



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



Report Number: 21-003489/D03.R00
Report Date: 04/07/2021
ORELAP#: OR100028
Purchase Order:
Received: 04/01/21 11:04

Customer: NW Natural Goods
Product identity: HEMP - LM 0039
Client/Metric ID: .
Laboratory ID: 21-003489-0001

Sample Date: 04/01/21

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g [†]	0.196		mg/4g		CBD-Total per 4g 25.8 mg/4g
CBD per 4g	25.8		mg/4g		
CBG per 4g [†]	0.373		mg/4g		THC-Total per 4g <LOQ
CBN per 4g	0.158		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 - LM 0039
Client/Metric ID: .
Sample Date: 04/01/21
Laboratory ID: 21-003489-0001
Evidence of Cooling: No
Temp: 18.3 °C
Serving Size #1: 4 g

Sample Results

Potency per 4g						Method J AOAC 2015 V98-6 (mod)Units mg/se		Batch: 2103059		Analyze: 4/6/21 12:45:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes						
CBC per 4g [†]	0.196		mg/4g	0.127							
CBC-A per 4g [†]	< LOQ		mg/4g	0.127							
CBC-Total per 4g [†]	< LOQ		mg/4g	0.239							
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	0.239							
CBDV per 4g [†]	< LOQ		mg/4g	0.127							
CBDV-A per 4g [†]	< LOQ		mg/4g	0.127							
CBDV-Total per 4g [†]	< LOQ		mg/4g	0.238							
CBG per 4g [†]	0.373		mg/4g	0.127							
CBG-A per 4g [†]	< LOQ		mg/4g	0.127							
CBG-Total per 4g [†]	0.373		mg/4g	0.238							
CBL per 4g [†]	< LOQ		mg/4g	0.127							
CBN per 4g	0.158		mg/4g	0.127							
Δ8-THC per 4g [†]	< LOQ		mg/4g	0.127							
Δ9-THC per 4g	< LOQ		mg/4g	0.127							
THC-A per 4g	< LOQ		mg/4g	0.127							
THC-Total per 4g	< LOQ		mg/4g	0.239							
THCV per 4g [†]	< LOQ		mg/4g	0.127							
THCV-A per 4g [†]	< LOQ		mg/4g	0.127							
THCV-Total per 4g [†]	< LOQ		mg/4g	0.239							

Microbiology								
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
E.coli	< LOQ		cfu/g	10	2102914	04/04/21	AOAC 991.14 (Petrifilm)	X
Total Coliforms	< LOQ		cfu/g	10	2102914	04/04/21	AOAC 991.14 (Petrifilm)	X
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2102915	04/04/21	AOAC 2014.05 (RAPID)	X
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2102915	04/04/21	AOAC 2014.05 (RAPID)	X



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Solvents											
Method	Residual Solvents by GC/MS				Units µg/g	Batch 2102988	Analyze 04/05/21 10:47 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	< LOQ		200		
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass	
2,2-Dimethylbutane	< LOQ		30.0			2,2-Dimethylpropane	< 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	< LOQ	70.0	30.0	pass		m,p-Xylene	< LOQ		200		
Methanol	< LOQ	3000	200	pass		Methylene chloride	< LOQ	600	60.0	pass	
Methylpropane	< 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	< LOQ	2170	600	pass	

Pesticides					
Method	AOAC 2007.01 & EN 15662 (mod)		Units mg/kg	Batch 2103093	Analyze 04/07/21 03:14 PM
Analyte	Result	Limits	Status	Notes	
Multi-Residue Pesticide Profile ¹	< LOQ for all analytes				

Metals									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes	
Arsenic	< LOQ		mg/kg	0.00714	2103018	04/05/21	AOAC 2013.06 (mod.)	X	
Cadmium	< LOQ		mg/kg	0.00714	2103018	04/05/21	AOAC 2013.06 (mod.)	X	
Lead	< LOQ		mg/kg	0.00714	2103018	04/05/21	AOAC 2013.06 (mod.)	X	
Mercury	< LOQ		mg/kg	0.00357	2103018	04/05/21	AOAC 2013.06 (mod.)	X	

Nutrition									
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes	
Moisture (Loss on Drying)	18.1		g/100g	0.10	2102969	04/03/21	AOAC 925.10 (mod.)	X	
Water Activity	0.724		Aw	0.030	2103019	04/05/21	AOAC 978.18	X	



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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

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.

† = Analyte not NELAP accredited.

Units of Measure

cfu/g = Colony forming units per gram

g = Gram

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

Glossary of Qualifiers

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner
General Manager


 Pixis Labs
 Canrabis Multi-Residue Profile, Limits of Quantitation

Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)	Compound	LOQ (mg/kg)
Abamectin	0.100	CIPC	1.000	Endrin	0.100
Acephate	0.100	Clethodim	0.050	EPN	0.050
Acequinocyl	0.100	Clethodim Sulfone	0.050	EPIC	0.100
Acetamiprid	0.020	Clethodim Sulfoxide	0.050	Esfenvalerate/ Fenvalerate	0.200
Acetochlor	0.100	Cbfeentazine	0.020	Etaconazole	0.100
Acrinathrin	0.100	Cbmazone	0.020	Ethalfuralin	0.100
Alachlor	0.100	Cbthianidin	0.200	Ethiofencarb	0.050
Aldicarb	0.100	Caumaphos	0.050	Ethion	0.200
Aldicarb sulfoxide	0.100	Crdoxyphos	0.020	Ethirimol	0.100
Aldoxycarb (Aldicarb-sulfone)	0.100	Cyazazine	0.020	Ethofumesate	0.050
Aldrin	0.100	Cyazofenphos	0.020	Ethoprophos	0.020
Ametoctradin	0.020	Cyatranylprole	0.050	Etofenprox	0.020
Ametryn	0.500	Cyazofamid	0.020	Etoxazole	0.020
Aspon	0.100	Cydoate	0.100	Etridiazole	0.100
Asulam	0.100	Cyfluthrin	0.200	Etrinfos	0.020
Atrazine	0.100	Cyhalothrin, lambda	0.200	Famoxadone	0.200
Atrazine-desethyl	0.100	Cymoxanil	0.050	Famphur	0.100
Azinphos-ethyl	0.020	Cypermethrin	0.200	Fenamidone	0.020
Azinphos-methyl	0.020	Cyprodinil	0.100	Fenamiphos	0.020
Azoxystrobin	0.020	Dadthal	0.100	Fenamiphos sulfone	0.020
Beralaxyl	0.020	Damhozide	0.100	Fenamiphos sulfoxide	0.020
Berdiocarb	0.020	DCPMU	0.050	Fenazaquin	0.100
Berfluralin	0.100	DD, qp'-	0.100	Fenbuconazole	0.100
Berxacor	0.050	DD, p,p'-	0.100	Fenchlorphos	0.100
Bersulide	0.050	DDE, o,p'-	0.100	Fenchlorphos-oxon	0.100
BHC alpha isomer	0.100	DDE, p,p'-	0.100	Fenhexamid	0.100
BHC beta isomer	0.100	DDT, o,p'-	0.100	Fenitrothion	0.100
BHC delta isomer	0.500	DDT, p,p'-	0.100	Fenobucarb	0.050
Bifenazate	0.020	DEF (Tribufos)	0.100	Fenoxycarb	0.020
Bifenthrin	0.020	Deltamethrin	0.100	Fenpropathrin	0.050
Boscalid	0.020	Desmedipham	0.100	Fenpyroximate	0.020
Bromophos-ethyl	0.100	Diallate	0.100	Fenson	0.100
Bromophos-methyl	0.200	Diazinon	0.020	Fensulfthion	0.020
Bromopropylate	0.100	Diazoxon	0.100	Fensulfthion oxon	0.020
Bromuconazole	0.100	Dichlobenil	0.100	Fensulfthion sulfone	0.100
Bupirimate	0.020	Dichlofluanid	0.100	Fensulfthion-oxon-sulfone	0.020
Buprofezin	0.050	Dichlorvos	0.100	Fenthion	0.050
Butachlor	0.500	Diclobutrazol	0.050	Fenthion oxon	0.020
Butralin	0.200	Dicofol	0.100	Fenthion oxon sulfone	0.100
Butylate	0.100	Dicrotophos	0.050	Fenthion oxon sulfoxide	0.020
Cadusafos	0.020	Dieldrin	0.100	Fenthion sulfoxide	0.100
Captaf	1.000	Diethofencarb	0.020	Fenthion sulfone	0.050
Cartaryl	0.050	Diethyltoluamide (DEET)	0.050	Fenuron	0.020
Cartendazim	0.100	Difenoconazole	0.100	Fipronil	0.100
Cartofuran	0.020	Dimethenamid	0.050	Fonicamid	0.100
Cartophenothion	0.100	Dimethoate	0.050	Fluchloralin	0.100
Cartoxin	0.020	Dimethomorph	0.020	Flucythrinate	0.100
Carfentrazone-ethyl	0.100	Diniconazole	0.200	Fludioxonil	0.200
Chlorantraniliprole	0.020	Dinotefuran	0.200	Flufenacet	0.020
Chordane, cis-	0.200	Dioxathion	0.100	Rumioxazin	0.100
Chordane, trans-	0.200	Diphenamid	0.020	Ruometuron	0.020
Chlorfenapyr	0.500	Diphenylamine	0.100	Ruopicolide	0.050
Chlorfenson	0.200	Disulfoton	0.100	Fuopyram	0.020
Chlorfenvinphos	0.050	Disulfoton sulfone	0.100	Fuoxastrobin	0.050
Chlorobenzilate	0.100	Disulfoton sulfoxide	0.100	Fupyradifurone	0.020
Chloroneb	0.200	Diuron	0.050	Fluridone	0.100
Chlorpyrifos	0.050	Edifenphos	0.050	Fusilazole	0.020
Chlorpyrifos-methyl	0.200	Endosulfan apha	0.200	Futolanil	0.020
		Endosulfan beta	0.200	Futriafol	0.020
		Endosulfan sulfate	0.100	Fuvalinate, tau-	0.100
				Fluxapyroxad	0.020



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Fixis Labs
 Cannabis Multi-Residue Profile, Limits of Quantitation

Compound	LOQ(mg/kg)	Compound	LOQ(mg/kg)	Compound	LOQ(mg/kg)
Fomesafen	0.100	Mexacarbate	0.020	Propamocarb	0.050
Fonofos	0.100	MGK 264	0.020	Proparil	0.050
Forchlorfenuron	0.050	Mirex	0.100	Propargite	0.050
Formetanate	0.050	Molinate	0.050	Propazine	0.020
Furathiocarb	0.020	Monocrotophos	0.100	Propetamphos	0.050
Heptachlor	0.100	Monolinuron	0.020	Propham	0.050
Heptachlor epoxide	0.100	Myclobutanil	0.050	Propiconazole	0.050
Heptenophos	0.100	Naled	0.100	Propoxur	0.050
Hexachlorobenzene	0.100	Napropamide	0.050	Propoxycarbazone Na	0.050
Hexaconazole	0.100	Neburon	0.020	Propyzamide	0.050
Hexazinone	0.100	Nitrapyrin	0.100	Prathiofos	0.100
Hexythiazox	0.020	Norflurazon	0.050	Pyraclostrobin	0.020
Imazali	0.100	Omethoate	0.100	Pyrazophos	0.050
Imidacoprid	0.100	O-Phenylphenol	0.100	Pyrethrins	0.050
Indaziflam	0.020	Oxadixyl	0.100	Pyridaben	0.020
Indoxacarb	0.020	Oxaryl	0.100	Pyridafol	0.100
Iprobenfos	0.100	Oxamyl-oxime	0.100	Pyridate	0.020
Iprodione	0.100	Oxychlorane	0.100	Pyrimethanil	0.050
Isobenzan	0.100	Oxydemeton-Methyl	0.100	Pyriproxifen	0.020
Isocarbophos	0.500	Oxythioquinox	0.200	Pyroxasulfone	0.020
Isodrin	0.100	Padbutrazol	0.050	Pyroxulam	0.020
Isopenphos	0.050	Paraoxon-ethyl	0.020	Quinalphos	0.050
Isopenphos-methyl	0.020	Paraoxon methyl	0.100	Quinoxyfen	0.050
Isopenphos oxon	0.050	Parathion ethyl	0.100	Quintozene (PQB)	0.200
Isoprocarb	0.020	Parathion methyl	0.200	Resmethrin	0.050
Isopropalin	0.200	Perconazole	0.050	Rotenone	0.050
Isoprothiolane	0.050	Perdimethalin	0.050	S421	0.100
Isoproturon	0.050	Perflufen	0.020	Smaizine	0.100
Isoxaben	0.050	Pertachloroaniline	0.100	Smectryl	0.200
Isoxaflutole	0.050	Pertachloroanisole	0.100	Spinetoram	0.020
Kresoxim-methyl	0.050	Pentachlorobenzene (PCB)	0.100	Spinosad	0.050
Lactofen	0.500	Pentachlorothiobenzene (PCTA)	0.100	Spirodiclofen	0.100
Lenacl	0.100	Perthiopyrad	0.020	Spiromesifen	0.050
Lindane (gammaBHC)	0.100	Permethrin	0.050	Spirotetramat	0.050
Linuron	0.020	Peithane	0.100	Spiroxamine	0.020
Malaaxon	0.050	Phenmedipharm	0.050	Sulfotep	0.050
Malathion	0.050	Phenthoate	0.050	Sulfoxaflor	0.050
Mandipropamid	0.020	Phorate	0.050	Sulprofos	0.020
Mecarbam	0.020	Phorate Sulfone	0.050	Tebuconazole	0.100
Mepanipyrim	0.050	Phorate Sulfoxide	0.050	Tebufenozide	0.020
Merphos	0.500	Phosalone	0.050	Tebuthiuron	0.020
Metalaxyl	0.050	Phosmet	0.100	Tecnazene	0.100
Metaldehyde	0.050	Phosphamidon	0.050	Tefluthrin	0.100
Metconazole	0.100	Phoxim	0.050	Terbufos	0.020
Methacifos	0.100	Pinoxaden	0.020	Terbufos sulfone	0.050
Methamidophos	0.050	Piperonyl butoxide	0.050	Terbufos sulfoxide	0.050
Methidathion	0.050	Pirimicarb	0.020	Terbutylazine	0.020
Methiocarb	0.050	Pirimiphos-methyl	0.050	Terbutryn	0.020
Methiocarb sulfone	0.100	Pirimiphos-ethyl	0.020	Tetrachlorvinphos	0.050
Methiocarb sulfoxide	0.100	Prallethrin	0.100	Tetraconazole	0.050
Methomyl	0.100	Prochloraz	0.020	Tetradfon	0.200
Methoxychlor	0.100	Procyimdone	0.100	Tetramethrin	0.050
Methoxyfenozide	0.020	Prdenofos	0.100	Tetrasul	0.100
Metobromuron	0.050	Prfluralin	0.100	Thiabendazole	0.100
Metolachlor	0.100	Promecarb	0.050	Thiabendazole, 5-hydroxy	0.100
Metolcarb	0.050	Prometon	0.100	Thiadoprid	0.050
Metrafenone	0.050	Prometryn	0.020	Thiamethoxam	0.100
Metribuzin	0.100	Propadchlor	0.020	Thiobencarb	0.050
Mevinphos	0.100			Thiodicarb	0.050
				Thiophanate-methyl	0.050



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PIXIS Labs
 Cannabis Multi-Residue Profile, Limits of Quantitation

Compound	LOQ(mg/kg)	Compound	LOQ(mg/kg)	Compound	LOQ(mg/kg)
Tolclofos-methyl	0.100	Triazophos	0.020	Trifloxystrobin	0.020
Triforin	0.100	Tolyfluarid	0.050	Triticonazole	0.050
Tralkoxydim	0.100	Tridiphane	0.500	Vindozolin	0.100
Triadimefon	0.050	Triflumizole	0.020	Zoxamide	0.020
Triallate	0.100	Trifluralin	0.100		

LOQ=Limit of Quantitation, mg/kg

Factors affecting the LOQ include instrumentation sensitivity for 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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Cannabis Chain of Custody Record

21-003489



ORELAP ID: OR100028

Company: NW Natural Goods		Analysis Requested											Purchase Order Number:				
Contact: Isaac Velasquez		OPEN MARKET											Project Number:				
Address: 11791 SE HWY 212, Clackamas, OR 97015													Project Name:				
Email: isaacv@nwnaturalgoods.com													<input type="checkbox"/> Report Instructions: <input type="checkbox"/> Send to State - METRC <input checked="" type="checkbox"/> Email Final Results: <input type="checkbox"/> Fax Final Results <input type="checkbox"/> Cash/Check/CC/Net 30				
Phone: 818-644-9479 Fax:													Other:				
Processor's License: 330-1058115IHH																	
Field ID	Date/Time Collected	Pesticides - OR 59 compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Water Activity	Moisture	Terpenes	Micro: Yeast and Mold	Micro: E. Coli and Total Coliform	Heavy Metals	Mycotoxins	Other	Matrix	Weight	Serving size for edibles	Comments/Metric ID
1 HEMP - LM 0039	4/1/2021	X	X	X	X	X	X	X	X	X	X			edible	40g	4g	

Collected By:	Relinquished By:	Date	Time	Received by:	Date	Time	Lab Use Only:
<input checked="" type="checkbox"/> Standard (5 day)	Isaac Velasquez	4/1/2021	1000	<i>[Signature]</i>	4-1-21	1000	Client Alias:
<input type="checkbox"/> Rush (3-4 day) (1.5x Standard)	<i>[Signature]</i>	4-1-21	1104	<i>[Signature]</i>	4-1-21	1104	Order Number:
<input type="checkbox"/> Priority Rush (2 day) (2x Standard)							Proper Container
							Sample Condition
							Temperature: 18.3 c
							Shipped Via:
							Evidence of cooling: <input type="checkbox"/> Yes <input type="checkbox"/> No

SUBMISSION OF SAMPLES WITH TESTING REQUIREMENTS TO PIXIS WILL BE UNDERSTOOD TO BE AN AGREEMENT FOR SERVICES IN ACCORDANCE WITH THE CONDITIONS LISTED ON THE BACK OF THIS FORM
 Revision: 1.00 Control#: CF023 Effective 11/8/2018 Revised 11/8/2018 www.pixislabs.com Page 1 of 21 bm

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.
 Testing in accordance with: OAR 333-007-0390 OAR 333-007-0400 OAR 333-007-0410 OAR 333-007-0430



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Laboratory Quality Control Results

Residual Solvents		Batch ID: 2102988							
Method Blank		Laboratory Control Sample							
Analyte	Result	LOQ	Notes	Result	Spike	Units	%Rec	Limits	Notes
Propane	ND	< 200		557	595	µg/g	93.6	70	- 130
Isobutane	ND	< 200		749	761	µg/g	98.4	70	- 130
Butane	ND	< 200		769	761	µg/g	101.1	70	- 130
2,2-Dimethylpropane	ND	< 200		896	955	µg/g	93.8	70	- 130
Methanol	ND	< 200		1650	1610	µg/g	102.5	70	- 130
Ethylene Oxide	ND	< 30		55.3	58.3	µg/g	94.9	70	- 130
2-Methylbutane	ND	< 200		1280	1630	µg/g	78.5	70	- 130
Hexane	ND	< 200		1330	1610	µg/g	82.6	70	- 130
Ethanol	ND	< 200		1670	1620	µg/g	103.1	70	- 130
Ethyl Ether	ND	< 200		1480	1630	µg/g	90.8	70	- 130
2,2-Dimethylbutane	ND	< 30		157	176	µg/g	89.2	70	- 130
Acetone	ND	< 200		1560	1610	µg/g	96.9	70	- 130
2-Propanol	ND	< 200		1710	1620	µg/g	105.6	70	- 130
Ethyl Formate	ND	< 500		1380	1600	µg/g	86.3	70	- 130
Acetonitrile	ND	< 100		466	499	µg/g	93.4	70	- 130
Methyl Acetate	ND	< 500		1670	1600	µg/g	104.4	70	- 130
2,3-Dimethylbutane	ND	< 30		157	165	µg/g	95.2	70	- 130
Dichloromethane	ND	< 200		417	482	µg/g	86.5	70	- 130
2-Methylpentane	ND	< 30		208	164	µg/g	126.8	70	- 130
MTBE	ND	< 500		1650	1610	µg/g	102.5	70	- 130
3-Methylpentane	ND	< 30		149	163	µg/g	91.4	70	- 130
Hexane	ND	< 30		139	166	µg/g	83.7	70	- 130
1-Propanol	ND	< 500		1700	1610	µg/g	105.6	70	- 130
Methyl ethyl ketone	ND	< 500		1680	1620	µg/g	103.7	70	- 130
Ethyl acetate	ND	< 200		1580	1610	µg/g	98.1	70	- 130
2-Butanol	ND	< 200		1560	1620	µg/g	96.3	70	- 130
Tetrahydrofuran	ND	< 100		401	509	µg/g	78.8	70	- 130
Cyclohexane	ND	< 200		1570	1620	µg/g	96.9	70	- 130
2-methyl-1-propanol	ND	< 500		1380	1610	µg/g	85.7	70	- 130
Benzene	ND	< 1		29.4	30.2	µg/g	97.4	70	- 130
Isopropyl Acetate	ND	< 200		1630	1610	µg/g	101.2	70	- 130
Heptane	ND	< 200		1510	1610	µg/g	93.8	70	- 130
1-Butanol	ND	< 500		1310	1600	µg/g	81.9	70	- 130
Propyl Acetate	ND	< 500		1460	1600	µg/g	91.3	70	- 130
1,4-Dioxane	ND	< 100		489	493	µg/g	99.2	70	- 130
2-Ethoxyethanol	ND	< 30		153	168	µg/g	91.1	70	- 130
Methylisobutylketone	ND	< 500		1330	1600	µg/g	83.1	70	- 130
3-Methyl-1-butanol	ND	< 500		1140	1600	µg/g	71.3	70	- 130
Ethylene Glycol	ND	< 200		375	483	µg/g	77.6	70	- 130
Toluene	ND	< 200		465	491	µg/g	94.7	70	- 130
Isobutyl Acetate	ND	< 500		1290	1600	µg/g	80.6	70	- 130
1-Pentanol	ND	< 500		1130	1610	µg/g	70.2	70	- 130
Butyl Acetate	ND	< 500		1240	1610	µg/g	77.0	70	- 130
Ethylbenzene	ND	< 200		934	966	µg/g	96.7	70	- 130
m,p-Xylene	ND	< 200		897	962	µg/g	93.3	70	- 130
o-Xylene	ND	< 200		913	976	µg/g	93.5	70	- 130
Cumene	ND	< 30		149	162	µg/g	92.0	70	- 130
Anisole	ND	< 500		1510	1620	µg/g	93.2	70	- 130
DMSD	ND	< 500		1470	1610	µg/g	91.3	70	- 130
1,2-dimethoxyethane	ND	< 50		169	177	µg/g	95.5	70	- 130
Trimethylamine	ND	< 500		1510	1600	µg/g	94.4	70	- 130
N,N-dimethylformamide	ND	< 150		453	492	µg/g	92.1	70	- 130
N,N-dimethylacetamide	ND	< 150		381	492	µg/g	77.4	70	- 130
Pyridine	ND	< 50		144	163	µg/g	88.3	70	- 130



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



Report Number: 21-003489/D03.R00
Report Date: 04/07/2021
ORELAP#: OR100028
Purchase Order:
Received: 04/01/21 11:04

QC - Sample Duplicate Sample ID: 21-003004-0001

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	405	301	200	µg/g	29.5	< 20	FAIL	Q4
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	200	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	200	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	

Abbreviations

- ND - None Detected at or above MRL
- RPD - Relative Percent Difference
- LOQ - Limit of Quantitation
- Q4 - Non-homogenous sample matrix, affecting RPD result and/or % recoveries.

Units of Measure:

µg/g - Microgram per gram or ppm



12423 NE Whitaker Way
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Report Number: 21-003489/D03.R00
Report Date: 04/07/2021
ORELAP#: OR100028
Purchase Order:
Received: 04/01/21 11:04

Revision #: 0.00 Control : CFL-D06
Revision Date: 05/31/2019 Effective Date: 05/31/2019

Laboratory Quality Control Results

JAOAC2015 V986 Batch ID: 2103059

Laboratory Control Sample

Analyte	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	0.00983	0.01	%	98.3	85.0 - 115	Acceptable	
CBDV	0.00973	0.01	%	97.3	85.0 - 115	Acceptable	
CBD-A	0.00979	0.01	%	97.9	85.0 - 115	Acceptable	
CBG-A	0.00960	0.01	%	96.0	85.0 - 115	Acceptable	
CBG	0.00988	0.01	%	98.8	85.0 - 115	Acceptable	
CBD	0.00975	0.01	%	97.5	85.0 - 115	Acceptable	
THCV	0.00987	0.01	%	98.7	85.0 - 115	Acceptable	
THCVA	0.00922	0.01	%	92.2	85.0 - 115	Acceptable	
CBN	0.0104	0.01	%	104	85.0 - 115	Acceptable	
THC	0.00993	0.01	%	99.3	85.0 - 115	Acceptable	
D8THC	0.00964	0.01	%	96.4	85.0 - 115	Acceptable	
CBL	0.00893	0.01	%	89.3	85.0 - 115	Acceptable	
CBC	0.01000	0.01	%	100.0	85.0 - 115	Acceptable	
THCA	0.00981	0.01	%	98.1	85.0 - 115	Acceptable	
CBCA	0.00920	0.01	%	92.0	85.0 - 115	Acceptable	

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBDV	<LOQ	0.003	%	< 0.003	Acceptable	
CBD-A	<LOQ	0.003	%	< 0.003	Acceptable	
CBG-A	<LOQ	0.003	%	< 0.003	Acceptable	
CBG	<LOQ	0.003	%	< 0.003	Acceptable	
CBD	<LOQ	0.003	%	< 0.003	Acceptable	
THCV	<LOQ	0.003	%	< 0.003	Acceptable	
THCVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBN	<LOQ	0.003	%	< 0.003	Acceptable	
THC	<LOQ	0.003	%	< 0.003	Acceptable	
D8THC	<LOQ	0.003	%	< 0.003	Acceptable	
CBL	<LOQ	0.003	%	< 0.003	Acceptable	
CBC	<LOQ	0.003	%	< 0.003	Acceptable	
THCA	<LOQ	0.003	%	< 0.003	Acceptable	
CBCA	<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



12423 NE Whitaker Way
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503-254-1794



Report Number: 21-003489/D03.R00
Report Date: 04/07/2021
ORELAP#: OR100028
Purchase Order:
Received: 04/01/21 11:04

Revision #: 0.00 Control : CFL-D06
Revision Date: 05/31/2019 Effective Date: 05/31/2019

Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 2103059						
Sample Duplicate				Sample ID: 21-003385-0001-01				
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDV-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG-A	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
D8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CEC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CECA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	

Abbreviations

- ND - None Detected at or above MRL
- RPD - Relative Percent Difference
- LOQ - Limit of Quantitation
- NA - Calculation Not Applicable given non-numerical results

Units of Measure

%- Percent



12423 NE Whitaker Way
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Report Number: 21-003489/D03.R00
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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.