



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



**Report Number:** 23-001115/D002.R000  
**Report Date:** 02/02/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 01/26/23 12:38

**Customer:** NW Natural Goods  
**Product identity:** HEMP- PR 0037  
**Client/Metric ID:** .  
**Laboratory ID:** 23-001115-0001

### Summary

**Potency:**

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	0.198		mg/4g		CBD-Total per Serving Size 20.2 mg/4g
CBD per 4g	20.2		mg/4g		
CBG per 4g	9.92		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 0037

**Client/Metric ID:** .

**Sample Date:**

**Laboratory ID:** 23-001115-0001

**Evidence of Cooling:** No

**Temp:** 17.6

**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: 2300924		Analyze: 1/31/23 4:24:00 AM
Analyte	Result	Limits	Units	LOQ	Notes	
CBC per 4g	0.198		mg/4g	0.133		
CBC-A per 4g	< LOQ		mg/4g	0.133		
CBC-Total per 4g	< LOQ		mg/4g	0.250		
CBD per 4g	20.2		mg/4g	0.133		
CBD-A per 4g	< LOQ		mg/4g	0.133		
CBD-Total per 4g	20.2		mg/4g	0.250		
CBDV per 4g	< LOQ		mg/4g	0.133		
CBDV-A per 4g	< LOQ		mg/4g	0.133		
CBDV-Total per 4g	< LOQ		mg/4g	0.249		
CBE per 4g	< LOQ		mg/4g	0.133		
CBG per 4g	9.92		mg/4g	0.133		
CBG-A per 4g	< LOQ		mg/4g	0.133		
CBG-Total per 4g	9.92		mg/4g	0.249		
CBL per 4g	< LOQ		mg/4g	0.133		
CBL-A per 4g	< LOQ		mg/4g	0.133		
CBL-Total per 4g	< LOQ		mg/4g	0.250		
CBN per 4g	< LOQ		mg/4g	0.133		
CBT per 4g	< LOQ		mg/4g	0.133		
Δ8-THCV per 4g	< LOQ		mg/4g	0.133		
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.133		
Δ10-THC-9S per 4g	< LOQ		mg/4g	0.133		
Δ10-THC-Total per 4g	< LOQ		mg/4g	0.266		
Δ8-THC per 4g	< LOQ		mg/4g	0.133		
Δ9-THC per 4g	< LOQ		mg/4g	0.133		
exo-THC per 4g	< LOQ		mg/4g	0.133		
THC-A per 4g	< LOQ		mg/4g	0.133		
THC-Total per 4g	< LOQ		mg/4g	0.250		
THCV per 4g	< LOQ		mg/4g	0.133		
THCV-A per 4g	< LOQ		mg/4g	0.133		
THCV-Total per 4g	< LOQ		mg/4g	0.250		
Total Cannabinoids per 4g	30.4		mg/4g			



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**Microbiology**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2300829	01/29/23 AOAC 991.14 (Petrifilm) <sup>®</sup>		
Total Coliforms	< LOQ		cfu/g	10	2300829	01/29/23 AOAC 991.14 (Petrifilm) <sup>®</sup>		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2300831	01/30/23 AOAC 2014.05 (RAPID) <sup>®</sup>		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2300831	01/30/23 AOAC 2014.05 (RAPID) <sup>®</sup>		

**Solvents** Method: Residual Solvents by GC/MS<sup>®</sup> Units µg/g Batch 2300908 Analyze 01/31/23 09:56 AM

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-Dimethylbutane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< LOQ		200		
2,3-Dimethylbutane	< 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	
Isopropylbenzene (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>®</sup> Units mg/kg Batch 2300931 Analyze 01/31/23 12:51 PM

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

**Metals**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Arsenic	< LOQ	0.200	mg/kg	0.0184	2301007	01/31/23 AOAC 2013.06 (mod.) <sup>®</sup>		pass
Cadmium	< LOQ	0.200	mg/kg	0.0184	2301007	01/31/23 AOAC 2013.06 (mod.) <sup>®</sup>		pass
Lead	< LOQ	0.500	mg/kg	0.0184	2301007	01/31/23 AOAC 2013.06 (mod.) <sup>®</sup>		pass
Mercury	< LOQ	0.100	mg/kg	0.00918	2301007	01/31/23 AOAC 2013.06 (mod.) <sup>®</sup>		pass



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**Nutrition**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	18.3		g/100g	0.10	2300904	01/30/23 AOAC 925.10 (mod.) <sup>p</sup>		
Water Activity	0.691		Aw	0.030	2300901	01/30/23 AOAC 978.18 <sup>p</sup>		



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**Abbreviations**

**Limits:** Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220, CCR title 16-division 42. BCC-section 5723

**Limit(s) of Quantitation (LOQ):** The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

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

**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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**P2320 Multi-Residue Pesticide Profile  
Cannabis**

Analyte	LOQ (mg/kg)
2,4-D	0.1
Abamectin	0.1
Acephate	0.2
Acequinocyl	0.2
Acetamiprid	0.1
Acetochlor	0.2
Acrinathrin	0.1
Alachlor	0.1
Aldicarb	0.1
Aldoxycarb	0.1
Aldrin	0.1
Ametoctradin	0.1
Ametryn	0.1
Anilazine	0.1
Aspon	0.1
Asulam	0.1
Atrazine	0.1
Atrazine-desethyl	0.1
Azinphos-ethyl	0.1
Azinphos-methyl	0.1
Azoxystrobin	0.1
Benalaxyl	0.1
Bendiocarb	0.1
Benoxacor	0.1
Bensulide	0.1
Bentazon	0.1
Bifenazate	0.1
Bifenox	0.1
Bifenthrin	0.1
Binapacryl	0.1
Boscalid	0.1
Bromacil	0.1
Bromophos-ethyl	0.1
Bromopropylate	0.1
Bromoxynil	0.1
Bupirimate	0.1
Buprofezin	0.1
Butachlor	0.1
Butylate	0.1
Cadusafos	0.1
Captan	0.2
Carbaryl	0.1
Carbendazim	0.1
Carbofuran	0.1
Carbofuran 3-hydroxy	0.1
Carbophenothion	0.1
Carbophenothion-methyl	0.1
Carboxin	0.1

Analyte	LOQ (mg/kg)
Chlorantraniliprol	0.1
Chlordane, cis-	0.1
Chlordane, trans-	0.1
Chlorfenapyr	0.1
Chlorfenvinphos	0.1
Chlorobenzilate	0.1
Chlorpyrifos-ethyl	0.1
Chlorpyrifos-methyl	0.1
Chlorthal-dimethyl (Dacthal)	0.1
Clethodim	0.1
Clethodim sulfone	0.1
Clethodim sulfoxide	0.1
Clofentezine	0.1
Clomazone	0.1
Clopyralid	0.1
Clothianidin	0.1
Coumaphos	0.1
Crotoxyphos	0.1
Cyanofenphos	0.1
Cyanophos	0.1
Cyantraniliprole	0.1
Cyazofamid	0.1
Cyfluthrin	0.1
Cyhalothrin, lambda	0.1
Cymoxanil	0.1
Cypermethrin	0.1
Cyprodinil	0.1
DDD, o,p'-	0.1
DDD, p,p'-	0.1
DDE, o,p'-	0.1
DDE, p,p'-	0.1
DDT, o,p'-	0.1
DDT, p,p'-	0.1
DEET	0.1
Deltamethrin	0.1
Demeton-S	0.1
Demeton-s-methyl	0.1
Demeton-S-methyl-sulfone	0.1
Desmedipham	0.1
Diazinon	0.1
Dicamba	0.1
Dichlofenthion	0.1
Dichlofluandil	0.1
Dichlorbenzamid	0.1
Dichlorvos	0.1
Diclofop	0.1
Diclofop-methyl	0.1
Dicrotophos	0.1

Analyte	LOQ (mg/kg)
Dieldrin	0.1
Diethofencarb	0.1
Difenoconazol	0.1
Diflubenzuron	0.1
Diflufenzopyr	0.1
Dimethenamid	0.1
Dimethoat	0.1
Dimethomorph	0.1
Dinoseb	0.1
Dinotefuran	0.1
Dioxaathion	0.1
Diphenamid	0.1
Diphenylamine (DPA)	0.1
Disulfoton	0.1
Disulfoton-sulfone	0.1
Disulfoton-Sulfoxide	0.1
Diuron	0.1
DNOC	0.1
Edifenphos	0.1
Endosulfan (alpha isomer)	0.1
Endosulfan (beta isomer)	0.1
Endosulfan-sulfate	0.1
Endrin	0.1
EPN	0.1
EPTC	0.1
Esfenvalerate/Fenvalerate	0.1
Ethiofencarb	0.1
Ethion	0.1
Ethofumesate	0.1
Ethoprophos	0.1
Etofenprox	0.1
Etozazole	0.1
Etrimfos	0.1
Famoxadone	0.1
Famphur	0.1
Fenamiphos	0.1
Fenamiphos-Sulfone	0.1
Fenamiphos-Sulfoxide	0.1
Fenazaquin	0.1
Fenbuconazole	0.1
Fenhexamid	0.1
Fenobucarb	0.1
Fenoxycarb	0.1
Fenpropathrin	0.1
Fensulfothion	0.1
Fenthion	0.1
Fenuron	0.1
Fipronil	0.1

LOQ= Limit of Quantitation  
mg/kg= milligram per kilogram (ppm)



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**P2320 Multi-Residue Pesticide Profile  
Cannabis**

Analyte	LOQ (mg/kg)
Flonicamid	0.1
Fluazifop	0.1
Fluazinam	0.1
Flucythrinate	0.1
Fludioxonil	0.1
Flufenacet	0.1
Flumioxazin	0.1
Flupicolide	0.1
Fluopyram	0.1
Fluoxastrobin	0.1
Flupyradifurone	0.1
Fluridone	0.1
Fluroxypyr	0.1
Fluthiacet-methyl	0.1
Flutolanil	0.1
Flutriafol	0.1
Fluvalinate	0.1
Fluxapyroxad	0.1
Fomesafen	0.1
Formetanate	0.1
Furathiocarb	0.1
Haloxypol	0.1
Heptachlor	0.1
Heptachlor epoxide	0.1
Hexaconazole	0.1
Hexazinone	0.1
Hexythiazox	0.1
Hydropene	0.1
Imazalil	0.1
Imazethapyr	0.1
Imidacloprid	0.1
Indaziflam	0.1
Indoxacarb	0.1
Iprobenfos	0.1
Iprodion	0.1
Isobenzan	0.1
Isufenphos	0.1
Isufenphos-methyl	0.1
Isufenphos-oxon	0.1
Isoprocab	0.1
Isoprothiolane	0.1
Isoproturon	0.1
Isoxaben	0.1
Kresoxim-methyl	0.1
Lindane	0.1
Linuron	0.1
Malaoxon	0.1
Malathion	0.1

Analyte	LOQ (mg/kg)
Mandipropamid	0.1
MCPA	0.1
MCPB	0.1
MCPP	0.1
Mecabarm	0.1
Mepanipyrim	0.1
Mesotrione	0.1
Metaxyl	0.1
Methamidophos	0.1
Methiocarb	0.1
Methiocarb sulfone	0.1
Methiocarb sulfoxide	0.1
Methomyl	0.1
Methoxyfenozide	0.1
Metolachlor	0.1
Metolcarb	0.1
Metrafenone	0.1
Mevinphos	0.1
MGK 264	0.1
Molinat	0.1
Monocrotophos	0.1
Monolinuron	0.1
Myclobutanil	0.1
Naled	0.1
Napropamide	0.1
Neburon	0.1
Norflurazon	0.1
Novaluron	0.1
Omethoat	0.1
Oryzalin	0.1
Oxadiazon	0.1
Oxadixyl	0.1
Oxamyl	0.1
Oxamyl-oxime	0.1
Oxychlorane	0.1
Oxydemeton-Methyl	0.1
Oxyfluorfen	0.1
Paclobutrazol	0.1
Paraoxon-ethyl	0.1
Paraoxon-methyl	0.1
Parathion-methyl	0.1
Penconazole	0.1
Pendimethalin	0.1
Penflufen	0.1
Penthiopyrad	0.1
Permethrin	0.1
Perthane	0.1
Phenmedipham	0.1

Analyte	LOQ (mg/kg)
Phenothrin	0.1
Phenthoate	0.1
Phorate	0.1
Phorate-Sulfone	0.1
Phorate-Sulfoxide	0.1
Phosalone	0.1
Phosmet	0.1
Phosphamidon	0.1
Phoxim	0.1
Pinoxaden	0.1
Piperonyl Butoxide	0.1
Pirimicarb	0.1
Pirimiphos-ethyl	0.1
Pirimiphos-methyl	0.1
Prallethrin	0.1
Prochloraz	0.1
Procymidone	0.1
Profenofos	0.1
Promecarb	0.1
Prometon	0.1
Prometryn	0.1
Propachlor	0.1
Propamocarb	0.1
Propanil	0.1
Propazine	0.1
Propetamophos	0.1
Propham	0.1
Propiconazole	0.1
Propoxur	0.1
Propyzamide	0.1
Prothiofos	0.1
Pyraclostrobin	0.1
Pyraflufen Ethyl	0.1
Pyrazophos	0.1
Pyrethrin	0.1
Pyridaben	0.1
Pyrimethanil	0.1
Pyriproxifen	0.1
Pyroxasulfone	0.1
Pyroxsulam	0.1
Quinalphos	0.1
Quinclorac	0.1
Quinoxifen	0.1
Quintozene(PCNB)	0.2
Quizalofop	0.1
Resmethrin	0.1
Rotenone	0.1
Safufenacil	0.1

LOQ= Limit of Quantitation  
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**P2320 Multi-Residue Pesticide Profile  
 Cannabis**

Analyte	LOQ (mg/kg)
Sebuthylazin	0.1
Sethoxydim	0.1
Simazine	0.1
Simetryn	0.1
Spinetoram J/L	0.1
Spinosyn A/D	0.1
Spirodiclofen	0.1
Spiromesifen	0.1
Spirotetramat	0.1
Spiroxamine	0.1
Sulfentrazone	0.1
Sulfotep	0.1
Sulfoxaflor	0.1
Sulprofos	0.1
Tebuconazole	0.1
Tebufenozide	0.1
Terbufos	0.1
Terbutylazine	0.1
Terbutryn	0.1
Tetrachlorvinphos	0.1
Tetraconazole	0.1
Tetramethrin	0.1
Thiabendazol	0.1
Thiabendazol-5-hydroxy	0.1
Thiacloprid	0.1
Thiamethoxam	0.1
Thiodicarb	0.1
Thiodicarb	0.1
Thiometon	0.1
Thiophanate-methyl	0.2
Tolfenpyrad	0.1
Tolyfluanid	0.1
Triadimefon	0.1
Triadimenol	0.1
Triazophos	0.1
Trifloxystrobin	0.1
Triflumizole	0.1
Triticonazole	0.1
Zoxamid	0.1

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**Hemp & Cannabis: Usable / Extract / Finished Prod**  
**Chain of Custody Record**

ORELAP ID: OR100028 ANAB ISO 17025 ID: AT-1508

NWNATURALGOODS 23-001115

ID: 2832 Revision: 5  
 fective: 01/04/2022



NW Natural Goods

<b>Company:</b> Northwest Natural Goods <b>Contact:</b> Annie Nair <b>Address:</b> 11791 SE HWY 212 <b>City:</b> Clackamas <b>State:</b> OR <b>Zip Code:</b> 97015 <input checked="" type="checkbox"/> <b>Email Results:</b> annienair@nwnaturalgoods.com <input type="checkbox"/> <b>Ph:</b> ( ) - <i>Billing Contact (if different)</i> <b>Name:</b> <b>Email:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Ph:</b> ( ) -			<b>Analysis Requested</b> Pesticides - OR 59 Compounds Pesticide Multi-Residue - 379 compounds Potency Residual Solvents Water Activity Moisture Micro: Yeast and Mold Micro: E.Coli and Total Coliform Heavy Metals Mycotoxins										<b>Sampled by:</b> <b>Custom Reporting:</b> <b>Source Material:</b> <input type="checkbox"/> - Ind. Hemp product   <input type="checkbox"/> - Rec. Cannabis <b>Reporting Type:</b> <input type="checkbox"/> - Compliance   <input type="checkbox"/> - R&D <b>Report to:</b> <input type="checkbox"/> - METRC   <input type="checkbox"/> - ODA   <input type="checkbox"/> - USDA   <input type="checkbox"/> - Other: <b>Turnaround time (TAT - Business Days):</b> <input checked="" type="checkbox"/> - 5BD   <input type="checkbox"/> - 3BD*   <input type="checkbox"/> - 2BD* <i>*Check for availability</i>		
Lab ID	Client Sample Identification	Sample date	Pesticides - OR 59 Compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Water Activity	Moisture	Micro: Yeast and Mold	Micro: E.Coli and Total Coliform	Heavy Metals	Mycotoxins	Material Type †	Weight (Units)	Comments/Metric ID
	HEMP - PR 0037	01/26/23	✓	✓	✓	✓	✓	✓	✓	✓	✓			80g	
<b>Signature - Relinquished By:</b> Annie Nair 			<b>Date:</b> 01/26/23	<b>Time:</b> 1030	<b>Signature - Received By:</b> 			<b>Date:</b> 1.26.23	<b>Time:</b> 1030	<b>Lab Use Only:</b> <input type="checkbox"/> Shipped Via: _____ or <input type="checkbox"/> Client drop off Evidence of cooling: <input type="checkbox"/> Yes   <input type="checkbox"/> No - Temp (°C): 12.6 Sample in good condition: <input type="checkbox"/> Yes   <input type="checkbox"/> No Payment: <input type="checkbox"/> Cash   <input type="checkbox"/> Check   <input type="checkbox"/> CC   <input type="checkbox"/> Net: Prelog storage: _____					
			1.26.23	1120	ABS			01/26/23	1238						

† - Material Type Codes: Plant Material (P) ; Isolate (I) ; Concentrate/Extract (C) ; Tincture/Topical (T) ; Edible (E) ; Beverage (B) ; Vapor Product (V)

Samples submitted to Columbia Laboratories with testing requirements constitute an agreement for services in accordance with the current terms of service associated with this COC. By signing "Relinquished by" you are agreeing to these terms  
 12423 NE Whitaker Way  
 Portland, OR 97230  
 P: (503) 254-1794 | Fax: (503) 254-1452  
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Report Number: 23-001115/D002.R000  
 Report Date: 02/02/2023  
 ORELAP#: OR100028  
 Purchase Order:  
 Received: 01/26/23 12:38

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

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2300908					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		518	572	µg/g	90.6	60 - 120	
Isobutane	ND	< 200		640	731	µg/g	87.6	60 - 120	
Butane	ND	< 200		626	731	µg/g	85.6	60 - 120	
2,2-Dimethylpropane	ND	< 200		780	938	µg/g	83.3	60 - 120	
Methanol	ND	< 200		1550	1620	µg/g	95.7	60 - 120	
Ethylene Oxide	ND	< 30		46.6	56.2	µg/g	82.9	60 - 120	
2-Methylbutane	ND	< 200		1420	1610	µg/g	88.2	60 - 120	
Pentane	ND	< 200		1390	1600	µg/g	86.9	60 - 120	
Ethanol	ND	< 200		1490	1610	µg/g	92.5	70 - 130	
Ethyl Ether	ND	< 200		1350	1630	µg/g	82.8	60 - 120	
2,2-Dimethylbutane	ND	< 30		160	171	µg/g	93.6	60 - 120	
Acetone	ND	< 200		1540	1630	µg/g	94.5	60 - 120	
2-Propanol	ND	< 200		1470	1620	µg/g	90.7	60 - 120	
Ethyl Formate	ND	< 500		1510	1670	µg/g	90.4	70 - 130	
Acetonitrile	ND	< 100		463	498	µg/g	93.0	60 - 120	
Methyl Acetate	ND	< 500		1640	1730	µg/g	94.8	70 - 130	
2,3-Dimethylbutane	ND	< 30		147	171	µg/g	86.0	60 - 120	
Dichloromethane	ND	< 60		424	483	µg/g	87.8	60 - 120	
2-Methylpentane	ND	< 30		149	168	µg/g	88.7	60 - 120	
MTBE	ND	< 500		1570	1650	µg/g	95.2	70 - 130	
3-Methylpentane	ND	< 30		131	167	µg/g	78.4	60 - 120	
Hexane	ND	< 30		195	182	µg/g	107.1	60 - 120	
1-Propanol	ND	< 500		1380	1620	µg/g	85.2	70 - 130	
Methyl ethyl ketone	ND	< 500		1530	1620	µg/g	94.4	70 - 130	
Ethyl acetate	ND	< 200		1510	1610	µg/g	93.8	60 - 120	
2-Butanol	ND	< 200		1440	1600	µg/g	90.0	60 - 120	
Tetrahydrofuran	ND	< 100		384	483	µg/g	79.5	60 - 120	
Cyclohexane	ND	< 200		1540	1610	µg/g	95.7	60 - 120	
2-methyl-1-propanol	ND	< 500		1330	1620	µg/g	82.1	70 - 130	
Benzene	ND	< 1		4.34	5.02	µg/g	86.5	60 - 120	
Isopropyl Acetate	ND	< 200		1520	1620	µg/g	93.8	60 - 120	
Heptane	ND	< 200		1520	1610	µg/g	94.4	60 - 120	
1-Butanol	ND	< 500		989	1630	µg/g	60.7	70 - 130	Q6
Propyl Acetate	ND	< 500		1490	1610	µg/g	92.5	70 - 130	
1,4-Dioxane	ND	< 100		480	491	µg/g	97.8	60 - 120	
2-Ethoxyethanol	ND	< 30		106	181	µg/g	58.6	60 - 120	Q6
Methylisobutylketone	ND	< 500		1420	1620	µg/g	87.7	70 - 130	
3-Methyl-1-butanol	ND	< 500		1100	1630	µg/g	67.5	70 - 130	Q6
Ethylene Glycol	ND	< 200		418	484	µg/g	86.4	60 - 120	
Toluene	ND	< 100		381	485	µg/g	78.6	60 - 120	
Isobutyl Acetate	ND	< 500		1590	1630	µg/g	97.5	70 - 130	
1-Pentanol	ND	< 500		1180	1620	µg/g	72.8	70 - 130	
Butyl Acetate	ND	< 500		1350	1620	µg/g	83.3	70 - 130	
Ethylbenzene	ND	< 200		808	969	µg/g	83.4	60 - 120	
m,p-Xylene	ND	< 200		820	994	µg/g	82.5	60 - 120	
o-Xylene	ND	< 200		761	967	µg/g	78.7	60 - 120	
Cumene	ND	< 30		120	171	µg/g	70.2	60 - 120	
Anisole	ND	< 500		990	1630	µg/g	60.7	70 - 130	Q6
DMISO	ND	< 500		1250	1680	µg/g	74.4	70 - 130	
1,2-dimethoxyethane	ND	< 50		169	169	µg/g	99.4	70 - 130	
Triethylamine	ND	< 500		1530	1630	µg/g	93.9	70 - 130	
N,N-dimethylformamide	ND	< 150		339	482	µg/g	70.3	70 - 130	
N,N-dimethylacetamide	ND	< 150		399	510	µg/g	78.2	70 - 130	
Pyridine	ND	< 50		162	203	µg/g	79.8	70 - 130	
Silofane	ND	< 50		114	172	µg/g	66.3	70 - 130	Q6
1,2-Dichloroethane	ND	< 1		0.952	1	µg/g	95.2	70 - 130	
Chloroform	ND	< 1		0.978	1	µg/g	97.8	70 - 130	
Trichloroethylene	ND	< 1		1.01	1	µg/g	101.0	70 - 130	
1,1-Dichloroethane	ND	< 1		0.932	1	µg/g	93.2	70 - 130	



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**Report Number:** 23-001115/D002.R000  
**Report Date:** 02/02/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 01/26/23 12:38

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

QC- Sample Duplicate Sample ID: 23-000158-0001

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

Units of Measure:

µg/g- Microgram per gram or ppm



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**Report Number:** 23-001115/D002.R000  
**Report Date:** 02/02/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 01/26/23 12:38

Revision: 1 Document ID: 7148  
 Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V986 Batch ID: 2300924

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDA	2	0.0333	0.033	%	99.7	80.0 - 120	Acceptable		
CBDA	2	0.0354	0.035	%	100	80.0 - 120	Acceptable		
CBE	2	0.0346	0.035	%	99.1	80.0 - 120	Acceptable		
CBDA	1	0.0317	0.032	%	98.9	90.0 - 110	Acceptable		
CBSA	1	0.0316	0.032	%	98.7	80.0 - 120	Acceptable		
CBS	1	0.0329	0.033	%	100.0	80.0 - 120	Acceptable		
CB	1	0.0324	0.032	%	99.9	90.0 - 110	Acceptable		
THCV	2	0.0338	0.035	%	95.4	80.0 - 120	Acceptable		
deltaTHCV	2	0.0356	0.034	%	103	80.0 - 120	Acceptable		
THCVA	2	0.0330	0.033	%	99.9	80.0 - 120	Acceptable		
CBN	1	0.0338	0.034	%	99.6	80.0 - 120	Acceptable		
exo-THC	2	0.0324	0.032	%	100	80.0 - 120	Acceptable		
deltaTHC	1	0.0347	0.035	%	99.3	90.0 - 110	Acceptable		
deltaTHC	1	0.0338	0.033	%	101	90.0 - 110	Acceptable		
9SdeltaTHC	1	0.0173	0.017	%	99.3	80.0 - 120	Acceptable		
CB	2	0.0324	0.035	%	93.8	90.0 - 110	Acceptable		
9RdeltaTHC	1	0.0156	0.016	%	99.3	80.0 - 120	Acceptable		
CB	2	0.0354	0.035	%	102	80.0 - 120	Acceptable		
THCA	1	0.0315	0.032	%	99.6	80.0 - 120	Acceptable		
CBSA	2	0.0339	0.034	%	98.7	80.0 - 120	Acceptable		
CBLA	2	0.0350	0.035	%	100	90.0 - 110	Acceptable		
CB	2	0.0343	0.035	%	97.8	80.0 - 120	Acceptable		

Method Blank						
Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDA	<LOQ	0.003	%	< 0.003	Acceptable	
CBDA	<LOQ	0.003	%	< 0.003	Acceptable	
CBE	<LOQ	0.003	%	< 0.003	Acceptable	
CBDA	<LOQ	0.003	%	< 0.003	Acceptable	
CBSA	<LOQ	0.003	%	< 0.003	Acceptable	
CBS	<LOQ	0.003	%	< 0.003	Acceptable	
CB	<LOQ	0.003	%	< 0.003	Acceptable	
THCV	<LOQ	0.003	%	< 0.003	Acceptable	
deltaTHCV	<LOQ	0.003	%	< 0.003	Acceptable	
THCVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBN	<LOQ	0.003	%	< 0.003	Acceptable	
exo-THC	<LOQ	0.003	%	< 0.003	Acceptable	
deltaTHC	<LOQ	0.003	%	< 0.003	Acceptable	
deltaTHC	<LOQ	0.003	%	< 0.003	Acceptable	
9SdeltaTHC	<LOQ	0.003	%	< 0.003	Acceptable	
CB	<LOQ	0.003	%	< 0.003	Acceptable	
9RdeltaTHC	<LOQ	0.003	%	< 0.003	Acceptable	
CB	<LOQ	0.003	%	< 0.003	Acceptable	
THCA	<LOQ	0.003	%	< 0.003	Acceptable	
CBSA	<LOQ	0.003	%	< 0.003	Acceptable	
CBLA	<LOQ	0.003	%	< 0.003	Acceptable	
CB	<LOQ	0.003	%	< 0.003	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:** 23-001115/D002.R000  
**Report Date:** 02/02/2023  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 01/26/23 12:38

Revision: 1 Document ID: 7148  
 Legacy ID: Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 2300924						
Sample Duplicate		Sample ID: 23-0010690001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBSA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBS	0.0352	0.0346	0.003	%	1.60	< 20	Acceptable	
CBD	0.0084	0.0084	0.003	%	0.949	< 20	Acceptable	
THCV	0.0074	0.0072	0.003	%	2.84	< 20	Acceptable	
δ8THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	0.0126	0.0125	0.003	%	0.616	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
δ9THC	0.983	0.968	0.003	%	1.54	< 20	Acceptable	
δ8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
9Sδ10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
9Rδ10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CB	0.0170	0.0169	0.003	%	0.198	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBSA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CB	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	

Abbreviations

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

Units of Measure:

% - Percent



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Explanation of QC Flag Comments:

Code	Explanation
Q	Matrix interferences affecting spike or surrogate recoveries.
Q1	Quality control result biased high. Only non-detect samples reported.
Q2	Quality control outside QC limits. Data considered estimate.
Q3	Sample concentration greater than four times the amount spiked.
Q4	Non-homogenous sample matrix, affecting RPD result and/or % recoveries.
Q5	Spike results above calibration curve.
Q6	Quality control outside QC limits. Data acceptable based on remaining QC.
R	Relative percent difference (RPD) outside control limit.
R1	RPD non-calculable, as sample or duplicate results are less than five times the LOQ.
R2	Sample replicates RPD non-calculable, as only one replicate is within the analytical range.
LOQ1	Quantitation level raised due to low sample volume and/or dilution.
LOQ2	Quantitation level raised due to matrix interference.
B	Analyte detected in method blank, but not in associated samples.
B1	The sample concentration is greater than 5 times the blank concentration.
B2	The sample concentration is less than 5 times the blank concentration.