cyaniliprole	0.050	hoimesa e	0.050
Aldrin	0.100	Cyazofluthrin	0.020	hoprophos	0.020
Ametoctradin	0.020	Cycloxyfen	0.100	oxaproprate	0.020
Ametoctradin	0.500	Cyfluthrin	0.200	oxazole	0.020
Aspersion	0.100	Cyhalothrin, lambda	0.200	ridiazole	0.100
Asulam	0.100	Cymoxanil	0.050	rimosulfuron	0.020
Azinphosmethyl	0.100	Cypermethrin	0.200	amoxadone	0.200
Azinphosmethyl	0.020	Cyprodinil	0.100	amphur	0.100
Azinphosmethyl	0.020	Dacifluthrin	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	enbutioconazole	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	enirofenthiol	0.100
Beta-cyfluthrin isomer	0.500	D (Tribuol)	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
Bromophosmethyl	0.100	Diazinon	0.020	enson	0.100
Bromophosmethyl	0.200	Diazoxon	0.100	ensulofenthiol	0.020
Bromopropylate	0.100	Dichlobenil	0.100	ensulofenthiol oxon	0.020
Bromuconazole	0.100	Dichlofuanid	0.100	ensulofenthiol sulfoxide	0.100
Bupirimate	0.020	Dichlorvos	0.100	Fensulfenthiol-oxon-sulfone	0.020
Buprofezin	0.050	Diclobutylazole	0.050	enfenprophos	0.050
Buthoxyacarb	0.500	Dicofenol	0.100	enfenprophos oxon	0.020
Buthoxyacarb	0.200	Dicrofofenol	0.050	enfenprophos sulfoxide	0.100
Buthoxyacarb	0.100	Dieldrin	0.100	enfenprophos sulfoxide	0.050
Cadusafos	0.020	Diehoencarb	0.020	enuron	0.020
Captafol	1.000	Diehoencarb (D T)	0.050	ipronil	0.100
Carbaryl	0.050	Diethofenathiazole	0.100	lonicamid	0.100
Carbendazim	0.100	Dimehenamid	0.050	luchloralin	0.100
Carbofenthiol	0.020	Dimehoencarb	0.050	lucythrinate	0.100
Carbophenothion	0.200	Dimehomophos	0.050	ludioxonil	0.200
Carboxin	0.020	Diniconazole	0.200	luenacarb	0.020
Carfenthiol	0.100	Dinofenprophos	0.200	lumioxazin	0.100
Chloraniliprole	0.020	Dioxathion	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
Chlorfenapyr	0.500	Disulfoton	0.100	luoxastrobin	0.050
Chlorfenthiol	0.200	Disulfoton sulfoxide	0.100	lupyradiuron	0.020
Chlorfenthiol	0.050	Disulfoton sulfoxide	0.100	luridone	0.100
Chlorobenzilate	0.100	Diuron	0.050	lutilazole	0.020
Chlorobenzilate	0.200	diethofenathiazole	0.050	lufenoxuron	0.020
Chlorpyrifos	0.050	disulfoton alpha	0.200	lufenoxuron	0.020
Chlorpyrifosmethyl	0.200	disulfoton beta	0.200	lufenoxuron	0.100
Cyfluthrin	1.000	disulfoton sulfoxide	0.100	luxapryoxad	0.020



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Cannabis Multiresidue Profiling Limits of Quantitation

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
omese	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
Mepanipirim	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- 1698686994

ORELAP ID: OR 000028 ANAB ISO 17025 ID: AT1508

Contact Information Company: <u>Northwest Natural Goods</u> [Redacted] [Redacted] [Redacted] [Redacted] [Redacted] [Redacted] [Redacted]		Project Details Turnaround Time: <u>5 Business Days Req. For Micro Testing Standard</u> Sample Relinquishment Options: <u>Pick-Up Request</u> Compliance: <u>Compliance</u> Project Name / ID: <u>HEMP - BB 01B</u> Cannabis Type (select if applicable): <u>Industrial</u>			Testing H001D - Potency Combined Basic + Extended Profile P2200 - Pesticide - Multi-Residue Profile H0008 - Residual Solvents - OR H001G - Heavy Metals Profile OR (As, Cd, Pb & Hg) M075 - Total Coliforms + E.Coli M283 - Yeast and Mold N180 - Moisture as Loss on Drying N360 - Water Activity						
#	Sample Name Test	Material	Amount Provided	Reporting Unit	Serving Size						
1	HEMP - BB 01B	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?
KRISTEN JOHNSON	10/30/2023	10:29	Temp., C	BR	10/31/2023	10:19		No
BR	10/31/2023	11:03	15.9	MIRH	10/31/2023	12:03		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)254-1941 / Fax (503)254-1452
info@columbiaboratories.com

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

Laboratory Quality Control Results

Residual Solvents				Batch D: 2312430						
Method Blank				Laboratory Control Sample						
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes	
Propane	ND	< 200		511	584	µg/g	87.5	60 - 120		
Isobutane	ND	< 200		794	767	µg/g	103.5	60 - 120		
Butane	ND	< 200		740	782	µg/g	94.6	60 - 120		
2,2-Dimethylpropane	ND	< 200		921	939	µg/g	98.1	60 - 120		
Methanol	ND	< 200		1650	1670	µg/g	98.8	60 - 120		
Ethylene Oxide	ND	< 30		58.2	57.1	µg/g	101.9	60 - 120		
2-Methylbutane	ND	< 200		1500	1680	µg/g	89.3	60 - 120		
Pentane	ND	< 200		1500	1670	µg/g	89.8	60 - 120		
Ethanol	ND	< 200		1600	1660	µg/g	96.4	70 - 130		
Ethyl Ether	ND	< 200		1550	1670	µg/g	92.8	60 - 120		
2,2-Dimethylbutane	ND	< 30		174	189	µg/g	92.1	60 - 120		
Acetone	ND	< 200		1590	1670	µg/g	95.2	60 - 120		
2-Propanol	ND	< 200		1540	1630	µg/g	94.5	60 - 120		
Ethyl Formate	ND	< 500		1160	1600	µg/g	72.5	70 - 130		
Acetonitrile	ND	< 100		468	492	µg/g	95.1	60 - 120		
Methyl Acetate	ND	< 500		1380	1600	µg/g	86.3	70 - 130		
2,3-Dimethylbutane	ND	< 30		185	180	µg/g	102.8	60 - 120		
Dichloromethane	ND	< 60		460	488	µg/g	94.3	60 - 120		
2-Methylpentane	ND	< 30		149	182	µg/g	81.9	60 - 120		
MTBE	ND	< 500		1420	1610	µg/g	88.2	70 - 130		
3-Methylpentane	ND	< 30		171	177	µg/g	96.6	60 - 120		
Hexane	ND	< 30		157	177	µg/g	88.7	60 - 120		
1-Propanol	ND	< 500		1430	1600	µg/g	89.4	70 - 130		
Methyl ethyl ketone	ND	< 500		1340	1610	µg/g	83.2	70 - 130		
Ethyl acetate	ND	< 200		1520	1630	µg/g	93.3	60 - 120		
2-Butanol	ND	< 200		1490	1630	µg/g	91.4	60 - 120		
Tetrahydrofuran	ND	< 100		437	488	µg/g	89.5	60 - 120		
Cyclohexane	ND	< 200		1450	1610	µg/g	90.1	60 - 120		
2-methyl-1-propanol	ND	< 500		1440	1610	µg/g	89.4	70 - 130		
Benzene	ND	< 1		4.59	4.79	µg/g	95.8	60 - 120		
Isopropyl Acetate	ND	< 200		1530	1650	µg/g	92.7	60 - 120		
Heptane	ND	< 200		1450	1630	µg/g	89.0	60 - 120		
1-Butanol	ND	< 500		1440	1600	µg/g	90.0	70 - 130		
Propyl Acetate	ND	< 500		1330	1600	µg/g	83.1	70 - 130		
1,4-Dioxane	ND	< 100		490	523	µg/g	93.7	60 - 120		
2-Ethoxyethanol	ND	< 30		155	179	µg/g	86.6	60 - 120		
Methylisobutylketone	ND	< 500		1430	1600	µg/g	89.4	70 - 130		
3-Methyl-1-butanol	ND	< 500		1210	1600	µg/g	75.6	70 - 130		
Ethylene Glycol	ND	< 200		427	508	µg/g	84.4	60 - 120		
Toluene	ND	< 100		440	496	µg/g	88.7	60 - 120		
Isobutyl Acetate	ND	< 500		1250	1610	µg/g	77.6	70 - 130		
1-Pentanol	ND	< 500		1170	1600	µg/g	73.1	70 - 130		
Butyl Acetate	ND	< 500		1210	1610	µg/g	75.2	70 - 130		
Ethylbenzene	ND	< 200		812	978	µg/g	83.0	60 - 120		
m,p-Xylene	ND	< 200		798	994	µg/g	80.1	60 - 120		
o-Xylene	ND	< 200		815	982	µg/g	83.0	60 - 120		
Cumene	ND	< 30		134	171	µg/g	78.4	60 - 120		
Anisole	ND	< 500		1190	1600	µg/g	74.4	70 - 130		
DMSO	ND	< 500		1310	1620	µg/g	80.9	70 - 130		
1,2-dimethoxyethane	ND	< 50		150	186	µg/g	80.6	70 - 130		
Triethylamine	ND	< 500		1340	1600	µg/g	83.8	70 - 130		
N,N-dimethylformamide	ND	< 150		350	480	µg/g	72.9	70 - 130		
N,N-dimethylacetamide	ND	< 150		396	483	µg/g	82.0	70 - 130		
Pyridine	ND	< 50		128	168	µg/g	76.2	70 - 130		
Silfolane	ND	< 50		90.4	161	µg/g	56.1	70 - 130	Q6	
1,2-Dichloroethane	ND	< 1		0.94	1	µg/g	94.0	70 - 130		
Chloroform	ND	< 1		0.76	1	µg/g	76.0	70 - 130		
Trichloroethylene	ND	< 1		0.799	1	µg/g	79.9	70 - 130		
1,1-Dichloroethane	ND	< 1		0.855	1	µg/g	85.5	70 - 130		



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



Report Number: 23-012876/D002.R000
Report Date: 11/07/2023
ORELAP#: OR100028
Purchase Order:
Received: 10/31/23 12:03

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

QC- Sample Duplicate		Sample ID: 23-012497-0001						
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		
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

Units of Measure:

µg/g - Microgram per gram or ppm



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 Portland, OR 97230
 503-254-1794



Report Number: 23-012876/D002.R000
Report Date: 11/07/2023
ORELAP#: OR100028
Purchase Order:
Received: 10/31/23 12:03

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

Laboratory Quality Control Results

JAOAC2015 V98-6 Batch ID: 2312433

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0322	0.0323	%	99.6	80.0	- 120	Acceptable	
CBDV	2	0.0330	0.0337	%	98.1	80.0	- 120	Acceptable	
CBE	2	0.0355	0.0358	%	99.0	80.0	- 120	Acceptable	
CBD	1	0.0328	0.0322	%	102	90.0	- 110	Acceptable	
CBD	1	0.0329	0.0329	%	99.7	80.0	- 120	Acceptable	
CBD	1	0.0365	0.0368	%	99.4	80.0	- 120	Acceptable	
CBD	1	0.0331	0.0313	%	106	90.0	- 110	Acceptable	
THCV	2	0.0340	0.0345	%	98.6	80.0	- 120	Acceptable	
38THCV	2	0.0287	0.0283	%	101	80.0	- 120	Acceptable	
THCV/A	2	0.0309	0.0312	%	99.3	80.0	- 120	Acceptable	
CBN	1	0.0328	0.0329	%	100.0	80.0	- 120	Acceptable	
exo-THC	2	0.0313	0.0315	%	99.4	80.0	- 120	Acceptable	
d9THC	1	0.0369	0.0365	%	101	90.0	- 110	Acceptable	
d8THC	1	0.0333	0.0340	%	98.0	90.0	- 110	Acceptable	
9S-d10THC	1	0.0334	0.0337	%	99.2	80.0	- 120	Acceptable	
CBL	2	0.0325	0.0332	%	98.1	80.0	- 120	Acceptable	
9R-d10THC	1	0.0331	0.0336	%	98.3	80.0	- 120	Acceptable	
CBC	2	0.0339	0.0342	%	99.1	80.0	- 120	Acceptable	
THCA	1	0.0334	0.0337	%	99.2	90.0	- 110	Acceptable	
CBCA	2	0.0328	0.0338	%	97.0	80.0	- 120	Acceptable	
CBLA	2	0.0346	0.0342	%	101	80.0	- 120	Acceptable	
39THCP	2	0.0331	0.0334	%	99.3	80.0	- 120	Acceptable	
CBT	2	0.0342	0.0343	%	99.8	80.0	- 120	Acceptable	

Method Blank						
Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00328	%	< 0.00328	Acceptable	
CBDV	<LOQ	0.00328	%	< 0.00328	Acceptable	
CBE	<LOQ	0.00328	%	< 0.00328	Acceptable	
CBD	<LOQ	0.00328	%	< 0.00328	Acceptable	
CBD	<LOQ	0.00328	%	< 0.00328	Acceptable	
THCV	<LOQ	0.00328	%	< 0.00328	Acceptable	
38THCV	<LOQ	0.00328	%	< 0.00328	Acceptable	
THCV/A	<LOQ	0.00328	%	< 0.00328	Acceptable	
CBN	<LOQ	0.00328	%	< 0.00328	Acceptable	
exo-THC	<LOQ	0.00328	%	< 0.00328	Acceptable	
d9THC	<LOQ	0.00328	%	< 0.00328	Acceptable	
d8THC	<LOQ	0.00328	%	< 0.00328	Acceptable	
9S-d10THC	<LOQ	0.00328	%	< 0.00328	Acceptable	
CBL	<LOQ	0.00328	%	< 0.00328	Acceptable	
9R-d10THC	<LOQ	0.00328	%	< 0.00328	Acceptable	
CBC	<LOQ	0.00328	%	< 0.00328	Acceptable	
THCA	<LOQ	0.00328	%	< 0.00328	Acceptable	
CBCA	<LOQ	0.00328	%	< 0.00328	Acceptable	
CBLA	<LOQ	0.00328	%	< 0.00328	Acceptable	
39THCP	<LOQ	0.00328	%	< 0.00328	Acceptable	
CBT	<LOQ	0.00328	%	< 0.00328	Acceptable	

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

Units of Measure:
 %- Percent



12423 NE Whitaker Way
 Portland, OR 97230
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Report Number: 23-012876/D002.R000
Report Date: 11/07/2023
ORELAP#: OR100028
Purchase Order:
Received: 10/31/23 12:03

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

Laboratory Quality Control Results

JAOAC2015 V98-6		Batch ID: 2312433						
Sample Duplicate		Sample ID: 23-012856-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
CBDV	0.00321	0.00332	0.00320	%	3.17	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
CBD	0.0180	0.0180	0.00320	%	0.303	< 20	Acceptable	
CBD	0.646	0.648	0.00320	%	0.370	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
Δ8THCV	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
THCV/A	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
Δ9THC	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
Δ8THC	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
9SΔ10THC	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
9RΔ10THC	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
CBC	0.00517	0.00524	0.00320	%	1.29	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
Δ9THCP	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.00320	%	NA	< 20	Acceptable	

Abbreviations

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

Units of Measure:

%- Percent



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



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Report Number: 23-012876/D002.R000
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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.