



# Certificate of Analysis

**COMPLIANCE FOR RETAIL**

**Sample:** GA01218003-012  
**Harvest/Lot ID:** PPFS103-201215-01  
**Batch#:** DF-PEAR-110220  
**Seed to Sale#** PPFS103-201215-01  
**Batch Date:** 12/15/20  
**Sample Size Received:** 16 gram  
**Total Amount:** 1450 units  
**Retail Product Size:** 1.1988  
**Ordered :** 12/18/20  
**Sampled :** 12/18/20  
**Completed:** 04/12/21  
**Sampling Method:** SOP.T.20.010

Apr 12, 2021 | Liberty Health Sciences, FL

18770 N CR 225  
Gainesville, FL, 32609, US

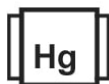

**PASSED**

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**PRODUCT IMAGE**


Box

**SAFETY RESULTS**

Pesticides  
**PASSED**

Heavy Metals  
**PASSED**

Microbials  
**PASSED**

Mycotoxins  
**PASSED**

Residuals Solvents  
**PASSED**

Filtration  
**PASSED**

Water Activity  
**PASSED**

Moisture  
**NOT TESTED**

Terpenes  
**TESTED**
**MISC.**

**Cannabinoid**
**PASSED**

**Total THC**
**0%**

/Container : 921.432 mg


**Total CBD**
**0%**

CBD/Container : 3.863 mg


**Total Cannabinoids**
**0%**

Total Cannabinoids/Container : 992.16 mg

	CBDV	CBDA	CBGA	CBG	CBD	THCV	CBN	D9-THC	D8-THC	CBC	THCA
%	0	0	0	3.793	0.322	0.954	0.472	76.862	0	0.357	0
mg/unit	0.001	0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.001
LOD	%	%	%	%	%	%	%	%	%	%	%

Analyzed by:  
1541

Weight:  
0.1071g

Extraction date:  
12/21/20 09:12:46

Extracted by:  
1791

Analysis Method : SOP.T.40.031, SOP.T.30.031

Analytical Batch : GA020166POT

Instrument Used : GA-HPLC-001 2030C Plus (Carl)

Analyzed Date : 12/21/20 15:17:16

Reviewed On : 12/22/20 18:30:07

Batch Date : 12/21/20 07:38:00

Dilution : 40

Reagent : 110320.53; 110520.05; 110519.12; 121820.R01; 121620.R04

Consumables : 280630187; VAV-09-1020 Lot# 947.077; 6970145500298; 190624060; 16466-042

Pipette : N/A

Full Spectrum cannabinoid analysis utilizing High Performance Liquid Chromatography with UV detection in accordance with F.S. Rule 64ER20-39.

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**Miranda MacDonald**  
Lab Director

State License # CMTL-0001  
 ISO 17025 Accreditation # ISO/IEC  
 17025:2017 Accreditation P/LA-  
 Testing 97164

  
 Signature  
 04/12/21



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 Gainesville, FL, 32609, US  
 Telephone: (833) 254-4877  
 Email: Qualityassurance@libertyhealthsciences.com

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 <b>Pesticides</b>					<b>PASSED</b>				
Pesticide	LOD	Units	Action Level	Pass/Fail Result	Pesticide	LOD	Units	Action Level	Pass/Fail Result
ABAMECTIN B1A	0.01	ppm	0.1	0	PYRIDABEN	0.02	ppm	0.2	0
ACEPHATE	0.01	ppm	0.1	0	SPIROMESIFEN	0.01	ppm	0.1	0
ACEQUINOCYL	0.01	ppm	0.1	0	SPIROTETRAMAT	0.01	ppm	0.1	0
ACETAMIPRID	0.01	ppm	0.1	0	SPIROXAMINE	0.01	ppm	0.1	0
ALDICARB	0.01	ppm	0.1	0	TEBUCONAZOLE	0.01	ppm	0.1	0
AZOXYSTROBIN	0.01	ppm	0.1	0	THIACLOPRID	0.01	ppm	0.1	0
BIFENAZATE	0.01	ppm	0.1	0	THIAMETHOXAM	0.05	ppm	0.5	0
BIFENTHRIN	0.01	ppm	0.1	0	TRIFLOXYSTROBIN	0.01	ppm	0.1	0
BOSCALID	0.01	PPM	0.1	0	PENTACHLORONITROBENZENE (PCNB) *	0.01	PPM	0.15	0
CARBARYL	0.05	ppm	0.5	0	PARATHION-METHYL *	0.01	PPM	0.1	0
CARBOFURAN	0.01	ppm	0.1	0	CAPTAN *	0.025	PPM	0.7	0
CHLORANTRANILIPROLE	0.1	ppm	1	0	CHLORDANE *	0.01	PPM	0.1	0
CHLORMEQUAT CHLORIDE	0.1	ppm	1	0	CHLORFENAPYR *	0.01	PPM	0.1	0
CHLORPYRIFOS	0.01	ppm	0.1	0	CYFLUTHRIN *	0.01	PPM	0.5	0
CLOFENTEZINE	0.02	ppm	0.2	0	CYPERMETHRIN *	0.01	PPM	0.5	0
COUMAPHOS	0.01	ppm	0.1	0					
DAMINOZIDE	0.01	ppm	0.1	0	Analyzed by: 1850	Weight: 0.9935g	Extraction date: 12/23/20 05:12:24	Extracted by: 1850	
DICHLORVOS	0.01	ppm	0.1	0	Analysis Method : SOP.T.30.101.FL (Gainesville), SOP.T.30.102.FL (Davie), SOP.T.40.101.FL (Gainesville), SOP.T.40.102.FL (Davie)				
DIMETHOATE	0.01	ppm	0.1	0	Analytical Batch : GA020155PES		Reviewed On : 12/24/20 10:58:54		
ETHOPROPHOS	0.01	ppm	0.1	0	Instrument Used : GA-LCMS-001 Pes		Batch Date : 12/18/20 16:40:28		
ETOFENPROX	0.01	ppm	0.1	0	Analyzed Date : 12/21/20 18:25:55				
ETOXAZOLE	0.01	ppm	0.1	0	Dilution : 10				
FENHEXAMID	0.01	ppm	0.1	0	Reagent : 120920.R09; 121120.R10; 122120.R05				
FENOXYCARB	0.01	ppm	0.1	0	Consumables : 282066106; VAV-09-1020 Lot# 947.077; 6970145500298; VAV-09-1020 (947.077) / ALK-09-1412 (9291.179); P734631 / P7411895				
FENPYROXIMATE	0.01	ppm	0.1	0	Pipette : N/A				
FIPRONIL	0.01	ppm	0.1	0	Testing for agricultural agents is performed utilizing Liquid Chromatography Triple-Quadrupole Mass Spectrometry in accordance with F.S. Rule 64ER20-39.				
FLONICAMID	0.01	ppm	0.1	0	Analyzed by: 1850	Weight: 0.9935g	Extraction date: 12/23/20 05:12:24	Extracted by: 1850	
FLUDIOXONIL	0.01	ppm	0.1	0	Analysis Method : SOP.T.30.151.FL (Gainesville), SOP.T.30.151A.FL (Davie), SOP.T.40.151.FL				
HEXYTHIAZOX	0.01	ppm	0.1	0	Analytical Batch : GA020237VOL		Reviewed On : 12/22/20 12:34:30		
IMAZALIL	0.01	ppm	0.1	0	Instrument Used : GA-GCMS-003 Triple Quad Pest (Indica)		Batch Date : 12/21/20 13:27:40		
IMIDACLOPRID	0.04	ppm	0.4	0	Analyzed Date : 12/21/20 18:35:36				
KRESOXIM-METHYL	0.01	ppm	0.1	0	Testing for agricultural agents is performed utilizing Gas Chromatography Triple-Quadrupole Mass Spectrometry in accordance with F.S. Rule 64ER20-39.				
MALATHION	0.02	ppm	0.2	0					
METALAXYL	0.01	ppm	0.1	0					
METHIOCARB	0.01	ppm	0.1	0					
METHOMYL	0.01	ppm	0.1	0					
MEVINPHOS	0.01	ppm	0.1	0					
MYCLOBUTANIL	0.01	ppm	0.1	0					
NALED	0.025	ppm	0.25	0					
OXAMYL	0.05	ppm	0.5	0					
PACLOBUTRAZOL	0.01	ppm	0.1	0					
PHOSMET	0.01	ppm	0.1	0					
PIPERONYL BUTOXIDE	0.3	ppm	3	0					
PRALLETHRIN	0.01	ppm	0.1	0					
PROPICONAZOLE	0.01	ppm	0.1	0					
PROPOXUR	0.01	ppm	0.1	0					

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**Miranda MacDonald**  
 Lab Director

 State License # CMTL-0001  
 ISO 17025 Accreditation # ISO/IEC  
 17025:2017 Accreditation P/LA-  
 Testing 97164

  
 Signature  
 04/12/21





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Harvest/Lot ID: PPFS103-201215-01

Batch# : DF-PEAR-110220

Sampled : 12/18/20

Ordered : 12/18/20

Sample Size Received : 16 gram

Total Amount : 1450 units

Completed : 04/12/21 Expires: 04/12/22

Sample Method : SOP.T.20.010

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## Residual Solvents

**PASSED**

Solvents	LOD	Units	Action Level	Pass/Fail	Result
METHANOL	25	ppm	250		0
ETHANOL	500	ppm	5000		260.721
PENTANES (N-PENTANE)	75	ppm	750		0
ETHYL ETHER	50	ppm	500		0
ACETONE	75	ppm	750		1.847
2-PROPANOL	50	ppm	500		0
ACETONITRILE	6	ppm	60		2.032
DICHLOROMETHANE	12.5	ppm	125		0
N-HEXANE	25	ppm	250		0
ETHYL ACETATE	40	ppm	400		0
BENZENE	0.1	ppm	1		0
HEPTANE	500	ppm	5000		0
TOLUENE	15	ppm	150		0
PROPANE	500	ppm	5000		0
CHLOROFORM	0.2	ppm	2		0
1,2-DICHLOROETHANE	0.2	ppm	2		0
BUTANES (N-BUTANE)	500	ppm	5000		44.065
ETHYLENE OXIDE	0.5	ppm	5		0
1,1-DICHLOROETHENE	0.8	ppm	8		0
TRICHLOROETHYLENE	2.5	ppm	25		0

 Analyzed by:  
 2155

 Weight:  
 .0243g

 Extraction date:  
 12/18/20 03:12:58

 Extracted by:  
 508

Analysis Method : SOP.T.40.041.FL

Analytical Batch : GA020151SOL

Instrument Used : GA-GCMS-001 Headspace Solvent

Analyzed Date : N/A

Reviewed On : 12/24/20 06:28:18

Batch Date : 12/18/20 15:19:45

Dilution : N/A

Reagent : N/A

Consumables : 24154107; ach-20-1720

Pipette : N/A

Residual solvents analysis is performed utilizing Gas Chromatography Mass Spectrometry in accordance with with F.S. Rule 64ER20-39.



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
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 Sample Method : SOP.T.20.010

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 <b>Microbial</b> <b>PASSED</b>						 <b>Mycotoxins</b> <b>PASSED</b>					
Analyte	LOD	Units	Result	Pass / Fail	Action Level	Analyte	LOD	Units	Result	Pass / Fail	Action Level
ASPERGILLUS FLAVUS	10000	RFU	0		10000	AFLATOXIN B1	0.002	ppm	0		0.02
ASPERGILLUS FUMIGATUS	10000	RFU	0		10000	AFLATOXIN B2	0.002	ppm	0		0.02
ASPERGILLUS NIGER	10000	RFU	0		10000	AFLATOXIN G1	0.002	ppm	0		0.02
ASPERGILLUS TERREUS	10000	RFU	0		10000	AFLATOXIN G2	0.002	ppm	0		0.02
ESCHERICHIA COLI SHIGELLA SPP	1726	RFU	0		1726	Analyzed by: 1850 Weight: 0.9935g Extraction date: 12/23/20 05:12:20 Extracted by: 1850					
SALMONELLA SPECIFIC GENE	10000	RFU	0		10000	Analysis Method : SOP.T.30.101.FL (Gainesville), SOP.T.40.101.FL (Gainesville), SOP.T.30.102.FL (Davie), SOP.T.40.102.FL (Davie)					
TOTAL YEAST AND MOLD	10	CFU	<10		100000	Analytical Batch : GA020223MYC Reviewed On : 12/24/20 06:04:07 Instrument Used : GA-LCMS-001 MYC Batch Date : 12/21/20 11:03:49 Analyzed Date : 12/21/20 18:25:44					
Analyzed by: 1790 Weight: 0.89g Extraction date: 12/18/20 09:12:16 Extracted by: 1828 Analysis Method : SOP.T.40.056C, SOP.T.40.058.FL, SOP.T.40.209.FL Analytical Batch : GA020163MIC Reviewed On : 12/24/20 06:12:28 Instrument Used : GA-093 PathogenDx Scanner (MIC) Batch Date : 12/18/20 19:50:10 Analyzed Date : N/A Dilution : 10 Reagent : 110320.21 Consumables : 001001; 001001; 002005 Pipette : N/A						Dilution : ND; ND; ND; ND; ND Reagent : Aflatoxin G2; Aflatoxin G1; Aflatoxin B2; Aflatoxin B1; Total Ochratoxin A Consumables : 0.02; 0.02; 0.02; 0.02; 0.02 Pipette : N/A Mycotoxins testing utilizing Liquid Chromatography with Triple-Quadrupole Mass Spectrometry in accordance with F.S. Rule 64ER20-39.					
 <b>Heavy Metals</b> <b>PASSED</b>											
Analyzed by: N/A Weight: N/A Extraction date: N/A Extracted by: N/A Analysis Method : SOP.T.40.208 (Gainesville), SOP.T.40.209.FL Analytical Batch : GA020164TYM Reviewed On : 12/24/20 06:10:28 Instrument Used : GA-093 PathogenDx Scanner (QUANT) Batch Date : 12/18/20 19:50:23 Analyzed Date : N/A											

Total yeast and mold testing is performed utilizing MPN and traditional culture based techniques in accordance with F.S. Rule 64ER20-39.

Metal						LOD	Units	Result	Pass / Fail	Action Level	
ARSENIC						0.02	PPM	0.002		0.2	
CADMIUM						0.02	PPM	0		0.2	
MERCURY						0.02	PPM	0		0.2	
LEAD						0.05	PPM	0.015		0.5	
Analyzed by: 650 Weight: 0.5101g Extraction date: 12/21/20 04:12:38 Extracted by: 1541 Analysis Method : SOP.T.30.082.FL, SOP.T.40.082.FL Analytical Batch : GA020168HEA Reviewed On : 12/23/20 15:55:15 Instrument Used : GA-ICPMS-001-DER (Ice Princess) Batch Date : 12/21/20 07:44:41 Analyzed Date : 12/22/20 12:53:15 Dilution : 50 Reagent : 092920.39; 121120.R11; 121620.R01; 110519.12; 081420.12; 111320.R17; 121420.R16 Consumables : 6970145500298; 106667-05-100719 Pipette : N/A											

Heavy Metals analysis is performed using Inductively Coupled Plasma Mass Spectrometry in accordance with F.S. Rule 64ER20-39.



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**Filth/Foreign  
Material**
**PASSED**

Analyte	LOD	Units	Result	P/F	Action Level
Filth and Foreign Material	0.1	%	0		5

Analyzed by: Weight: Extraction date: Extracted by:

Analysis Method : SOP.T.40.090

Analytical Batch : GA020145FIL

Instrument Used : GA-Filth/Foreign Material Microscope

Analyzed Date : N/A

Reviewed On : 12/21/20 07:42:01

Batch Date : 12/18/20 13:45:21

Filth and foreign material inspection is performed by visual inspection utilizing naked eye and microscope technologies in accordance with F.S. Rule 64ER20-39.


**Water Activity**
**PASSED**

Analyte	LOD	Units	Result	P/F	Action Level
Water Activity	0.01	aw	0.337		0.85

Analyzed by: Weight: Extraction date: Extracted by:

Analysis Method : SOP.T.40.019

Analytical Batch : GA020154WAT

Instrument Used : GA-125 Rotronic HygroPalm

Analyzed Date : N/A

Reviewed On : 12/21/20 08:16:26

Batch Date : 12/18/20 16:35:02

Water Activity is performed using a Rotronic HygroPalm HP 23-AW in accordance with F.S. Rule 64ER20-39.