



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22

**Customer:** NW Natural Goods  
**Product identity:** HEMP - EB 0088  
**Client/Metric ID:** .  
**Laboratory ID:** 23-009164-0002

### Summary

**Potency:**

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	0.200		mg/4g		CBD-Total per Serving Size 25.8 mg/4g
CBD per 4g	25.8		mg/4g		
CBG per 4g	0.704		mg/4g		THC-Total per Serving Size <LOQ
CBN per 4g	4.92		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.*



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22

**Customer:** NW Natural Goods

**Product identity:** HEMP - EB 0088

**Client/Metric ID:** .

**Sample Date:**

**Laboratory ID:** 23-009164-0002

**Evidence of Cooling:** No

**Temp:** 21.4 °C

**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: 2309794	Analyze: 8/7/23 9:12:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	0.200		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	25.8		mg/4g	0.127	
CBD-A per 4g	< LOQ		mg/4g	0.127	
CBD-Total per 4g	25.8		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	0.236	
CBE per 4g	< LOQ		mg/4g	0.127	
CBG per 4g	0.704		mg/4g	0.127	
CBG-A per 4g	< LOQ		mg/4g	0.127	
CBG-Total per 4g	0.704		mg/4g	0.236	
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	4.92		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	0.253	
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	31.7		mg/4g		



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22

**Microbiology**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2309696	08/06/23 AOAC 991.14 (Petrifilm) <sup>P</sup>		
Total Coliforms	< LOQ		cfu/g	10	2309696	08/06/23 AOAC 991.14 (Petrifilm) <sup>P</sup>		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2309697	08/06/23 AOAC 2014.05 (RAPID) <sup>P</sup>		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2309697	08/06/23 AOAC 2014.05 (RAPID) <sup>P</sup>		

**Solvents** Method: Residual Solvents by GC/MS<sup>P</sup> Units µg/g Batch 2309785 Analyze 08/07/23 02:08 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>P</sup> Units mg/kg Batch 2309863 Analyze 08/09/23 04:16 PM

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



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22

**Metals**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic*	< LOQ	0.200	mg/kg	0.0162	2309845	08/08/23 AOAC 2013.06 (mod.) <sup>p</sup>	pass	
Cadmium*	< LOQ	0.200	mg/kg	0.0162	2309845	08/08/23 AOAC 2013.06 (mod.) <sup>p</sup>	pass	
Lead*	< LOQ	0.500	mg/kg	0.0162	2309845	08/08/23 AOAC 2013.06 (mod.) <sup>p</sup>	pass	
Mercury*	< LOQ	0.100	mg/kg	0.00812	2309845	08/08/23 AOAC 2013.06 (mod.) <sup>p</sup>	pass	

**Nutrition**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	18.1		g/100g	0.10	2309793	08/07/23 AOAC 925.10 (mod.) <sup>p</sup>		
Water Activity	0.707		Aw	0.030	2309772	08/07/23 AOAC 978.18 <sup>p</sup>		



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22

### 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



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22



**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)
Abamec in	0.100	Cle hodim	0.050	ndrin	0.100
Acepha e	0.100	Cle hodim Sul one	0.050	PN	0.050
Acequinocyl	0.100	Cle hodim Sul oxide	0.050	PTC	0.100
Ace amiprid	0.020	Clo en ezine	0.020	s envalera e/ envalera e	0.200
Ace ochlor	0.100	Clomazone	0.020	aconazole	0.100
Acrina hrin	0.100	Clo hianidin	0.200	hal luralin	0.100
Alachlor	0.100	Coumaphos	0.050	hio encarb	0.050
Aldicarb	0.100	Cro oxyphos	0.020	hion	0.200
Aldicarb sul oxide	0.100	Cyanazine	0.020	hirimol	0.100
Aldoxycarb (Aldicarb-sul one)	0.100	Cyano enphos	0.020	ho umesa e	0.050
Aldrin	0.100	Cyan raniliprole	0.050	hoprophos	0.020
Ame ocr radin	0.020	Cyazo amid	0.020	o enprox	0.020
Ame ryn	0.500	Cycloa e	0.100	oxazole	0.020
Aspon	0.100	Cy lu hrin	0.200	ridiazole	0.100
Asulam	0.100	Cyhalo hrin, lambda	0.200	rim os	0.020
A razine	0.100	Cymoxanil	0.050	amoxadone	0.200
A razine-dese hyl	0.100	Cyperme hrin	0.200	amphur	0.100
Azinphos-e hyl	0.020	Cyprodinil	0.100	enamidone	0.020
Azinphos-me hyl	0.020	Dac hal	0.100	enamiphos	0.020
Azoxys robin	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
Ben luralin	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
B C alpha isomer	0.100	DDT, o,p'-	0.100	enhexamid	0.100
B C be a isomer	0.100	DDT, p,p'-	0.100	eni ro hion	0.100
B C del a isomer	0.500	D (Tribu os)	0.100	enobucarb	0.050
Bi enaza e	0.020	Del ame hrin	0.100	enoxy carb	0.020
Bi en hrin	0.020	Desmedipham	0.100	enpropa hrin	0.050
Boscalid	0.020	Dialla e	0.100	enpyroxima e	0.020
Bromophos-e hyl	0.100	Diazinon	0.020	enson	0.100
Bromophos-me hyl	0.200	Diazoxon	0.100	ensul o hion	0.020
Bromopropyla e	0.100	Dichlobenil	0.100	ensul o hion oxon	0.020
Bromuconazole	0.100	Dichlo luanid	0.100	ensul o hion sul one	0.100
Bupirima e	0.020	Dichlorvos	0.100	Fensulfothion-oxon-sulfone	0.020
Bupro ezin	0.050	Diclobu razol	0.050	en hion	0.050
Bu achlor	0.500	Dico ol	0.100	en hion oxon	0.020
Bu ralin	0.200	Dicro ophos	0.050	en hion oxon sul one	0.100
Bu yla e	0.100	Dieldrin	0.100	en hion sul one	0.050
Cadusa os	0.020	Die ho encarb	0.020	enuron	0.020
Cap an	1.000	Die hyl oluamide (D T)	0.050	ipronil	0.100
Carbaryl	0.050	Di enoconazole	0.100	lonicamid	0.100
Carbendazim	0.100	Dime henamid	0.050	luchloralin	0.100
Carbo uran	0.020	Dime hoa e	0.050	lucy hrina e	0.100
Carbopheno hion	0.200	Dime homorph	0.050	ludioxonil	0.200
Carboxin	0.020	Diniconazole	0.200	lu enace	0.020
Car en razone-e hyl	0.100	Dino e uran	0.200	lumioxazin	0.100
Chloran raniliprole	0.020	Dioxa hion	0.100	luome uron	0.020
Chlordane, cis-	0.200	Diphenamid	0.020	luopicolide	0.050
Chlordane, rans-	0.200	Diphenylamine	0.100	luopyram	0.020
Chlor enapyr	0.500	Disul o on	0.100	luoxas robin	0.050
Chlor enson	0.200	Disul o on sul one	0.100	lupyradi urone	0.020
Chlor envinphos	0.050	Disul o on sul oxide	0.100	luridone	0.100
Chlorobenzila e	0.100	Diuron	0.050	lusilazole	0.020
Chloroneb	0.200	di enphos	0.050	lu olanil	0.020
Chlorpyri os	0.050	ndosul an alpha	0.200	lu ria ol	0.020
Chlorpyri os-me hyl	0.200	ndosul an be a	0.200	lualina e, au-	0.100
C PC	1.000	ndosul an sul a e	0.100	luxapyroxad	0.020



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

**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22



Cannabis Multiresidue Profiling Limits of Quantitation

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
omese	0.100	Mexacarb	0.020	Propamocarb	0.050
onos	0.100	MGK 264	0.020	Propanil	0.050
orchlor enuron	0.050	Mirex	0.100	Propargite	0.050
orme ana e	0.050	Molina e	0.050	Propazine	0.020
ura hiocarb	0.020	Monocro phos	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	Pyraclorobin	0.020
mazalil	0.100	Ome hoa e	0.100	Pyrazophos	0.050
midacloprid	0.100	O-Phenylphenol	0.100	Pyre hrins	0.050
ndazilam	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	Oxychlorane	0.100	Pyrimethanil	0.050
sobenzan	0.100	Oxydeme on-Me hyl	0.100	Pyriproxy en	0.020
socarbophos	0.500	Oxy hioquinox	0.200	Pyroxasul one	0.020
sodrin	0.100	Paclobu razol	0.050	Pyroxsulam	0.020
so enphos	0.050	Paraoxon-e hyl	0.020	Quinalphos	0.050
so enphos-me hyl	0.020	Paraoxon me hyl	0.100	Quinoxyl en	0.050
so enphos oxon	0.050	Para hion e hyl	0.100	Quin ozene (PCNB)	0.200
soprocab	0.020	Para hion me hyl	0.200	Resmethrin	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	Pentachloroethoxyanisole (PCTA)	0.100	Spirodiclo en	0.100
enacil	0.100	Pen hiopyrad	0.020	Spiromesifen	0.050
indane (gamma B C)	0.100	Permethrin	0.050	Spiro erama	0.050
inuron	0.020	Per hane	0.100	Spiroxamine	0.020
Mala oxon	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	Procymidone	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	Thiamethoxam	0.100
Me ribuzin	0.100	Propachlor	0.020	Thiobencarb	0.050
Mevinphos	0.100			Thiodicarb	0.050
				Thiophanate-methyl	0.050



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22



Cannabis Mutt-Residue Profile, Limits of Quantitation

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
Tolcloso-methyl	0.100	Triazophos	0.020	Trioxys-robin	0.020
Triorin	0.100	Tolyluanid	0.050	Triiconazole	0.050
Tralkoxydim	0.100	Tridiphane	0.500	Vinclozolin	0.100
Triadimeon	0.050	Triumizole	0.020	Zoxamide	0.020
Trialle	0.100	Triuralin	0.100		

LOQ = Limit of Quantitation, mg/kg

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





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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22



Hemp & Cannabis  
 Chain of Custody

Northwest-Natural-  
 Goods-1691014509

ORELAP ID: CR1000028 ANAB ISO 17025 ID: AT1608

Project Information			Testing							
Project Name: <b>HEMP - EB 0088</b> PONumber: <b>N/A</b> Turnaround Time: <b>5 Business Days (Req. For Micro Testing) Standard</b> Samples Delivered to Laboratory: <b>Schedule Pick-Up</b> Cannabis Type: <b>Industrial</b>			H0010 Potency Cannabinoid Basic + Extended Profile	P2320 Pesticide - Multi-Residue Profile	H0008 Residual Solvents - OR	H0019 Heavy Metals Profile OR (As, Cd, Pb, Hg)	M075 Total Coliforms + E Coli	M020 Yeast and Mold	N180 Moisture as Loss on Drying	N050 Water Activity
#	Sample Name	Material	Amount Provided							
1	HEMP - EB 0088	Edible	20 units for sale	✓	✓	✓	✓	✓	✓	

Relinquished By	Date	Time	Temp., °C	Received By	Date	Time	Received Temp. °C	Evidence of Cooling?
<i>Charles Moore</i>	<i>8/2/2023</i>	<i>15:15</i>		<i>BR</i>	<i>8/3/2023</i>	<i>10:26</i>		<i>No</i>
<i>BR</i>	<i>8/3/2023</i>	<i>11:05</i>	<i>21.3</i>	<i>MRH</i>	<i>8/3/2023</i>	<i>11:22</i>		<i>No</i>

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  
[www.columbialaboratories.com](http://www.columbialaboratories.com)

Page 1 of 1  
[www.columbialaboratories.com](http://www.columbialaboratories.com)



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22



Hemp & Cannabis  
 Chain of Custody

Northwest-Natural-  
 Goods-1691014306

ORELAP ID: CR1000028 ANAB ISO 17025 ID: AT1608

[Redacted] [Redacted] [Redacted] [Redacted] [Redacted] [Redacted] [Redacted]	Project Information Project Name <b>HEMP - EB0087</b> PONumber <b>N/A</b> Turnaround Time <b>5 Business Days - Req. For Micro Testing   Standard</b> Samples Delivered to Laboratory <b>Schedule Pick-Up</b> Cannabis Type <b>Industrial</b> [Redacted] [Redacted]		Testing H0010 Potency Cannabinoid Basic + Extended Profile P2320 Pesticide - Multi-Residue Profile H0008 Residual Solvents - OR H0019 Heavy Metals Profile OR (As, Cd, Pb, Hg) M075 Total Coliforms + E Coli M025 Yeast and Mold N050 Water Activity N180 Moisture as Loss on Drying						
	#	Sample Name	Material	Amount Provided					
1	HEMP - EB0087	Edible	20 units for sale						

Relinquished By	Date	Time	Temp., °C	Received By	Date	Time	Received Temp. °C	Evidence of Cooling?
<i>Charles Moore</i>	8/2/2023	15:11		<i>BR</i>	8/3/2023	10:22		<i>No</i>
<i>BR</i>	8/3/2023	11:04	21.4	<i>MRH</i>	8/3/2023	11:22		<i>No</i>

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) 254-4152  
[www.columbialaboratories.com](http://www.columbialaboratories.com)

Page 1 of 1  
[www.columbialaboratories.com](http://www.columbialaboratories.com)



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22

Revision 2 Document D 7087  
 Legacy D CFL-E33Effective

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2309785					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		489	584	µg/g	83.7	60	120
Isobutane	ND	< 200		645	767	µg/g	84.1	60	120
Butane	ND	< 200		632	782	µg/g	80.8	60	120
2,2 Dimethylpropane	ND	< 200		787	939	µg/g	83.8	60	120
Methanol	ND	< 200		1670	1640	µg/g	101.8	60	120
Ethylene Oxide	ND	< 30		56.2	57.1	µg/g	98.4	60	120
2 Methylbutane	ND	< 200		1390	1600	µg/g	86.9	60	120
Pentane	ND	< 200		1420	1620	µg/g	87.7	60	120
Ethanol	ND	< 200		1660	1610	µg/g	103.1	70	130
Ethyl Ether	ND	< 200		1470	1610	µg/g	91.3	60	120
2,2 Dimethylbutane	ND	< 30		154	168	µg/g	91.7	60	120
Acetone	ND	< 200		1540	1620	µg/g	95.1	60	120
2 Propanol	ND	< 200		1780	1600	µg/g	111.3	60	120
Ethyl Formate	ND	< 500		1390	1600	µg/g	86.9	70	130
Acetonitrile	ND	< 100		436	484	µg/g	90.1	60	120
Methyl Acetate	ND	< 500		1540	1610	µg/g	95.7	70	130
2,3 Dimethylbutane	ND	< 30		150	162	µg/g	92.6	60	120
Dichloromethane	ND	< 60		465	483	µg/g	96.3	60	120
2 Methylpentane	ND	< 30		171	174	µg/g	98.3	60	120
M BE	ND	< 500		1570	1610	µg/g	97.5	70	130
3 Methylpentane	ND	< 30		167	168	µg/g	99.4	60	120
Hexane	ND	< 30		156	168	µg/g	92.9	60	120
1 Propanol	ND	< 500		1730	1600	µg/g	108.1	70	130
Methylethylketone	ND	< 500		1590	1620	µg/g	98.1	70	130
Ethyl acetate	ND	< 200		1600	1600	µg/g	100.0	60	120
2 Butanol	ND	< 200		1820	1600	µg/g	113.8	60	120
tetrahydrofuran	ND	< 100		492	514	µg/g	95.7	60	120
Cyclohexane	ND	< 200		1560	1600	µg/g	97.5	60	120
2 methyl 1 propanol	ND	< 500		1890	1610	µg/g	117.4	70	130
Benzene	ND	< 1		4.17	5.12	µg/g	81.4	60	120
Isopropyl Acetate	ND	< 200		1630	1620	µg/g	100.6	60	120
Heptane	ND	< 200		1500	1610	µg/g	93.2	60	120
1 Butanol	ND	< 500		1840	1600	µg/g	115.0	70	130
Propyl Acetate	ND	< 500		1610	1600	µg/g	100.6	70	130
1,4 Dioxane	ND	< 100		487	493	µg/g	98.8	60	120
2 Ethoxyethanol	ND	< 30		194	163	µg/g	119.0	60	120
Methylisobutylketone	ND	< 500		1660	1600	µg/g	103.8	70	130
3 Methyl 1 butanol	ND	< 500		1810	1610	µg/g	112.4	70	130
Ethylene Glycol	ND	< 200		292	483	µg/g	60.5	60	120
oluene	ND	< 100		489	493	µg/g	99.2	60	120
Isobutyl Acetate	ND	< 500		1610	1600	µg/g	100.6	70	130
1 Pentanol	ND	< 500		1860	1600	µg/g	116.3	70	130
Butyl Acetate	ND	< 500		1630	1600	µg/g	101.9	70	130
Ethylbenzene	ND	< 200		988	969	µg/g	102.0	60	120
m,p Xylene	ND	< 200		983	968	µg/g	101.5	60	120
o Xylene	ND	< 200		1020	976	µg/g	104.5	60	120
Cumene	ND	< 30		171	162	µg/g	105.6	60	120
Anisole	ND	< 500		1610	1610	µg/g	100.0	70	130
DMSO	ND	< 500		1430	1610	µg/g	88.8	70	130
1,2 dimethoxyethane	ND	< 50		158	164	µg/g	96.3	70	130
riethylamine	ND	< 500		1360	1600	µg/g	85.0	70	130
N,N dimethylformamide	ND	< 150		519	484	µg/g	107.2	70	130
N,N dimethylacetamide	ND	< 150		460	489	µg/g	94.1	70	130
Pyridine	ND	< 50		180	172	µg/g	104.7	70	130
Sulfolane	ND	< 50		160	163	µg/g	98.2	70	130
1,2 Dichloroethane	ND	< 1		1.2	1	µg/g	120.0	70	130
Chloroform	ND	< 1		1.36	1	µg/g	136.0	70	130 Q1
richloroethylene	ND	< 1		1.36	1	µg/g	136.0	70	130 Q1
1,1 Dichloroethane	ND	< 1		1.07	1	µg/g	107.0	70	130



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22

Revision 2 Document D 7087  
 Legacy D CFL-E33Effective

QC - Sample Duplicate Sample ID: 23-009084-0001

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  
 Q1 Quality control result biased high. On y non detect samples reported.

**Units of Measure:**

µg/g Microgram per gram or ppm



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22

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

Laboratory Quality Control Results

J AOAC 2015 V98-6 Batch ID: 2309794

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits		Evaluation	Notes
CBDVA	2	0.0314	0.0311	%	101	80.0	- 120	Acceptable	
CBDV	2	0.0310	0.0307	%	101	80.0	- 120	Acceptable	
CBE	2	0.0350	0.0349	%	100	80.0	- 120	Acceptable	
CBDA	1	0.0330	0.0336	%	98.1	90.0	- 110	Acceptable	
CBGA	1	0.0351	0.0336	%	105	80.0	- 120	Acceptable	
CBG	1	0.0343	0.0344	%	99.5	80.0	- 120	Acceptable	
CBD	1	0.0351	0.0352	%	99.7	90.0	- 110	Acceptable	
THCV	2	0.0225	0.0222	%	101	80.0	- 120	Acceptable	
d8THCV	2	0.0272	0.0272	%	100	80.0	- 120	Acceptable	
THCVA	2	0.0312	0.0310	%	101	80.0	- 120	Acceptable	
CBN	1	0.0356	0.0351	%	102	80.0	- 120	Acceptable	
exo-THC	2	0.0312	0.0311	%	100	80.0	- 120	Acceptable	
d9THC	1	0.0355	0.0345	%	103	90.0	- 110	Acceptable	
d8THC	1	0.0325	0.0325	%	99.9	90.0	- 110	Acceptable	
9S-d10THC	1	0.0356	0.0354	%	101	80.0	- 120	Acceptable	
CBL	2	0.0315	0.0311	%	101	80.0	- 120	Acceptable	
9R-d10THC	1	0.0325	0.0323	%	101	80.0	- 120	Acceptable	
CBC	2	0.0315	0.0319	%	98.7	80.0	- 120	Acceptable	
THCA	1	0.0333	0.0331	%	101	90.0	- 110	Acceptable	
CBCA	2	0.0321	0.0325	%	98.7	80.0	- 120	Acceptable	
CBLA	2	0.0498	0.0500	%	99.6	80.0	- 120	Acceptable	
d9THCP	2	0.0316	0.0323	%	97.8	80.0	- 120	Acceptable	
CBT	2	0.0306	0.0314	%	97.5	80.0	- 120	Acceptable	

Method Blank						
Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBDV	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBE	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBDA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBGA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBG	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBD	<LOQ	0.00322	%	< 0.00322	Acceptable	
THCV	<LOQ	0.00322	%	< 0.00322	Acceptable	
d8THCV	<LOQ	0.00322	%	< 0.00322	Acceptable	
THCVA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBN	<LOQ	0.00322	%	< 0.00322	Acceptable	
exo-THC	<LOQ	0.00322	%	< 0.00322	Acceptable	
d9THC	<LOQ	0.00322	%	< 0.00322	Acceptable	
d8THC	<LOQ	0.00322	%	< 0.00322	Acceptable	
9S-d10THC	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBL	<LOQ	0.00322	%	< 0.00322	Acceptable	
9R-d10THC	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBC	<LOQ	0.00322	%	< 0.00322	Acceptable	
THCA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBCA	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBLA	<LOQ	0.00322	%	< 0.00322	Acceptable	
d9THCP	<LOQ	0.00322	%	< 0.00322	Acceptable	
CBT	<LOQ	0.00322	%	< 0.00322	Acceptable	

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

**Units of Measure:**  
% - Percent



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22

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

Laboratory Quality Control Results

J AOAC 2015 V98-6		Batch ID: 2309794						
Sample Duplicate		Sample ID: 23-009164-0001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBE	0.00406	0.00423	0.00315	%	4.18	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBG	0.0121	0.0122	0.00315	%	1.23	< 20	Acceptable	
CBD	0.635	0.645	0.00315	%	1.61	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBN	0.126	0.128	0.00315	%	1.58	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
9S-d10THC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
9R-d10THC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBC	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
d9THCP	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	
CBT	<LOQ	<LOQ	0.00315	%	NA	< 20	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent



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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22





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



**Report Number:** 23-009164/D004.R000  
**Report Date:** 08/10/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 08/03/23 11:22

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.