



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35

**Customer:** NW Natural Goods  
**Product identity:** HEMP-RB 0086  
**Client/Metric ID:** .  
**Laboratory ID:** 22-011152-0001

### Summary

**Potency:**

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	0.213		mg/4g		CBD-Total per Serving Size 28.2 mg/4g
CBD per 4g	28.2		mg/4g		
CBN per 4g	0.158		mg/4g		THC-Total per Serving Size <LOQ
CBT per 4g	0.328		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:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35

**Customer:** NW Natural Goods

**Product identity:** HEMP-RB 0086

**Client/Metric ID:** .

**Sample Date:**

**Laboratory ID:** 22-011152-0001

**Evidence of Cooling:** No

**Temp:** 19.8 °C

**Relinquished by:** client

**Serving Size #1:** 4 g

### Sample Results

Potency per 4g					
Method: J AOAC 2015 V98-6 (mod) <sup>b</sup>					
Units mg/se Batch: 2207947 Analyze: 9/20/22 11:20:00 PM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	0.213		mg/4g	0.129	
CBC-A per 4g	< LOQ		mg/4g	0.129	
CBC-Total per 4g	< LOQ		mg/4g	0.243	
CBD per 4g	28.2		mg/4g	0.129	
CBD-A per 4g	< LOQ		mg/4g	0.129	
CBD-Total per 4g	28.2		mg/4g	0.243	
CBDV per 4g	< LOQ		mg/4g	0.129	
CBDV-A per 4g	< LOQ		mg/4g	0.129	
CBDV-Total per 4g	< LOQ		mg/4g	0.241	
CBE per 4g	< LOQ		mg/4g	0.129	
CBG per 4g	< LOQ		mg/4g	0.129	
CBG-A per 4g	< LOQ		mg/4g	0.129	
CBG-Total per 4g	< LOQ		mg/4g	0.241	
CBL per 4g	< LOQ		mg/4g	0.129	
CBL-A per 4g	< LOQ		mg/4g	0.129	
CBL-Total per 4g	< LOQ		mg/4g	0.243	
CBN per 4g	0.158		mg/4g	0.129	
CBT per 4g	0.328		mg/4g	0.129	
Δ8-THCV per 4g	< LOQ		mg/4g	0.129	
Δ10-THC per 4g	< LOQ		mg/4g	0.129	
Δ8-THC per 4g	< LOQ		mg/4g	0.129	
Δ9-THC per 4g	< LOQ		mg/4g	0.129	
exo-THC per 4g	< LOQ		mg/4g	0.129	
THC-A per 4g	< LOQ		mg/4g	0.129	
THC-Total per 4g	< LOQ		mg/4g	0.243	
THCV per 4g	< LOQ		mg/4g	0.129	
THCV-A per 4g	< LOQ		mg/4g	0.129	
THCV-Total per 4g	< LOQ		mg/4g	0.243	
Total Cannabinoids per 4g	29.0		mg/4g		



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35

**Microbiology**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2207830	09/19/22 AOAC 991.14 (Petrifilm) <sup>®</sup>		
Total Coliforms	< LOQ		cfu/g	10	2207830	09/19/22 AOAC 991.14 (Petrifilm) <sup>®</sup>		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2207831	09/20/22 AOAC 2014.05 (RAPID) <sup>®</sup>		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2207831	09/20/22 AOAC 2014.05 (RAPID) <sup>®</sup>		

**Solvents Method: Residual Solvents by GC/MS<sup>®</sup> Units µg/g Batch 2208084 Analyze 09/26/22 11:07 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 2207991 Analyze 09/23/22 01:32 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	0.0193	2208071	09/23/22 AOAC 2013.06 (mod.) <sup>®</sup>	pass	
Cadmium	< LOQ	0.200	mg/kg	0.0193	2208071	09/23/22 AOAC 2013.06 (mod.) <sup>®</sup>	pass	
Lead	< LOQ	0.500	mg/kg	0.0193	2208071	09/23/22 AOAC 2013.06 (mod.) <sup>®</sup>	pass	
Mercury	< LOQ	0.100	mg/kg	0.00966	2208071	09/23/22 AOAC 2013.06 (mod.) <sup>®</sup>	pass	



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35

**Nutrition**

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
Moisture (Loss on Drying)	15.6		g/100g	0.10	2208048	09/22/22 AOAC 925.10 (mod.) <sup>p</sup>		
Water Activity	0.654		Aw	0.030	2207856	09/19/22 AOAC 978.18 <sup>p</sup>		



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35

These test results are representative of the individual sample selected and submitted by the client.

**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>b</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



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35



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

Document Control ID: 2832 Revision: 5  
Effective: 01/04/2022

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

<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>PO Number:</b> <b>Project ID:</b> <b>Batch ID:</b> <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 - RB 0086	09/01/22	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		80g	
<b>Signature - Relinquished By:</b> Annie Nair 			<b>Date:</b> 9.16.22 <b>Time:</b> 1040			<b>Signature - Received By:</b> 			<b>Date:</b> 9.16.22 <b>Time:</b> 1040			<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): <u>19.6</u> 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:			

† - 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  
info@columbialaboratories.com

Page \_\_\_\_\_ of \_\_\_\_\_  
www.columbialaboratories.com



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35



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
Dichlofluanid	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
Dioxathion	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
Etrifos	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)



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35



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
Fluopicolide	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
Malaonox	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  
mg/kg= milligram per kilogram (ppm)





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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35



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
Thiobencarb	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

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



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35

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

Laboratory Quality Control Results

JAOAC2015 V986 Batch ID: 2207947

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDA	2	0.0356	0.033	%	107	80.0 - 120	Acceptable	
CBV	2	0.0370	0.033	%	111	80.0 - 120	Acceptable	
CE	2	0.0350	0.033	%	105	80.0 - 120	Acceptable	
CDA	1	0.0341	0.033	%	102	90.0 - 110	Acceptable	
CBSA	1	0.0338	0.033	%	102	80.0 - 120	Acceptable	
CBS	1	0.0372	0.036	%	103	80.0 - 120	Acceptable	
CB	1	0.0374	0.036	%	104	90.0 - 110	Acceptable	
THCV	2	0.0365	0.033	%	110	80.0 - 120	Acceptable	
d8THCV	2	0.0367	0.033	%	110	80.0 - 120	Acceptable	
THCVA	2	0.0342	0.033	%	103	80.0 - 120	Acceptable	
CBN	1	0.0370	0.036	%	103	90.0 - 110	Acceptable	
exo-THC	2	0.0347	0.033	%	104	80.0 - 120	Acceptable	
d9THC	1	0.0386	0.039	%	100	90.0 - 110	Acceptable	
d8THC	1	0.0343	0.033	%	103	80.0 - 120	Acceptable	
CB	2	0.0336	0.033	%	101	80.0 - 120	Acceptable	
d10THC	1	0.0310	0.033	%	92.9	80.0 - 120	Acceptable	
CB	2	0.0351	0.033	%	105	80.0 - 120	Acceptable	
THCA	1	0.0322	0.032	%	101	90.0 - 110	Acceptable	
CBA	2	0.0358	0.033	%	107	80.0 - 120	Acceptable	
CBA	2	0.0360	0.033	%	108	80.0 - 120	Acceptable	
CB	2	0.0336	0.033	%	101	80.0 - 120	Acceptable	

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBV	<LOQ	0.0006	%	< 0.0006	Acceptable	
CE	<LOQ	0.0006	%	< 0.0006	Acceptable	
CDA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBSA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBS	<LOQ	0.0006	%	< 0.0006	Acceptable	
CB	<LOQ	0.0006	%	< 0.0006	Acceptable	
THCV	<LOQ	0.0006	%	< 0.0006	Acceptable	
d8THCV	<LOQ	0.0006	%	< 0.0006	Acceptable	
THCVA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBN	<LOQ	0.0006	%	< 0.0006	Acceptable	
exo-THC	<LOQ	0.0006	%	< 0.0006	Acceptable	
d9THC	<LOQ	0.0006	%	< 0.0006	Acceptable	
d8THC	<LOQ	0.0006	%	< 0.0006	Acceptable	
CB	<LOQ	0.0006	%	< 0.0006	Acceptable	
d10THC	<LOQ	0.0006	%	< 0.0006	Acceptable	
CB	<LOQ	0.0006	%	< 0.0006	Acceptable	
THCA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CB	<LOQ	0.0006	%	< 0.0006	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:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35

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

Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 2207947						
Sample Duplicate		Sample ID: 22-0108810001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDA	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBDA	0.0429	0.0458	0.0006	%	6.48	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
delta-THCV	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
THCVa	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
delta-THC	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
delta-THC	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
delta-THC	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.0006	%	NA	< 20	Acceptable	
CBF	0.0008	0.0009	0.0006	%	5.91	< 20	Acceptable	

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

**Units of Measure:**



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35

Revision: Document ID:  
 Legacy ID: Effective:

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2208084					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		424	572	µg/g	74.1	60 - 120	
Isobutane	ND	< 200		544	731	µg/g	74.4	60 - 120	
Butane	ND	< 200		533	731	µg/g	72.9	60 - 120	
2,2-Dimethylpropane	ND	< 200		691	936	µg/g	73.8	60 - 120	
Methanol	ND	< 200		1310	1650	µg/g	79.4	60 - 120	
Ethylene Oxide	ND	< 30		39.7	56.2	µg/g	70.6	60 - 120	
2-Methylbutane	ND	< 200		1330	1650	µg/g	80.6	60 - 120	
Pentane	ND	< 200		1350	1650	µg/g	81.8	60 - 120	
Ethanol	ND	< 200		1320	1660	µg/g	79.5	70 - 130	
Ethyl Ether	ND	< 200		1320	1630	µg/g	81.0	60 - 120	
2,2-Dimethylbutane	ND	< 30		154	189	µg/g	81.5	60 - 120	
Acetone	ND	< 200		1320	1650	µg/g	80.0	60 - 120	
2-Propanol	ND	< 200		1320	1650	µg/g	80.0	60 - 120	
Ethyl Formate	ND	< 500		1150	1610	µg/g	71.4	70 - 130	
Acetonitrile	ND	< 100		377	504	µg/g	74.8	60 - 120	
Methyl Acetate	ND	< 500		1300	1630	µg/g	79.8	70 - 130	
2,3-Dimethylbutane	ND	< 30		119	174	µg/g	68.4	60 - 120	
Dichloromethane	ND	< 60		422	521	µg/g	81.0	60 - 120	
2-Methylpentane	ND	< 30		163	187	µg/g	87.2	60 - 120	
MTBE	ND	< 500		1280	1600	µg/g	80.0	70 - 130	
3-Methylpentane	ND	< 30		158	188	µg/g	84.0	60 - 120	
Hexane	ND	< 30		153	182	µg/g	84.1	60 - 120	
1-Propanol	ND	< 500		1190	1610	µg/g	73.9	70 - 130	
Methylethylketone	ND	< 500		1220	1600	µg/g	76.3	70 - 130	
Ethyl acetate	ND	< 200		1290	1630	µg/g	79.1	60 - 120	
2-Butanol	ND	< 200		1290	1630	µg/g	79.1	60 - 120	
Tetrahydrofuran	ND	< 100		405	506	µg/g	80.0	60 - 120	
Cyclohexane	ND	< 200		1300	1640	µg/g	79.3	60 - 120	
2-methyl-1-propanol	ND	< 500		1220	1620	µg/g	75.3	70 - 130	
Benzene	ND	< 1		3.66	4.93	µg/g	74.2	60 - 120	
Isopropyl Acetate	ND	< 200		1260	1640	µg/g	76.8	60 - 120	
Heptane	ND	< 200		1270	1630	µg/g	77.9	60 - 120	
1-Butanol	ND	< 500		1290	1600	µg/g	80.6	70 - 130	
Propyl Acetate	ND	< 500		1160	1620	µg/g	71.6	70 - 130	
1,4-Dioxane	ND	< 100		364	493	µg/g	73.8	60 - 120	
2-Ethoxyethanol	ND	< 30		140	171	µg/g	81.9	60 - 120	
Methylisobutylketone	ND	< 500		1210	1620	µg/g	74.7	70 - 130	
3-Methyl-1-butanol	ND	< 500		1330	1610	µg/g	82.6	70 - 130	
Ethylene Glycol	ND	< 200		301	494	µg/g	60.9	60 - 120	
Toluene	ND	< 100		373	506	µg/g	73.7	60 - 120	
Isobutyl Acetate	ND	< 500		1190	1620	µg/g	73.5	70 - 130	
1-Pentanol	ND	< 500		1430	1610	µg/g	88.8	70 - 130	
Butyl Acetate	ND	< 500		1240	1610	µg/g	77.0	70 - 130	
Ethylbenzene	ND	< 200		788	996	µg/g	79.1	60 - 120	
m,p-Xylene	ND	< 200		813	1010	µg/g	80.5	60 - 120	
o-Xylene	ND	< 200		806	979	µg/g	82.3	60 - 120	
Cumene	ND	< 30		163	188	µg/g	86.7	60 - 120	
Anisole	ND	< 500		1380	1610	µg/g	85.7	70 - 130	
DMSO	ND	< 500		1120	1600	µg/g	70.0	70 - 130	
1,2-dimethoxyethane	ND	< 50		142	190	µg/g	74.7	70 - 130	
Triethylamine	ND	< 500		1260	1610	µg/g	78.3	70 - 130	
N,N-dimethylformamide	ND	< 150		417	496	µg/g	84.1	70 - 130	
N,N-dimethylacetamide	ND	< 150		409	483	µg/g	84.7	70 - 130	
Pyridine	ND	< 50		111	167	µg/g	66.5	70 - 130	Q6
1,2-Dichloroethane	ND	< 1		0.647	1	µg/g	64.7	70 - 130	Q6
Chloroform	ND	< 1		0.719	1	µg/g	71.9	70 - 130	
Trichloroethylene	ND	< 1		0.703	1	µg/g	70.3	70 - 130	



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35

Revision: Document ID:  
Legacy ID: Effective:

QC - Sample Duplicate			Sample ID: 22-011133-0001					
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	815	844	200	µg/g	3.5	< 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	
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	
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	
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	

**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



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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35





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



**Report Number:** 22-011152/D003.R000  
**Report Date:** 09/27/2022  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/16/22 01:35

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.