














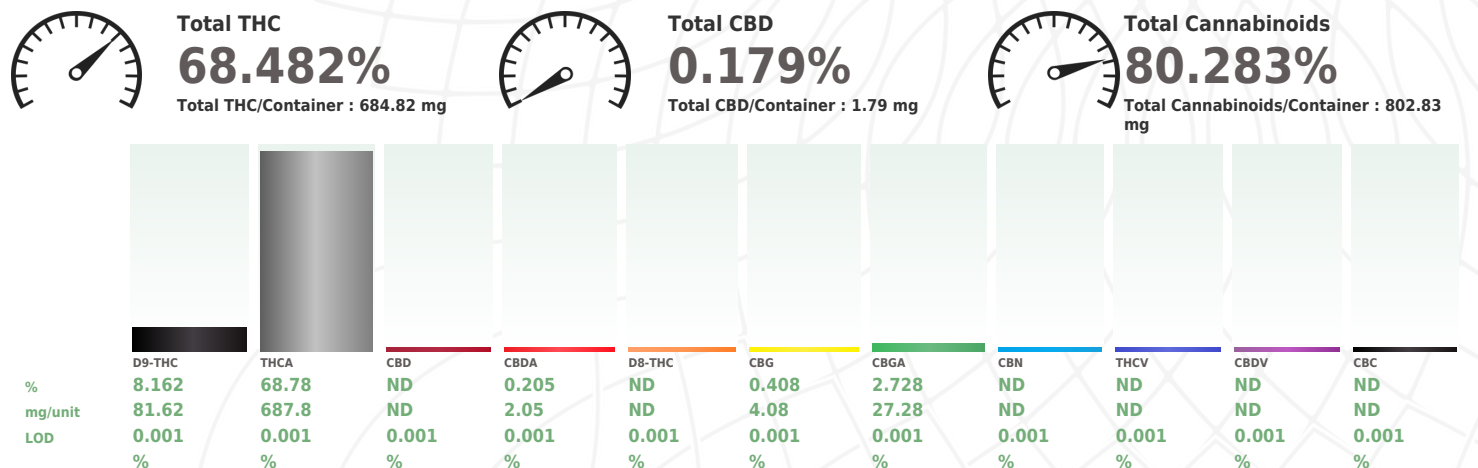
# Certificate of Analysis

**Sample:GA20716002-004**
**Harvest/Lot ID: ORFCS162-2207-11912**
**Batch#: LPC-3L-050922-5-P2**
**Cultivation Facility: Gainesville Cultivation**
**Processing Facility : Gainesville Processing**
**Seed to Sale# ORFCS162-2207-11912**
**Batch Date: 07/13/22**
**Sample Size Received: 16 gram**
**Total Batch Size: 321 units**
**Retail Product Size: 1 gram**
**Ordered : 07/16/22**
**Sampled : 07/16/22**
**Completed: 07/18/22**
**Sampling Method: SOP.T.20.010.FL**
**PASSED**

Page 1 of 6

Jul 18, 2022 | Liberty Health Sciences, FL  
18770 N CR 225  
Gainesville, FL, 32609, US


PRODUCT IMAGE	SAFETY RESULTS								MISC.
	 <b>Pesticides PASSED</b>	 <b>Heavy Metals PASSED</b>	 <b>Microbials PASSED</b>	 <b>Mycotoxins PASSED</b>	 <b>Residuals Solvents PASSED</b>	 <b>Filtration PASSED</b>	 <b>Water Activity PASSED</b>	 <b>Moisture NOT TESTED</b>	 <b>Terpenes TESTED</b>
 <b>Cannabinoid</b>									<b>PASSED</b>



<b>Analyzed by:</b> 3404, 3134, 2507, 3205, 2338 <b>Analysis Method :</b> SOP.T.40.031, SOP.T.30.031 <b>Analytical Batch :</b> GA046981POT <b>Instrument Used :</b> GA-HPLC-003 2030C PDA <b>Running on :</b> 07/16/22 15:48:57 <b>Dilution :</b> 400 <b>Reagent :</b> 020322.R09; 010421.51; 060922.09; 013122.12; 070222.R04; 070222.R06 <b>Consumables :</b> 947.109; H20364; 9291.271; LLS-00-0005; 12455-202CD-202C; R0NB32898; 000000146137; 944C4 944; 209598; 206639 <b>Pipette :</b> GA-002; GA-006; GA-013; GA-169 (Dispenser); GA-209 Dispenser	<b>Weight:</b> 0.0926g <b>Extraction date:</b> 07/16/22 13:18:14 <b>Reviewed On :</b> 07/17/22 15:40:50 <b>Batch Date :</b> 07/16/22 12:28:06	<b>Extracted by:</b> 3134
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Full Spectrum cannabinoid analysis utilizing High Performance Liquid Chromatography with UV detection in accordance with F.S. Rule 64ER20-39.



# Certificate of Analysis

**PASSED**

Liberty Health Sciences, FL

18770 N CR 225

Gainesville, FL, 32609, US

Telephone: (833) 254-4877

Email: Qualityassurance@libertyhealthsciences.com

Sample : GA20716002-004

Harvest/Lot ID: ORFCS162-2207-11912

Batch# : LPC-3L-050922-5-P2

Sampled : 07/16/22

Ordered : 07/16/22

Sample Size Received : 16 gram

Total Batch Size : 321 units

Completed : 07/18/22 Expires: 07/18/23

Sample Method : SOP.T.20.010

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## Terpenes

**TESTED**

Terpenes	LOD (%)	mg/unit	%	Result (%)	Terpenes	LOD (%)	mg/unit	%	Result (%)
TOTAL TERPINEOL	0.007	1.8	0.18		BORNEOL	0.013	0.41	0.041	
CAMPENE	0.007	ND	ND		GERANIOL	0.007	ND	ND	
BETA-MYRCENE	0.007	1.04	0.104		PULEGONE	0.007	ND	ND	
3-CARENE	0.007	ND	ND		ALPHA-CEDRENE	0.007	ND	ND	
ALPHA-PHELLENDRENE	0.007	ND	ND		ALPHA-HUMULENE	0.007	6.57	0.657	
OCIMENE	0.007	1.2	0.12		TRANS-NEROLIDOL	0.007	0.5	0.05	
EUCALYPTOL	0.007	0.23	0.023		GUAJOL	0.007	3.09	0.309	
LINALOL	0.007	4.62	0.462						
FENCHONE	0.007	ND	ND						
ISOPULEGOL	0.007	ND	ND						
ISOBORNEOL	0.007	ND	ND						
HEXAHYDROTHYMOL	0.007	ND	ND						
NEROL	0.007	ND	ND						
GERANYL ACETATE	0.007	ND	ND						
BETA-CARYOPHYLLENE	0.007	22.32	2.232						
VALENCENE	0.007	ND	ND						
CIS-NEROLIDOL	0.007	ND	ND						
CEDROL	0.007	ND	ND						
CARYOPHYLLENE OXIDE	0.007	0.58	0.058						
FARNESENE	0	0.57	0.057						
ALPHA-BISABOLOL	0.007	3.48	0.348						
ALPHA-PINENE	0.007	ND	ND						
SABINENE	0.007	ND	ND						
BETA-PINENE	0.007	<0.2	<0.02						
ALPHA-TERPINENE	0.007	ND	ND						
LIMONENE	0.007	2.84	0.284						
GAMMA-TERPINENE	0.007	ND	ND						
TERPINOLENE	0.007	2.61	0.261						
SABINENE HYDRATE	0.007	<0.2	<0.02						
FENCHYL ALCOHOL	0.007	2.28	0.228						
CAMPOR	0.013	ND	ND						
<b>Total (%)</b>			<b>5.414</b>						

Analyzed by: 3404, 3134, 3303, 3205, 1541 Analysis Method : SOP.T.30.061A.FL, SOP.T.40.061A.FL Analytical Batch : GA046980TER Instrument Used : GA-GCMS-002 QP2010S Running on : 07/16/22 15:49:53 Dilution : 50 Reagent : 060922.R22; 062922.47; 010421.51 Consumables : 947.109; H20364; 9291.271; LLS-00-0005; 89012-780; RONB32898; 000000146137; 41064115C41158; 209598; 206639 Pipette : GA-002; GA-006; GA-013; GA-211 Dispenser Terpenoid testing is performed utilizing Gas Chromatography Mass Spectrometry.	Weight: 1.0143g	Extraction date: 07/16/22 13:42:05	Extracted by: 3134
Reviewed On : 07/18/22 08:29:23 Batch Date : 07/16/22 12:27:24			



# Certificate of Analysis

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

Sample : GA20716002-004

Harvest/Lot ID: ORFCS162-2207-11912

Batch# : LPC-3L-050922-5-P2 Sample Size Received : 16 gram

Sampled : 07/16/22

Ordered : 07/16/22

Total Batch Size : 321 units

Completed : 07/18/22 Expires: 07/18/23

Sample Method : SOP.T.20.010

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## Pesticides

**PASSED**

Pesticide	LOD	Units	Action Level	Pass/Fail	Result	Pesticide	LOD	Units	Action Level	Pass/Fail	Result
ABAMECTIN B1A	0.01	ppm	0.1	PASS	ND	PROPOXUR	0.01	ppm	0.1	PASS	ND
ACEPHATE	0.01	ppm	0.1	PASS	ND	PYRETHRINS	0.01	ppm	0.5	PASS	ND
ACEQUINOCYL	0.01	ppm	0.1	PASS	ND	PYRIDABEN	0.01	ppm	0.2	PASS	ND
ACETAMIPRID	0.01	ppm	0.1	PASS	ND	SPIROMESIFEN	0.01	ppm	0.1	PASS	ND
ALDICARB	0.01	ppm	0.1	PASS	ND	SPIROTETRAMAT	0.01	ppm	0.1	PASS	ND
AZOXYSTROBIN	0.01	ppm	0.1	PASS	ND	SPIROXAMINE	0.01	ppm	0.1	PASS	ND
BIFENAZATE	0.01	ppm	0.1	PASS	ND	TEBUCONAZOLE	0.01	ppm	0.1	PASS	ND
BIFENTHRIN	0.01	ppm	0.1	PASS	ND	THIACLOPRID	0.01	ppm	0.1	PASS	ND
BOSCALID	0.01	PPM	0.1	PASS	ND	THIAMETHOXAM	0.01	ppm	0.5	PASS	ND
CARBARYL	0.01	ppm	0.5	PASS	ND	TRIFLOXYSTROBIN	0.01	ppm	0.1	PASS	ND
CARBOFURAN	0.01	ppm	0.1	PASS	ND	PENTACHLORONITROBENZENE (PCNB) *	0.01	PPM	0.15	PASS	ND
CHLORANTRANILIPROLE	0.01	ppm	1	PASS	ND	PARATHION-METHYL *	0.01	PPM	0.1	PASS	ND
CHLORMEQUAT CHLORIDE	0.01	ppm	1	PASS	ND	CAPTAN *	0.07	PPM	0.7	PASS	ND
CHLORPYRIFOS	0.01	ppm	0.1	PASS	ND	CHLORDANE *	0.01	PPM	0.1	PASS	ND
CLOFENTZINE	0.01	ppm	0.2	PASS	ND	CHLORFENAPYR *	0.01	PPM	0.1	PASS	ND
COUMAPHOS	0.01	ppm	0.1	PASS	ND	CYFLUTHRIN *	0.05	PPM	0.5	PASS	ND
DAMINOZIDE	0.01	ppm	0.1	PASS	ND	CYPERMETHRIN *	0.05	PPM	0.5	PASS	ND
DIAZINON	0.01	ppm	0.1	PASS	ND	Analyzed by: 3404, 3134, 3303, 2338, 3298 Analysis Method : SOP.T.30.101.FL, SOP.T.30.102.FL, SOP.T.30.151.FL, SOP.T.40.101.FL, SOP.T.40.102.FL, SOP.T.40.151.FL Analytical Batch : GA046982PES Instrument Used : GA-LCMS-002 PES Running on : 07/16/22 15:57:11 Dilution : 10 Reagent : 070822.R34; 050621.01; 061922.R01; 061922.R03 Consumables : 947.109; H20364; 9291.271; LLS-00-0005; 89012-780; 29802917; 944C4 944; 209598; 206639 Pipette : GA-002; GA-006; GA-013; GA-210 Dispenser Testing for agricultural agents is performed utilizing Liquid Chromatography Triple-Quadrupole Mass Spectrometry and Gas Chromatography Triple-Quadrupole Mass Spectrometry in accordance with F.S. Rule 64ER20-39.					
DICHLORVOS	0.01	ppm	0.1	PASS	ND						
DIMETHOATE	0.01	ppm	0.1	PASS	ND	Analyzed by: 3404, 3134, 3298, 2338 Analysis Method : SOP.T.30.060, SOP.T.40.060 Analytical Batch : GA046986VOL Instrument Used : GA-GCMS-006 Running on : 07/16/22 17:14:46 Dilution : 100 Reagent : 070822.R34; 050621.01; 070822.R07 Consumables : 947.109; H20364; 9291.271; LLS-00-0005; 89012-780; 29802917; 944C4 944; 209598; 206639; 15144001 Pipette : GA-002; GA-006; GA-013; GA-210 Dispenser Testing for agricultural agents is performed utilizing Liquid Chromatography Triple-Quadrupole Mass Spectrometry and Gas Chromatography Triple-Quadrupole Mass Spectrometry in accordance with F.S. Rule 64ER20-39.					
ETHOPROPHOS	0.01	ppm	0.1	PASS	ND						
ETOFENPROX	0.01	ppm	0.1	PASS	ND	Reviewed On : 07/17/22 14:56:08 Batch Date : 07/16/22 12:28:39					
ETOXAZOLE	0.01	ppm	0.1	PASS	ND						
FENHEXAMID	0.01	ppm	0.1	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
FENOXYCARB	0.01	ppm	0.1	PASS	ND						
FENPYROXIMATE	0.01	ppm	0.1	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
FIPRONIL	0.01	ppm	0.1	PASS	ND						
FLONICAMID	0.01	ppm	0.1	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
FLUDIOXONIL	0.01	ppm	0.1	PASS	ND						
HEXYTHIAZOX	0.01	ppm	0.1	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
IMAZALIL	0.01	ppm	0.1	PASS	ND						
IMIDACLOPRID	0.01	ppm	0.4	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
KRESOXIM-METHYL	0.01	ppm	0.1	PASS	ND						
MALATHION	0.01	ppm	0.2	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
METALAXYL	0.01	ppm	0.1	PASS	ND						
METHIOCARB	0.01	ppm	0.1	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
METHOMYL	0.01	ppm	0.1	PASS	ND						
MEVINPHOS	0.01	ppm	0.1	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
MYCLOBUTANIL	0.01	ppm	0.1	PASS	ND						
NALED	0.01	ppm	0.25	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
OXAMYL	0.01	ppm	0.5	PASS	ND						
PACLOBUTRAZOL	0.01	ppm	0.1	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
PHOSMET	0.01	ppm	0.1	PASS	ND						
PIPERONYL BUTOXIDE	0.01	ppm	3	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					
PRALLETHRIN	0.01	ppm	0.1	PASS	ND						
PROPICONAZOLE	0.01	ppm	0.1	PASS	ND	Reviewed On : 07/17/22 15:17:10 Batch Date : 07/16/22 14:20:14					





# Certificate of Analysis

**PASSED**

Liberty Health Sciences, FL

18770 N CR 225

Gainesville, FL, 32609, US

Telephone: (833) 254-4877

Email: Qualityassurance@libertyhealthsciences.com

Sample : GA20716002-004

Harvest/Lot ID: ORFCS162-2207-11912

Batch# : LPC-3L-050922-5-P2

Sampled : 07/16/22

Ordered : 07/16/22

Sample Size Received : 16 gram

Total Batch Size : 321 units

Completed : 07/18/22 Expires: 07/18/23

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	PASS	ND
ETHANOL	500	ppm	5000	PASS	<2500
PENTANES (N-PENTANE)	75	ppm	750	PASS	ND
ETHYL ETHER	50	ppm	500	PASS	ND
ACETONE	75	ppm	750	PASS	ND
2-PROPANOL	50	ppm	500	PASS	ND
ACETONITRILE	6	ppm	60	PASS	ND
DICHLOROMETHANE	12.5	ppm	125	PASS	ND
N-HEXANE	25	ppm	250	PASS	ND
ETHYL ACETATE	40	ppm	400	PASS	ND
BENZENE	0.1	ppm	1	PASS	ND
HEPTANE	500	ppm	5000	PASS	ND
TOLUENE	15	ppm	150	PASS	ND
TOTAL XYLENES	15	ppm	150	PASS	ND
PROPANE	500	ppm	5000	PASS	ND
CHLOROFORM	0.2	ppm	2	PASS	ND
BUTANES (N-BUTANE)	500	ppm	5000	PASS	ND
1,2-DICHLOROETHANE	0.2	ppm	2	PASS	ND
ETHYLENE OXIDE	0.5	ppm	5	PASS	ND
1,1-DICHLOROETHENE	0.8	ppm	8	PASS	ND
TRICHLOROETHYLENE	2.5	ppm	25	PASS	ND

 Analyzed by:  
 N/A

 Weight:  
 N/A

 Extraction date:  
 N/A

 Extracted by:  
 N/A

Analysis Method : SOP.T.40.041.FL

Analytical Batch : GA046977SOL

Instrument Used : GA-GCMS-001 Headspace Solvent

Running on : 07/16/22 14:03:56

Reviewed On : 07/18/22 08:06:51

Batch Date : 07/16/22 12:20:56

Dilution : N/A

Reagent : N/A

Consumables : 27296; 854996

Pipette : N/A

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



# Certificate of Analysis

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Liberty Health Sciences, FL

18770 N CR 225

Gainesville, FL, 32609, US

Telephone: (833) 254-4877

Email: Qualityassurance@libertyhealthsciences.com

Sample : GA20716002-004

Harvest/Lot ID: ORFCS162-2207-11912

Batch# : LPC-3L-050922-5-P2

Sampled : 07/16/22

Ordered : 07/16/22



Sample Size Received : 16 gram


Total Batch Size : 321 units

Completed : 07/18/22 Expires: 07/18/23

Sample Method : SOP.T.20.010

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<div></div> <div>Microbial</div> <div>PASSED</div>						<div></div> <div>Mycotoxins</div> <div>PASSED</div>					
Analyte	LOD	Units	Result	Pass / Fail	Action Level	Analyte	LOD	Units	Result	Pass / Fail	Action Level
ESCHERICHIA COLI SHIGELLA SPP			Not Present	PASS		AFLATOXIN B2	0.002	ppm	ND	PASS	0.02
SALMONELLA SPECIFIC GENE			Not Present	PASS		AFLATOXIN B1	0.002	ppm	ND	PASS	0.02
ASPERGILLUS FLAVUS			Not Present	PASS		OCHRATOXIN A	0.002	ppm	ND	PASS	0.02
ASPERGILLUS FUMIGATUS			Not Present	PASS		AFLATOXIN G1	0.002	ppm	ND	PASS	0.02
ASPERGILLUS TERREUS			Not Present	PASS		AFLATOXIN G2	0.002	ppm	ND	PASS	0.02
ASPERGILLUS NIGER			Not Present	PASS							
TOTAL YEAST AND MOLD	10	CFU/g	<10	PASS	100000						
Analyzed by: 3404, 2821, 1541			Weight: 0.99g		Extraction date: 07/17/22 13:00:49		Extracted by: 2821				
Analysis Method : SOP.T.40.041, SOP.T.40.043, SOP.T.40.045, SOP.T.40.056B, SOP.T.40.058.FL, SOP.T.40.208											
Analytical Batch : GA046984MIC			Reviewed On : 07/18/22 17:29:35								
Instrument Used : GA-TYM-001 Tempo Filler and Reader			Batch Date : 07/16/22 14:05:28								
Running on : 07/17/22 13:01:08											
Dilution : 90											
Reagent : 060122.05											
Consumables : 2304270; 2304240; 2306070; 2305240; 61630-123C6-123E											
Pipette : GA-154											
Microbial testing is performed utilizing various technologies including: PCR, RTPCR, MPN, and traditional culture based techniques in accordance with F.S. Rule 64ER20-39..											
Analyzed by: N/A			Weight: N/A		Extraction date: N/A		Extracted by: N/A				
Analysis Method : SOP.T.40.041											
Analytical Batch : GA046985TYM			Reviewed On : 07/18/22 17:30:00								
Instrument Used : GA-TYM-001 bioMérieux Tempo Filler and Reader			Batch Date : 07/16/22 14:05:54								
Running on : 07/17/22 12:58:31											
Dilution : 90											
Reagent : 060122.05											
Consumables : 2306070; 2305240; 61630-123C6-123E											
Pipette : GA-154											
Total yeast and mold testing is performed utilizing MPN and traditional culture based techniques in accordance with F.S. Rule 64ER20-39.											

<div></div> <div>Heavy Metals</div> <div>PASSED</div>								
Metal	LOD	Units	Result	Pass / Fail	Action Level			
ARSENIC	0.02	PPM	ND	PASS	0.2			
CADMIUM	0.02	PPM	ND	PASS	0.2			
MERCURY	0.02	PPM	ND	PASS	0.2			
LEAD	0.05	PPM	ND	PASS	0.5			
Analyzed by: 3404, 3571, 3317, 3298, 2338			Weight: 0.4945g		Extraction date: 07/16/22 13:22:17		Extracted by: 3571	
Analysis Method : SOP.T.30.081.FL, SOP.T.30.082.FL, SOP.T.40.081.FL, SOP.T.40.082.FL								
Analytical Batch : GA046979HEA			Reviewed On : 07/17/22 09:19:19					
Instrument Used : GA-ICPMS-002			Batch Date : 07/16/22 12:26:39					
Running on : 07/16/22 17:36:04								
Dilution : 100								
Reagent : 052422.R35; 070522.R18; 010421.51; 071522.04; 071522.R33; 051622.R03; 041722.R01; 042022.R45; 070622.R61								
Consumables : GA-194; GA-195; CGR0114; 12455-202CD-202C; 210268; L2019501								
Pipette : GA-012; GA-183; GA-193								
Heavy Metals analysis is performed using Inductively Coupled Plasma Mass Spectrometry in accordance with F.S. Rule 64ER20-39.								



# Certificate of Analysis

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Sample : GA20716002-004

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Sample Method : SOP.T.20.010

Page 6 of 6


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

Analyte	LOD	Units	Result	P/F	Action Level
Filth and Foreign Material	1	%	ND	PASS	5

Analyzed by: 3404, 3571, 3192	Weight: 15.2999g	Extraction date: 07/16/22 11:58:01	Extracted by: 3571
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Analysis Method : SOP.T.30.074, SOP.T.40.074

Analytical Batch : GA046976FIL

Instrument Used : GA-Filth/Foreign Material Microscope

Running on : N/A

Reviewed On : 07/18/22 08:20:12

Batch Date : 07/16/22 11:56:50

Dilution : N/A

Reagent : N/A

Consumables : N/A

Pipette : N/A

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	0.1	aw	0.643	PASS	0.85

Analyzed by: 3404, 3571, 3192	Weight: 1.5489g	Extraction date: 07/16/22 14:14:40	Extracted by: 3571
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Analysis Method : SOP.T.40.019

Analytical Batch : GA046978WAT

Instrument Used : GA-203 Rotronic HygroPalm

Running on : N/A

Reviewed On : 07/18/22 08:24:21

Batch Date : 07/16/22 12:25:55

Dilution : N/A

Reagent : N/A

Consumables : 107264

Pipette : N/A

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