



# Certificate of Analysis

Dec 30, 2019 | CURALEAF FLORIDA LLC

19000 SW 192 STREET  
MIAMI, FL, 33187, US

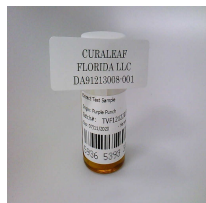


Sample: DA91213008-001  
Harvest/Lot ID: HS-TVF1212201901  
Cultivation Facility: Miami Cultivation  
Processing Facility: Homestead Processing  
Seed to Sale #5936 5393 3445 1732  
Batch Date :N/A  
Batch#: HS-TVF1212201901  
Sample Size Received: 7.0 gram  
Total Weight/Volume: 2000 gram  
Retail Product Size: 0.5 gram gram  
Ordered : 12/13/19  
sampled : 12/13/19  
Completed: 12/30/19  
Sampling Method: SOP Client Method

**PASSED**

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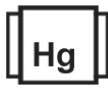
## PRODUCT IMAGE



## 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

**85.957%**

THC/Container :429.79 mg



Total CBD

**0.195%**

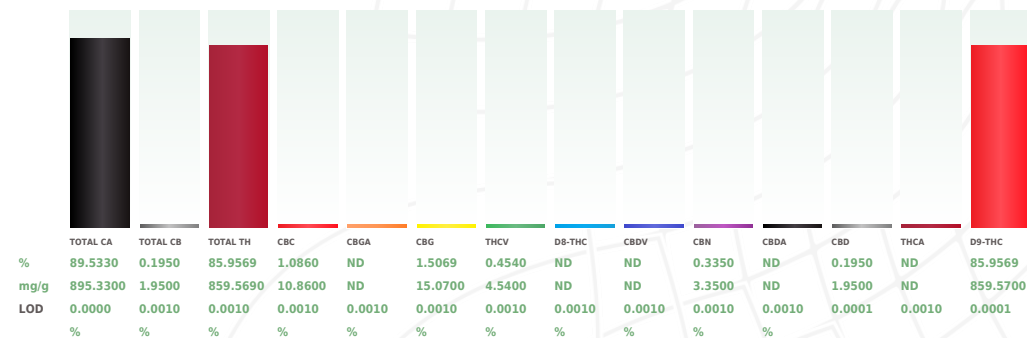
CBD/Container :0.98 mg



Total Cannabinoids

**89.533%**

Total Cannabinoids / Container  
:0.000



**Filtration PASSED**

Analyzed By: 584  
Weight: 1g  
Extraction date: 12/13/19  
Extracted By: 584  
Analyte: Filth and Foreign Material  
Analysis Method: -SOP.T.40.013  
Analytical Batch: -DA008716FIL  
Instrument Used:  
LOD: 0  
Result: ND  
Batch Date:

This includes but is not limited to hair, insects, feces, packaging contaminants, and manufacturing waste and by-products. An SH-2B/T Stereo Microscope is used for inspection.

## Cannabinoid Profile Test

Analyzed by 450	Weight 0.1049g	Extraction date : 12/17/19 04:12:37	Extracted By : 357
Analysis Method -SOP.T.40.020, SOP.T.30.050	Instrument Used :	Batch Date :	
Reagent 121619.R15	Dilution 40	Consums. ID 76124-662 SPN-BX-1025 849CA-849AK 849CA-849H	

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

12/30/19

Signed On



# Certificate of Analysis

**PASSED**

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

**Sample :** DA91213008-001  
**Harvest/LOT ID:** HS-TVF1212201901

**Batch# :** HS-TVF1212201901  
**Sampled :** 12/13/19  
**Ordered :** 12/13/19

**Sample Size Received :** 7.0 gram  
**Total Weight/Volume :** 2000 gram  
**Completed :** 12/30/19 **Expires:** 12/30/20  
**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	< 0.2	< 0.020		SABINENE HYDRATE	0.007	ND	ND	
ALPHA-PINENE	0.007	50.548	5.054		TERPINEOL	0.007	ND	ND	
ALPHA-TERPINENE	0.007	ND	ND		TERPINOLENE	0.007	ND	ND	
BETA-MYRCENE	0.007	0.563	0.056		BETA-CARYOPHYLLENE	0.007	1.648	0.164	
BETA-PINENE	0.007	5.311	0.531		TRANS-NEROLIDOL	0.007	< 0.2	< 0.020	
BORNEOL	0.013	ND	ND		VALENCENE	0.007	ND	ND	
CAMPHENE	0.007	0.777	0.077						
CAMPHOR	0.013	ND	ND						
CARYOPHYLLENE	0.007	< 0.2	< 0.020						
OXIDE									
CEDROL	0.007	ND	ND						
ALPHA-BISABOOL	0.007	1.394	0.139						
ISOPULEGOL	0.007	ND	ND						
CIS-NEROLIDOL	0.007	ND	ND						
3-CARENE	0.007	ND	ND						
FENCHYL ALCOHOL	0.007	ND	ND						
HEXAHYDROTHYM	0.007	ND	ND						
OL									
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	0.690	0.069						
LIMONENE	0.007	7.178	0.717						
LINALOOL	0.007	0.484	0.048						
NEROL	0.007	ND	ND						
OCIMENE	0.007	ND	ND						
ALPHA-PHELLANDRENE	0.007	ND	ND						
PULEGONE	0.007	ND	ND						
<b>Total (%)</b>		6.859							



## Terpenes

**TESTED**
**Analyzed by** 1118 **Weight** 0.9161g **Extraction date** 12/13/19 10:12:07 **Extracted By** 1118

**Analysis Method -SOP.T.40.090**  
**Analytical Batch -DA008703TER**  
**Instrument Used :**  
**Running On :**  
**Batch Date :**

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

**Sample :** DA91213008-001  
**Harvest/LOT ID:** HS-TVF1212201901

**Batch# :** HS-TVF1212201901  
**Sampled :** 12/13/19  
**Ordered :** 12/13/19


**Sample Size Received :** 7.0 gram  
**Total Weight/Volume :** 2000 gram  
**Completed :** 12/30/19 **Expires:** 12/30/20  
**Sample Method :** SOP Client Method

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


**Pesticides**

**PASSED**

<b>Analyzed by</b> 585	<b>Weight</b> 0.9548g	<b>Extraction date</b> 12/13/19 12:12:48	<b>Extracted By</b> 584
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 - DA008708PES Instrument Used : Running On :			
			Batch Date :
<b>Reagent</b>	<b>Dilution</b>	<b>Consums. ID</b>	
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. SOP.T40.065/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.			

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**Jorge Segredo**  
 Lab Director

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

  
 Signature

12/30/19

Signed On





# Certificate of Analysis

**PASSED**

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

**Sample :** DA91213008-001  
**Harvest/LOT ID:** HS-TVF1212201901  
**Batch# :** HS-TVF1212201901  
**Sampled :** 12/13/19  
**Ordered :** 12/13/19

**Sample Size Received :** 7.0 gram  
**Total Weight/Volume :** 2000 gram  
**Completed :** 12/30/19 **Expires:** 12/30/20  
**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> 0.0249g	<b>Extraction date</b> 12/13/19 02:12:34	<b>Extracted By</b> 850
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**Analysis Method -SOP.T.40.032**  
**Analytical Batch -DA008719SOL**  
**Instrument Used :**  
**Running On :**  
**Batch Date :**

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

**Sample :** DA91213008-001  
**Harvest/LOT ID:** HS-TVF1212201901  
**Batch# :** HS-TVF1212201901  
**Sampled :** 12/13/19  
**Ordered :** 12/13/19

**Sample Size Received :** 7.0 gram  
**Total Weight/Volume :** 2000 gram  
**Completed :** 12/30/19 **Expires:** 12/30/20  
**Sample Method :** SOP Client Method

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	<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 -DA008707MIC Batch Date :**  
**Instrument Used :**  
**Running On :**

Analyzed by	Weight	Extraction date	Extracted By
513,	0.9975g	12/13/19	1082,

Reagent	Consums. ID	Consums. ID
121019.R05	2802011	19193
	A02	
	2803021	
	009D	
	020	
	011	

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-plating 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 -DA008709**  
**Instrument Used :**  
**Running On :**  
**Batch Date :**

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.T40.065 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
121319.R01	052419.01	50
121219.R04		
121119.R03		
112119.R02		
120419.R01		
120419.R02		

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	0.063	0.5
MERCURY	0.01	PPM	ND	0.1

Analyzed by	Weight	Extraction date	Extracted By
53	0.2644g	12/13/19 02:12:22	457

**Analysis Method -SOP.T.40.050, SOP.T.30.052**  
**Analytical Batch -DA008715HEA**  
**Instrument Used :**  
**Running On :**  
**Batch Date :**

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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 Signature

12/30/19

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