



# Certificate of Analysis

Jan 17, 2020 | CURALEAF FLORIDA LLC

19000 SW 192 STREET  
MIAMI, FL, 33187, US

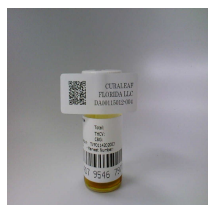


Sample: DA00115012-004  
Harvest/Lot ID: HS-TVF0114202003  
Cultivation Facility: Miami Cultivation  
Processing Facility: Homestead Processing  
Seed to Sale #3610 7417 9546 7977  
Batch Date :N/A  
Batch#: HS-TVF0114202003  
Sample Size Received: 7.0 gram  
Total Weight/Volume: 2000 gram  
Retail Product Size: 0.5 gram gram  
Ordered : 01/15/20  
sampled : 01/15/20  
Completed: 01/17/20  
Sampling Method: SOP Client Method

**PASSED**

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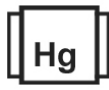
## PRODUCT IMAGE



## SAFETY RESULTS



Pesticides  
**PASSED**



Heavy Metals  
**PASSED**



Microbials  
**PASSED**



Mycotoxins  
**PASSED**



Residuals  
Solvents  
**PASSED**



Filtration  
**PASSED**



Water Activity  
**NOT TESTED**



Moisture  
**NOT TESTED**



Terpenes  
**TESTED**

## MISC.

## CANNABINOID RESULTS



Total THC

**80.652%**

THC/Container :403.26 mg



Total CBD

**0.110%**

CBD/Container :0.55 mg



Total Cannabinoids

**84.699%**

Total Cannabinoids / Container  
:0.000

	TOTAL CA	TOTAL CB	TOTAL TH	CBC	CBGA	CBG	THCV	DB-THC	CBDV	CBN	CBDA	CBD	THCA	D9-THC
%	84.6990	0.1100	80.6520	1.2330	ND	1.4790	0.8550	0.1450	ND	0.2250	ND	0.1100	ND	80.6520
mg/g	846.9900	1.1000	806.5200	12.3300	ND	14.7900	8.5500	1.4500	ND	2.2500	ND	1.1000	ND	806.5200
LOD	0.0000	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0001	0.0010	0.0001
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%

Filtration	PASSED
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Analyzed By	Weight	Extraction date	Extracted By
584	1g	01/15/20	584
Analyte			Result
Filtration and Foreign Material			ND
			Batch Date : 01/15/20 13:40:50

Analysis Method -SOP.T.40.013  
Analytical Batch -DA009453FIL  
Instrument Used :

This includes but is not limited to hair, insects, feces, packaging contaminants, and manufacturing waste and by-products. An SH-28/T Stereo Microscope is used for inspection.

## Cannabinoid Profile Test

Analyzed by	Weight	Extraction date :	Extracted By :
1224	0.1052g	01/15/20 01:01:33	574
Analysis Method	SOP.T.40.020, SOP.T.30.050		Batch Date : 01/15/20 10:28:04
Analytical Batch	-DA009445POT		
Instrument Used	DA-LC-003		
Reagent	Dilution	Consumers ID	
011020.R10	400	76124-662	
011420.R09		SFN-BX-1025	
011420.R08		849CA-849AK	
		840C6-840H	

Full spectrum cannabinoid analysis utilizing High Performance Liquid Chromatography with UV detection (HPLC-UV). (Method: SOP.T.30.050 for sample prep and Shimadzu High Sensitivity Method SOP.T.40.020 for analysis. LOQ for all cannabinoids is 1 mg/L).

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Jorge Segredo  
Lab Director

State License # CMTL-0002  
ISO Accreditation # ISO/IEC  
17025:2017 Accreditation  
PJLA-Testing 97164

  
Signature

01/17/20

Signed On



# Certificate of Analysis

**PASSED**

 19000 SW 192 STREET  
 MIAMI, FL, 33187, US  
**Telephone:** 7865860672  
**Email:** erick.ramirez@curaleaf.com

**Sample :** DA00115012-004  
**Harvest/LOT ID:** HS-TVF0114202003

**Batch# :** HS-TVF0114202003  
**Sampled :** 01/15/20  
**Ordered :** 01/15/20

**Sample Size Received :** 7.0 gram  
**Total Weight/Volume :** 2000 gram  
**Completed :** 01/17/20 **Expires:** 01/17/21  
**Sample Method :** SOP Client Method

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## Terpenes

**TESTED**

Terpenes	LOD(%)	mg/g	%	Result (%)	Terpenes	LOD(%)	mg/g	%	Result (%)
ALPHA-CEDRENE	0.007	ND	ND		SABINENE	0.007	ND	ND	
ALPHA-HUMULENE	0.007	2.499	0.249		SABINENE HYDRATE	0.007	ND	ND	
ALPHA-PINENE	0.007	1.633	0.163		TERPINEOL	0.007	0.847	0.084	
ALPHA-TERPINENE	0.007	ND	ND		TERPINOLENE	0.007	ND	ND	
BETA-MYRCENE	0.007	3.741	0.374		BETA-CARYOPHYLLENE	0.007	11.246	1.124	
BETA-PINENE	0.007	1.315	0.131		TRANS-NEROLIDOL	0.007	ND	ND	
BORNEOL	0.013	< 0.4	< 0.040		VALENCENE	0.007	ND	ND	
CAMPHENE	0.007	ND	ND						
CAMPHOR	0.013	ND	ND						
CARYOPHYLLENE OXIDE	0.007	ND	ND						
CEDROL	0.007	ND	ND						
ALPHA-BISABOOL	0.007	2.114	0.211						
ISOPULEGOL	0.007	ND	ND						
CIS-NEROLIDOL	0.007	ND	ND						
3-CARENE	0.007	ND	ND						
FENCHYL ALCOHOL	0.007	ND	ND						
HEXAHYDROTHYMOL	0.007	ND	ND						
EUCALYPTOL	0.007	ND	ND						
ISOBORNEOL	0.007	ND	ND						
FARNESENE	0.007	ND	ND						
FENCHONE	0.007	ND	ND						
GAMMA-TERPINENE	0.007	ND	ND						
GERANIOL	0.007	ND	ND						
GERANYL ACETATE	0.007	ND	ND						
GUAJOL	0.007	ND	ND						
LIMONENE	0.007	9.848	0.984						
LINALOOL	0.007	4.018	0.401						
NEROL	0.007	ND	ND						
OCIMENE	0.007	ND	ND						
ALPHA-PHELLANDRENE	0.007	ND	ND						
PULEGONE	0.007	ND	ND						
<b>Total (%)</b>		3.726							



## Terpenes

**TESTED**
**Analyzed by** 1118 **Weight** 0.9667g **Extraction date** 01/15/20 11:01:43 **Extracted By** 1118

**Analysis Method** -SOP.T.40.090  
**Analytical Batch** -DA009419TER  
**Instrument Used** : Liquid Injection GCMS QP2010  
**Running On** :  
**Batch Date** : 01/15/20 08:21:37

Reagent	Dilution	Consums. ID
	10	

Terpenoid profile screening is performed using GC-MS with Liquid Injection (Gas Chromatography - Mass Spectrometer) which can screen 38 terpenes using Method SOP.T.40.091 Terpenoid Analysis Via GC/MS.



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## Pesticides

**PASSED**

Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
CHLORDANE	0.005	ppm	0.1	ND	OXAMYL	0.01	ppm	0.5	ND
CAPTAN	0.05	ppm	0.7	ND	PACLOBUTRAZOL	0.01	ppm	0.1	ND
BOSCALID	0.01	PPM	0.1	ND	TRANS-PERMETHRIN	0.05	ppm	0.1	ND
DIMETHOATE	0.01	ppm	0.1	ND	PHOSMET	0.01	ppm	0.1	ND
AZOXYSTROBIN	0.01	ppm	0.01	ND	PIPERONYL BUTOXIDE	0.01	ppm	3	ND
ABAMECTIN B1A	0.02	ppm	0.1	ND	PRALLETHRIN	0.05	ppm	0.1	ND
CIS-PERMETHRIN	0.05	ppm	0.1	ND	PROPICONAZOLE	0.01	ppm	0.1	ND
SPINETORAM	0.01	PPM	0.2	ND	PROPOXUR	0.01	ppm	0.1	ND
ACEPHATE	0.001	ppm	0.1	ND	PYRETHRIN I	0.01	ppm	0.5	ND
FENOXYCARB	0.01	ppm	0.1	ND	PYRIDABEN	0.01	ppm	0.2	ND
DIMETHOMORPH	0.005	ppm	0.2	ND	SPINOSAD (SPINOSYN A)	0.01	ppm	0.1	ND
BIFENAZATE	0.01	ppm	0.1	ND	SPINOSAD (SPINOSYN D)	0.01	ppm	0.1	ND
ETHOPROPHOS	0.01	ppm	0.1	ND	SPIROMESIFEN	0.01	ppm	0.1	ND
ACEQUINOCYL	0.01	ppm	0.1	ND	SPIROTETRAMAT	0.02	ppm	0.1	ND
ACETAMIPRID	0.01	ppm	0.1	ND	SPIROXAMINE	0.01	ppm	0.1	ND
ETOFENPROX	0.01	ppm	0.1	ND	TEBUCONAZOLE	0.01	ppm	0.1	ND
BIFENTHRIN	0.01	ppm	0.1	ND	THIACLOPRID	0.01	ppm	0.1	ND
ALDICARB	0.02	ppm	0.1	ND	THIAMETHOXAM	0.01	ppm	0.5	ND
ETOXAZOLE	0.01	ppm	0.1	ND	TRIFLOXYSTROBIN	0.01	ppm	0.1	ND
FENPYROXIMATE	0.01	ppm	0.1	ND					
FIPRONIL	0.02	ppm	0.1	ND					
FENHEXAMID	0.01	ppm	0.1	ND					
CARBARYL	0.01	ppm	0.5	ND					
CARBOFURAN	0.01	ppm	0.1	ND					
FLONICAMID	0.01	ppm	0.1	ND					
FLUDIOXONIL	0.01	ppm	0.1	ND					
CHLORFENAPYR	0.01	ppm	0.1	ND					
CHLORANTRANILIPROLE	0.01	ppm	1	ND					
HEXYTHIAZOX	0.01	ppm	0.1	ND					
CHLORPYRIFOS	0.01	ppm	0.1	ND					
IMAZALIL	0.01	ppm	0.1	ND					
MALATHION	0.01	ppm	0.2	ND					
CLOFENTEZINE	0.01	ppm	0.2	ND					
DAMINOZIDE	0.02	ppm	0.1	ND					
IMIDACLOPRID	0.01	ppm	0.4	ND					
METALAXYL	0.01	ppm	0.02	ND					
DICHLORVOS	0.05	ppm	0.1	ND					
METHIOCARB	0.01	ppm	0.05	ND					
COUMAPHOS	0.005	ppm	0.1	ND					
METHOMYL	0.01	ppm	0.1	ND					
KRESOXIM-METHYL	0.01	ppm	0.1	ND					
DIAZANON	0.01	ppm	0.1	ND					
CYPERMETHRIN	0.01	ppm	0.5	ND					
MEVINPHOS	0.01	ppm	0.1	ND					
MYCLOBUTANIL	0.01	ppm	0.1	ND					
NALED	0.01	ppm	0.25	ND					



## Pesticides

**PASSED**

Analyzed by 585	Weight 0.9570g	Extraction date 01/15/20 12:01:41	Extracted By 357
Analysis Method - SOP.T.30.065, SOP.T.40.065, SOP.T.40.066, SOP.T.40.070 , SOP.T.30.065, SOP.T.40.070			
Analytical Batch - DA009433PES			
Instrument Used : LCMS E-SHI-039			
Running On :		Batch Date : 01/15/20 09:24:07	
Reagent	Dilution		Consums. ID
101519.04 010220.805 010220.806			180711
<p>Pesticide screen is performed using LC-MS and/or GC-MS which can screen down to below single digit ppb concentrations for regulated Pesticides. Currently we analyze for 67 Pesticides. (Method: SOP.T.30.060 Sample Preparation for Pesticides Analysis via LCMSMS and GCMSMS.</p> <p>SOP.T.40.065/SOP.T.40.066/SOP.T.40.070 Procedure for Pesticide Quantification Using LCMS and GCMS). * Volatile Pesticide screening is performed using GC-MS which can screen down to below single digit ppb concentrations for regulated Pesticides. Analytes marked with an asterisk were tested using GC-MS.</p>			

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**Jorge Segredo**  
Lab Director

State License # CMTL-0002  
ISO Accreditation # ISO/IEC  
17025:2017 Accreditation  
PJLA-Testing 97164

  
Signature

01/17/20

Signed On





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**Email:** erick.ramirez@curaleaf.com

**Sample :** DA00115012-004  
**Harvest/LOT ID:** HS-TVF0114202003  
**Batch# :** HS-TVF0114202003  
**Sampled :** 01/15/20  
**Ordered :** 01/15/20

**Sample Size Received :** 7.0 gram  
**Total Weight/Volume :** 2000 gram  
**Completed :** 01/17/20 **Expires:** 01/17/21  
**Sample Method :** SOP Client Method

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	<b>Residual Solvents</b>	<b>PASSED</b>
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	<b>Residual Solvents</b>	<b>PASSED</b>
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Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
PROPANE	120	ppm	2100	PASS	ND
BUTANES (N-BUTANE)	96	ppm	2000	PASS	ND
ETHYLENE OXIDE	0.6	ppm	5	PASS	ND
METHANOL	22.5	ppm	250	PASS	ND
ETHANOL	90	ppm	5000	PASS	ND
PENTANES (N-PENTANE)	67.5	ppm	750	PASS	ND
ETHYL ETHER	45	ppm	500	PASS	ND
ACETONE	67.5	ppm	750	PASS	ND
2-PROPANOL	45	ppm	500	PASS	ND
ACETONITRILE	5.4	ppm	60	PASS	ND
DICHLOROMETHANE	11.25	ppm	125	PASS	ND
N-HEXANE	4.5	ppm	250	PASS	ND
ETHYL ACETATE	36	ppm	400	PASS	ND
BENZENE	0.09	ppm	1	PASS	ND
HEPTANE	45	ppm	500	PASS	ND
TOLUENE	13.5	ppm	150	PASS	ND
CHLOROFORM	0.18	ppm	2	PASS	ND
1,2-DICHLOROETHANE	0.18	ppm	2	PASS	ND
TRICHLOROETHYLENE	2.25	ppm	25	PASS	ND
1,1-DICHLOROETHENE	1	ppm	8	PASS	ND
TOTAL XYLENES	13.5	ppm	150	PASS	ND

<b>Analyzed by</b> 850	<b>Weight</b> 0.0255g	<b>Extraction date</b> 01/15/20 03:01:48	<b>Extracted By</b> 850
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**Analysis Method -SOP.T.40.032**  
**Analytical Batch -DA009459SOL**  
**Instrument Used : Headspace GCMS**  
**Running On :**  
**Batch Date : 01/15/20 15:09:12**

Reagent	Dilution	Consums. ID
	1	00276446 161040-1 24152436

Residual solvents screening is performed using GC-MS which can detect below single digit ppm concentrations. Currently we analyze for 21 Residual solvents.(Method: SOP.T.40.032 Residual Solvents Analysis via GC-MS).



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**Harvest/LOT ID:** HS-TVF0114202003  
**Batch# :** HS-TVF0114202003  
**Sampled :** 01/15/20  
**Ordered :** 01/15/20

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**Completed :** 01/17/20 **Expires:** 01/17/21  
**Sample Method :** SOP Client Method

Page 5 of 5

	<b>Microbials</b>	<b>PASSED</b>
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Analyte	LOD	Result	Action Level (cfu/g)
ASPERGILLUS_FLAVUS		not present in 1 gram.	
ASPERGILLUS_FUMIGATUS		not present in 1 gram.	
ASPERGILLUS_NIGER		not present in 1 gram.	
ASPERGILLUS_TERREUS		not present in 1 gram.	
ESCHERICHIA_COLI_SHIGELLA_SPP		not present in 1 gram.	
SALMONELLA_SPECIFIC_GENE		not present in 1 gram.	
TOTAL_YEAST_AND_MOLD		not present in 1 gram.	

Analysis Method -SOP.T.40.043 / SOP.T.40.044 / SOP.T.40.041  
 Analytical Batch -DA009429MIC Batch Date : 01/15/20, 01/15/20  
 Instrument Used : PathogenDX PCR\_Array Scanner, PathogenDX PCR\_Array Scanner  
 Running On :

Analyzed by	Weight	Extraction date	Extracted By
513,	1.01104g	01/15/20	1082,

Reagent	Consums. ID	Consums. ID
011320.R03	2802012	012
	2803022	
	A03	
	010A	
	020	
	19193	

Microbiological testing for Fungal and Bacterial Identification via Polymerase Chain Reaction (PCR) method consisting of sample DNA amplified via tandem Polymerase Chain Reaction (PCR) as a crude lysate which avoids purification. (Method SOP.T.40.043) If a pathogenic Escherichia Coli, Salmonella, Aspergillus fumigatus, Aspergillus flavus, Aspergillus niger, or Aspergillus terreus is detected in 1g of a sample, the sample fails the microbiological-impurity testing. Pour-plate is used for quantitation and confirmation, Total Yeast and Mold has an action limit of 100,000 CFU.

	<b>Mycotoxins</b>	<b>PASSED</b>
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Analyte	LOD	Units	Result	Action Level (PPM)
AFLATOXIN G2	0.002	ppm	ND	
AFLATOXIN G1	0.002	ppm	ND	
AFLATOXIN B2	0.002	ppm	ND	
AFLATOXIN B1	0.002	ppm	ND	
OCHRATOXIN A+	0.002	ppm	ND	0.02
TOTAL AFLATOXINS	0.02	PPM	ND	0.02

Analysis Method -SOP.T.30.065, SOP.T.40.065  
 Analytical Batch -DA009434  
 Instrument Used : LCMS E-SHI-039  
 Running On :  
 Batch Date : 01/15/20 09:25:31

Analyzed by	Weight	Extraction date	Extracted By
585	1g	NA	NA

Aflatoxins B1, B2, G1, G2, and Ochratoxins A testing using LC-MS. (Method: SOP.T.30.065 for Sample Preparation and SOP.T.40.065 Procedure for Mycotoxins Quantification Using LCMS. LOQ 1.0 ppb). Aflatoxin B1, B2, G1, and G2 must individually be <20ug/Kg. Ochratoxins must be <20µg/Kg.

	<b>Heavy Metals</b>	<b>PASSED</b>
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Reagent	Reagent	Dilution
010220.R09	011020.R13	50
011420.R04	010220.R04	
010620.R02	111319.01	
011520.R02		
011520.R03		
011520.R01		

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.01	PPM	ND	0.2
CADMIUM	0.01	PPM	ND	0.2
LEAD	0.01	PPM	ND	0.5
MERCURY	0.01	PPM	ND	0.1

Analyzed by	Weight	Extraction date	Extracted By
53	0.2590g	01/15/20 04:01:30	457

Analysis Method -SOP.T.40.050, SOP.T.30.052  
 Analytical Batch -DA009426HEA  
 Instrument Used : ICPMS-2030  
 Running On :  
 Batch Date : 01/15/20 08:43:31

Heavy Metals screening is performed using ICP-MS (Inductively Coupled Plasma - Mass Spectrometer) which can screen down to below single digit ppb concentrations for regulated heavy metals using Method SOP.T.30.052 Sample Preparation for Heavy Metals Analysis via ICP-MS and SOP.T.40.050 Heavy Metals Analysis via ICP-MS.

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**Jorge Segredo**  
 Lab Director

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 PJLA-Testing 97164

  
 Signature

01/17/20

Signed On