



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



Report Number: 23-000249/D002.R000
Report Date: 01/24/2023
ORELAP#: OR100028
Purchase Order:
Received: 01/06/23 16:04

Customer: NW Natural Goods
Product identity: HEMP- BB 0090
Client/Metric ID: .
Laboratory ID: 23-000249-0001

Summary

Potency:

Analyte per 4g	Result	Limits	Units	Status	
CBC per 4g	0.218		mg/4g		CBD-Total per Serving Size 23.6 mg/4g
CBD per 4g	23.6		mg/4g		
CBG per 4g	0.688		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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Product identity: HEMP- BB 0090

Client/Metric ID: .

Sample Date:

Laboratory ID: 23-000249-0001

Evidence of Cooling: No

Temp: 17.5

Relinquished by: hinton

Serving Size #1: 4 g

Sample Results

Potency per 4g Method: J AOAC 2015 V98-6 (mod) ^b Units mg/se Batch: 2300463 Analyze: 1/14/23 4:41:00 AM					
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 4g	0.218		mg/4g	0.124	
CBC-A per 4g	< LOQ		mg/4g	0.124	
CBC-Total per 4g	< LOQ		mg/4g	0.232	
CBD per 4g	23.6		mg/4g	0.124	
CBD-A per 4g	< LOQ		mg/4g	0.124	
CBD-Total per 4g	23.6		mg/4g	0.232	
CBDV per 4g	< LOQ		mg/4g	0.124	
CBDV-A per 4g	< LOQ		mg/4g	0.124	
CBDV-Total per 4g	< LOQ		mg/4g	0.231	
CBE per 4g	< LOQ		mg/4g	0.124	
CBG per 4g	0.688		mg/4g	0.124	
CBG-A per 4g	< LOQ		mg/4g	0.124	
CBG-Total per 4g	0.688		mg/4g	0.231	
CBL per 4g	< LOQ		mg/4g	0.124	
CBL-A per 4g	< LOQ		mg/4g	0.124	
CBL-Total per 4g	< LOQ		mg/4g	0.232	
CBN per 4g	< LOQ		mg/4g	0.124	
CBT per 4g	< LOQ		mg/4g	0.124	
Δ8-THCV per 4g	< LOQ		mg/4g	0.124	
Δ10-THC-9R per 4g	< LOQ		mg/4g	0.124	
Δ8-THC per 4g	< LOQ		mg/4g	0.124	
Δ9-THC per 4g	< LOQ		mg/4g	0.124	
exo-THC per 4g	< LOQ		mg/4g	0.124	
THC-A per 4g	< LOQ		mg/4g	0.124	
THC-Total per 4g	< LOQ		mg/4g	0.232	
THCV per 4g	< LOQ		mg/4g	0.124	
THCV-A per 4g	< LOQ		mg/4g	0.124	
THCV-Total per 4g	< LOQ		mg/4g	0.233	
Total Cannabinoids per 4g	24.6		mg/4g		



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2300299	01/13/23 AOAC 991.14 (Petrifilm) [®]		
Total Coliforms	< LOQ		cfu/g	10	2300299	01/13/23 AOAC 991.14 (Petrifilm) [®]		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2300300	01/14/23 AOAC 2014.05 (RAPID) [®]		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2300300	01/14/23 AOAC 2014.05 (RAPID) [®]		

Solvents Method: Residual Solvents by GC/MS[®] Units µg/g Batch 2300638 Analyze 01/20/23 10:57 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)[®] Units mg/kg Batch 2300687 Analyze 01/23/23 01:15 PM

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



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Metals								
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method		Status Notes
Arsenic	< LOQ	0.200	mg/kg	0.0156	2300487	01/13/23	AOAC 2013.06 (mod.) ^b	pass
Cadmium	< LOQ	0.200	mg/kg	0.0156	2300487	01/13/23	AOAC 2013.06 (mod.) ^b	pass
Lead	< LOQ	0.500	mg/kg	0.0156	2300487	01/13/23	AOAC 2013.06 (mod.) ^b	pass
Mercury	< LOQ	0.100	mg/kg	0.00780	2300487	01/13/23	AOAC 2013.06 (mod.) ^b	pass
Nutrition								
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method		Status Notes
Moisture (Loss on Drying)	46.6		g/100g	0.10	2300318	01/10/23	AOAC 925.10 (mod.) ^b	
Water Activity	0.703		Aw	0.030	2300264	01/09/23	AOAC 978.18 ^b	



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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.

Ⓟ = ISO/IEC 17025:2017 accredited method.

¥ = TNI accredited analyte.

Units of Measure

cfu/g = Colony forming units per gram

g = g

g/100g = Grams per 100 Grams

µg/g = Microgram per gram

mg/kg = Milligram per kilogram = parts per million (ppm)

mg/4g = Milligram per 4g

% = Percentage of sample

Aw = Water Activity

% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager



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Revision: 3 Document ID 3120
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Laboratory Pesticide Quality Control Results

AQAC2007.1 & EN 15662			Units: mg/Kg		Batch ID 2300339			
Method Blank			Laboratory Control Sample					
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spike	LCS% Re	Limits	Notes
Abamectin	0.000	< 0.250		0.908	1.000	90.3	50.0 150	
Acephate	0.000	< 0.200		0.711	0.800	88.9	60.0 120	
Acetaminophyl	0.000	< 1.000		3.399	4.000	85.0	40.0 160	
Acetamiprid	0.000	< 0.100		0.364	0.400	91.0	60.0 120	
Aldicarb	0.000	< 0.200		0.715	0.800	89.3	60.0 120	
Azoxystrobin	0.000	< 0.100		0.353	0.400	88.3	60.0 120	
Bifenazate	0.000	< 0.100		0.385	0.400	96.2	60.0 120	
Bifenthrin	0.000	< 0.100		0.355	0.400	88.8	50.0 150	
Boscalid	0.000	< 0.200		0.713	0.800	89.1	60.0 120	
Carbaryl	0.000	< 0.100		0.355	0.400	88.6	60.0 120	
Carbendazim	0.000	< 0.100		0.365	0.400	91.2	60.0 120	
Chlorantraniliprole	0.000	< 0.100		0.380	0.400	90.0	60.0 120	
Chlorfenapyr	0.000	< 0.500		1.910	2.000	95.5	60.0 120	
Chlorpyrifos	0.000	< 0.100		0.353	0.400	88.2	60.0 120	
Clofentezine	0.000	< 0.100		0.295	0.400	73.8	60.0 120	
Cyfluthrin	0.000	< 0.500		1.678	2.000	83.9	50.0 150	
Cypermethrin	0.000	< 0.500		1.788	2.000	89.4	50.0 150	
Daminozide	0.000	< 0.500		0.836	2.000	41.8	60.0 120	
Diazinon	0.000	< 0.100		0.340	0.400	85.0	60.0 120	
Dichlorvos	0.000	< 0.500		1.754	2.000	87.7	60.0 120	
Dimethoate	0.000	< 0.100		0.368	0.400	91.9	60.0 120	
Ethionphos	0.000	< 0.100		0.362	0.400	90.6	60.0 120	
Etofenprox	0.000	< 0.200		0.700	0.800	87.6	50.0 150	
Etoxazole	0.000	< 0.100		0.351	0.400	87.7	60.0 120	
Fenoxycarb	0.000	< 0.100		0.363	0.400	90.8	60.0 120	
Fenpyroximate	0.000	< 0.200		0.722	0.800	90.2	60.0 120	
Flpronil	0.000	< 0.200		0.729	0.800	91.1	60.0 120	
Flonicamid	0.000	< 0.250		0.986	1.000	98.6	60.0 120	
Fludioxonil	0.000	< 0.200		0.715	0.800	89.4	50.0 150	
Hexythiazox	0.000	< 0.250		0.873	1.000	87.3	60.0 120	
Imazalil	0.000	< 0.100		0.366	0.400	91.5	60.0 120	
Imidacloprid	0.000	< 0.200		0.735	0.800	91.9	60.0 120	
Kiesoxim-methyl	0.000	< 0.200		0.724	0.800	90.5	60.0 120	
Malathion	0.000	< 0.100		0.363	0.400	90.7	60.0 120	
Metolaxyl	0.000	< 0.100		0.367	0.400	91.7	60.0 120	
Methiocarb	0.000	< 0.100		0.362	0.400	90.6	60.0 120	
Methomyl	0.000	< 0.200		0.801	0.800	100.1	60.0 120	
MCK-264	0.000	< 0.100		0.357	0.400	89.3	50.0 150	
Mydobutanil	0.000	< 0.100		0.366	0.400	91.4	60.0 120	
Naled	0.000	< 0.250		0.871	1.000	87.1	50.0 150	
Oxamyl	0.000	< 0.500		1.963	2.000	98.2	60.0 120	
Padobutrazole	0.000	< 0.200		0.721	0.800	90.2	60.0 120	
Parathion-Methyl	0.000	< 0.100		0.399	0.400	99.7	50.0 150	
Permethrin	0.000	< 0.100		0.365	0.400	91.2	50.0 150	
Phosmet	0.000	< 0.100		0.364	0.400	91.0	50.0 150	
Piperonyl butoxide	0.000	< 0.500		1.777	2.000	88.8	60.0 120	
Prallethrin	0.000	< 0.100		0.359	0.400	89.8	60.0 120	
Propiconazole	0.000	< 0.200		0.724	0.800	90.5	60.0 120	
Propoxur	0.000	< 0.100		0.380	0.400	89.9	60.0 120	
Pyrethrin (Summe)	0.000	< 0.100		0.437	0.488	89.5	60.0 120	
Pyridaben	0.000	< 0.100		0.355	0.400	88.7	50.0 150	
Spinosad	0.000	< 0.100		0.352	0.388	90.6	50.0 150	
Spiromesifen	0.000	< 0.100		0.361	0.400	90.2	60.0 120	
Spirotetramat	0.000	< 0.100		0.366	0.400	91.6	60.0 120	
Spiroxamine	0.000	< 0.200		0.724	0.800	90.6	60.0 120	
Tebuconazole	0.000	< 0.200		0.722	0.800	90.2	60.0 120	
Thiadoprid	0.000	< 0.100		0.358	0.400	89.5	60.0 120	
Thiamethoxam	0.000	< 0.100		0.392	0.400	97.9	60.0 120	
Trifloxystrobin	0.000	< 0.100		0.359	0.400	89.9	60.0 120	

Q6



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LegacyID: CFC21WorksheetValidated 10/30/2020

Laboratory Pesticide Quality Control Results

AOAC2007.1 & EN 15662				Units: mg/Kg		Batch ID 2300339					
Matrix Spike/Matrix Spike Duplicate Recoveries										Sample ID: 230001540006	
Analyte	Result	MS Res	MSD Res	Spike	RPD%	Limit	MS% Re	MSD % Re	Limits	Notes	
Abamectin	0.000	0.901	0.920	1.000	2.1%	< 30	90.1%	92.0%	50 - 150		
Acephate	0.000	0.745	0.741	0.800	0.6%	< 30	93.2%	92.6%	50 - 150		
Acequinocyl	0.000	3.500	3.621	4.000	3.4%	< 30	87.5%	90.5%	50 - 150		
Acetamiprid	0.000	0.372	0.378	0.400	1.7%	< 30	93.0%	94.6%	50 - 150		
Aldicarb	0.000	0.728	0.755	0.800	3.7%	< 30	91.0%	94.5%	50 - 150		
Azoxystrobin	0.014	0.373	0.364	0.400	2.3%	< 30	89.5%	87.5%	50 - 150		
Bifenazate	0.000	0.388	0.389	0.400	1.7%	< 30	95.7%	97.3%	50 - 150		
Bifenthrin	0.000	0.360	0.368	0.400	2.1%	< 30	90.0%	92.0%	50 - 150		
Boscalid	0.000	0.742	0.755	0.800	1.8%	< 30	92.7%	94.4%	50 - 150		
Carbaryl	0.000	0.369	0.370	0.400	0.3%	< 30	92.3%	92.6%	50 - 150		
Carbofuran	0.000	0.376	0.384	0.400	2.1%	< 30	94.0%	96.0%	50 - 150		
Chlorantraniliprole	0.000	0.366	0.374	0.400	2.1%	< 30	91.4%	93.4%	50 - 150		
Chlorfenapyr	0.000	1.925	2.088	2.000	8.1%	< 30	96.3%	104.4%	50 - 150		
Chlorpyrifos	0.000	0.355	0.362	0.400	2.1%	< 30	88.7%	90.6%	50 - 150		
Clofentezine	0.000	0.123	0.145	0.400	16.3%	< 30	30.7%	36.1%	50 - 150	Q	
Cyfluthrin	0.000	1.801	1.879	2.000	4.3%	< 30	90.0%	94.0%	30 - 150		
Cypermethrin	0.000	1.944	1.875	2.000	3.6%	< 30	97.2%	93.8%	50 - 150		
Daminozide	0.000	0.858	0.901	2.000	4.8%	< 30	42.9%	45.0%	30 - 150		
Diazinon	0.000	0.354	0.357	0.400	0.6%	< 30	88.6%	89.2%	50 - 150		
Dichlorvos	0.000	1.857	1.884	2.000	1.4%	< 30	92.9%	94.2%	50 - 150		
Dimethoate	0.000	0.380	0.385	0.400	1.2%	< 30	95.0%	96.2%	50 - 150		
Ethionaphos	0.000	0.368	0.370	0.400	0.4%	< 30	92.1%	92.5%	50 - 150		
Etofenprox	0.000	0.722	0.731	0.800	1.3%	< 30	90.2%	91.3%	50 - 150		
Etoxazole	0.000	0.359	0.370	0.400	3.0%	< 30	89.9%	92.6%	50 - 150		
Fenoxycarb	0.000	0.365	0.371	0.400	1.8%	< 30	91.2%	92.6%	50 - 150		
Fenpyroximate	0.000	0.821	0.820	0.800	0.1%	< 30	102.6%	102.5%	50 - 150		
Flpronil	0.000	0.755	0.763	0.800	0.9%	< 30	94.4%	95.3%	50 - 150		
Flonicamid	0.000	0.772	0.730	1.000	5.6%	< 30	77.2%	73.0%	50 - 150		
Fludioxonil	0.000	0.736	0.747	0.800	1.5%	< 30	92.0%	93.4%	50 - 150		
Hexythiazox	0.000	0.908	0.925	1.000	2.5%	< 30	90.3%	92.5%	50 - 150		
Imazalil	0.000	0.379	0.379	0.400	0.2%	< 30	94.6%	94.6%	50 - 150		
Imidacloprid	0.000	0.736	0.755	0.800	2.5%	< 30	92.0%	94.4%	50 - 150		
Kiesoxim-methyl	0.000	0.734	0.732	0.800	0.3%	< 30	91.6%	91.5%	50 - 150		
Malathion	0.000	0.368	0.371	0.400	0.8%	< 30	92.0%	92.7%	50 - 150		
Metolaxyl	0.000	0.373	0.377	0.400	1.1%	< 30	93.2%	94.2%	50 - 150		
Methiocarb	0.000	0.374	0.373	0.400	0.3%	< 30	93.6%	93.3%	50 - 150		
Methomyl	0.000	0.735	0.757	0.800	3.0%	< 30	91.9%	94.7%	50 - 150		
MCK-264	0.000	0.398	0.385	0.400	2.0%	< 30	89.5%	91.3%	50 - 150		
Mydobutanol	0.000	0.373	0.354	0.400	5.2%	< 30	93.2%	88.5%	50 - 150		
Naled	0.000	0.914	0.935	1.000	2.3%	< 30	91.4%	93.5%	50 - 150		
Oxamyl	0.000	2.011	1.933	2.000	4.0%	< 30	100.6%	96.6%	50 - 150		
Padobutrazole	0.000	0.743	0.743	0.800	0.1%	< 30	92.8%	92.9%	50 - 150		
Parathion-Methyl	0.000	0.335	0.384	0.400	13.6%	< 30	83.7%	96.0%	30 - 150		
Permethrin	0.000	0.359	0.362	0.400	0.8%	< 30	89.8%	90.5%	50 - 150		
Phosmet	0.000	0.381	0.381	0.400	0.1%	< 30	95.3%	95.4%	50 - 150		
Piperonyl butoxide	0.000	1.765	1.813	2.000	2.7%	< 30	88.2%	90.6%	50 - 150		
Prallethrin	0.000	0.355	0.361	0.400	1.3%	< 30	89.1%	90.2%	50 - 150		
Propiconazole	0.000	0.755	0.755	0.800	0.2%	< 30	94.5%	94.3%	50 - 150		
Propoxur	0.000	0.367	0.378	0.400	2.9%	< 30	91.7%	94.5%	50 - 150		
Pyrethrin (Summe)	0.007	0.402	0.404	0.488	0.7%	< 30	80.9%	81.4%	50 - 150		
Pyridaben	0.000	0.341	0.344	0.400	0.9%	< 30	85.3%	86.1%	50 - 150		
Spinosad	0.000	0.358	0.358	0.388	0.0%	< 30	92.3%	92.3%	50 - 150		
Spiromesfen	0.000	0.370	0.376	0.400	1.6%	< 30	92.4%	93.9%	50 - 150		
Spirotetramat	0.000	0.373	0.375	0.400	0.7%	< 30	93.2%	93.8%	50 - 150		
Spiroxamine	0.000	0.710	0.745	0.800	4.9%	< 30	88.7%	93.2%	50 - 150		
Tebuconazole	0.000	0.733	0.735	0.800	0.3%	< 30	91.6%	91.6%	50 - 150		
Thiadoprid	0.000	0.380	0.382	0.400	0.5%	< 30	95.0%	95.5%	50 - 150		
Thiamethoxam	0.000	0.335	0.332	0.400	0.9%	< 30	83.8%	83.1%	50 - 150		
Trifloxystrobin	0.000	0.370	0.364	0.400	1.4%	< 30	92.4%	91.1%	50 - 150		

Q



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Report Number: 23-000249/D002.R000
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ORELAP#: OR100028
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Laboratory Quality Control Results

JAOAC2015 V986 Batch ID: 2300463

Laboratory Control Sample									
Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes	
CBDVA	2	0.0334	0.033	%	99.9	80.0 - 120	Acceptable		
CBDV	2	0.0354	0.035	%	100	80.0 - 120	Acceptable		
CBE	2	0.0347	0.035	%	99.1	80.0 - 120	Acceptable		
CBD	1	0.0312	0.032	%	97.4	90.0 - 110	Acceptable		
CBGA	1	0.0315	0.032	%	98.2	80.0 - 120	Acceptable		
CBG	1	0.0324	0.033	%	98.4	80.0 - 120	Acceptable		
CBD	1	0.0313	0.032	%	96.5	90.0 - 110	Acceptable		
THCV	2	0.0351	0.035	%	99.1	80.0 - 120	Acceptable		
d8THCV	2	0.0348	0.034	%	101	80.0 - 120	Acceptable		
THCVA	2	0.0328	0.033	%	99.5	80.0 - 120	Acceptable		
CBN	1	0.0335	0.034	%	98.7	80.0 - 120	Acceptable		
exo-THC	2	0.0324	0.032	%	100	80.0 - 120	Acceptable		
d9THC	1	0.0352	0.035	%	101	90.0 - 110	Acceptable		
d8THC	1	0.0319	0.033	%	95.3	90.0 - 110	Acceptable		
CBL	2	0.0346	0.035	%	100	80.0 - 120	Acceptable		
d10THC	1	0.0154	0.016	%	97.6	80.0 - 120	Acceptable		
CBG	2	0.0342	0.035	%	98.8	80.0 - 120	Acceptable		
THCA	1	0.0317	0.032	%	100	90.0 - 110	Acceptable		
CBGA	2	0.0342	0.034	%	99.4	80.0 - 120	Acceptable		
CBLA	2	0.0346	0.035	%	99.1	80.0 - 120	Acceptable		
CBT	2	0.0344	0.035	%	97.9	80.0 - 120	Acceptable		

Method Blank

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBDV	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBE	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBD	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBGA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBG	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBD	<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	
CBL	<LOQ	0.0006	%	< 0.0006	Acceptable	
d10THC	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBG	<LOQ	0.0006	%	< 0.0006	Acceptable	
THCA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBGA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBLA	<LOQ	0.0006	%	< 0.0006	Acceptable	
CBT	<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



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Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 2300463						
Sample Duplicate		Sample ID: 23-0002490001						
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	
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0172	0.0172	0.003	%	0.159	< 20	Acceptable	
CBD	0.587	0.590	0.003	%	0.512	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d9THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	0.00543	0.00546	0.003	%	0.548	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBT	<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:



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Laboratory Quality Control Results

Residual Solvents				Batch ID: 2300638					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		545	572	µg/g	95.3	60 - 120	
Isobutane	ND	< 200		640	731	µg/g	87.6	60 - 120	
Butane	ND	< 200		625	731	µg/g	85.5	60 - 120	
2,2-Dimethylpropane	ND	< 200		839	936	µg/g	89.6	60 - 120	
Methanol	ND	< 200		1680	1620	µg/g	103.7	60 - 120	
Ethylene Oxide	ND	< 30		49.8	56.2	µg/g	88.6	60 - 120	
2-Methylbutane	ND	< 200		1400	1610	µg/g	87.0	60 - 120	
Pentane	ND	< 200		1400	1600	µg/g	87.5	60 - 120	
Ethanol	ND	< 200		1180	1610	µg/g	73.3	70 - 130	
Ethyl Ether	ND	< 200		1410	1630	µg/g	86.5	60 - 120	
2,2-Dimethylbutane	ND	< 30		161	171	µg/g	94.2	60 - 120	
Acetone	ND	< 200		1510	1630	µg/g	92.6	60 - 120	
2-Propanol	ND	< 200		1520	1620	µg/g	93.8	60 - 120	
Ethyl Formate	ND	< 500		1600	1670	µg/g	95.8	70 - 130	
Acetonitrile	ND	< 100		435	498	µg/g	87.3	60 - 120	
Methyl Acetate	ND	< 500		1640	1730	µg/g	94.8	70 - 130	
2,3-Dimethylbutane	ND	< 30		151	171	µg/g	88.3	60 - 120	
Dichloromethane	ND	< 60		433	483	µg/g	89.6	60 - 120	
2-Methylpentane	ND	< 30		143	168	µg/g	85.1	60 - 120	
MTBE	ND	< 500		1500	1650	µg/g	90.9	70 - 130	
3-Methylpentane	ND	< 30		133	167	µg/g	79.6	60 - 120	
Hexane	ND	< 30		202	182	µg/g	111.0	60 - 120	
1-Propanol	ND	< 500		1400	1620	µg/g	86.4	70 - 130	
Methyl ethyl ketone	ND	< 500		1610	1620	µg/g	99.4	70 - 130	
Ethyl acetate	ND	< 200		1520	1610	µg/g	94.4	60 - 120	
2-Butanol	ND	< 200		1450	1600	µg/g	90.6	60 - 120	
Tetrahydrofuran	ND	< 100		388	483	µg/g	79.9	60 - 120	
Cyclohexane	ND	< 200		1520	1610	µg/g	94.4	60 - 120	
2-methyl-1-propanol	ND	< 500		1250	1620	µg/g	77.2	70 - 130	
Benzene	ND	< 1		4.05	5.02	µg/g	80.7	60 - 120	
Isopropyl Acetate	ND	< 200		1430	1620	µg/g	88.3	60 - 120	
Heptane	ND	< 200		1580	1610	µg/g	98.1	60 - 120	
1-Butanol	ND	< 500		1010	1630	µg/g	62.0	70 - 130	Q6
Propyl Acetate	ND	< 500		1290	1610	µg/g	80.1	70 - 130	
1,4-Dioxane	ND	< 100		415	491	µg/g	84.5	60 - 120	
2-Ethoxyethanol	ND	< 30		112	181	µg/g	61.9	60 - 120	
Methylisobutyl ketone	ND	< 500		1420	1620	µg/g	87.7	70 - 130	
3-Methyl-1-butanol	ND	< 500		1220	1630	µg/g	74.8	70 - 130	
Ethylene Glycol	ND	< 200		513	484	µg/g	106.0	60 - 120	
Toluene	ND	< 100		400	485	µg/g	82.5	60 - 120	
Isobutyl Acetate	ND	< 500		1550	1630	µg/g	95.1	70 - 130	
1-Pentanol	ND	< 500		1230	1620	µg/g	75.9	70 - 130	
Butyl Acetate	ND	< 500		1390	1620	µg/g	85.8	70 - 130	
Ethylbenzene	ND	< 200		838	969	µg/g	86.5	60 - 120	
m,p-Xylene	ND	< 200		853	994	µg/g	85.8	60 - 120	
o-Xylene	ND	< 200		770	967	µg/g	79.6	60 - 120	
Cumene	ND	< 30		123	171	µg/g	75.4	60 - 120	
Anisole	ND	< 500		1010	1630	µg/g	62.0	70 - 130	Q6
DMSO	ND	< 500		1410	1680	µg/g	83.9	70 - 130	
1,2-dimethoxyethane	ND	< 50		159	169	µg/g	94.1	70 - 130	
Triethylamine	ND	< 500		1540	1630	µg/g	94.5	70 - 130	
N,N-dimethylformamide	ND	< 150		459	482	µg/g	95.2	70 - 130	
N,N-dimethylacetamide	ND	< 150		333	510	µg/g	65.3	70 - 130	Q6
Pyridine	ND	< 50		174	203	µg/g	85.7	70 - 130	
Sulfolane	ND	< 50		133	172	µg/g	77.3	70 - 130	
1,2-Dichloroethane	ND	< 1		0.801	1	µg/g	80.1	70 - 130	
Chloroform	ND	< 1		0.83	1	µg/g	83.0	70 - 130	
Trichloroethylene	ND	< 1		0.825	1	µg/g	82.5	70 - 130	
1,1-Dichloroethane	ND	< 1		0.779	1	µg/g	77.9	70 - 130	



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QC- Sample Duplicate

Sample ID: 23-000249-0001

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: 23-000249/D002.R000
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Explanation of QC Flag Comments:

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