



# Certificate of Analysis

Dec 30, 2019 | CURALEAF FLORIDA LLC

19000 SW 192 STREET  
MIAMI, FL, 33187, US



Sample: DA91223022-004  
Harvest/Lot ID: HS-TCF1223201901  
Cultivation Facility: Miami Cultivation  
Processing Facility: Homestead Processing  
Seed to Sale #7413 8456 5187 1695  
Batch Date : N/A  
Batch#: HS-TCF1223201901  
Sample Size Received: 30 units  
Total Weight/Volume: 7011 gram  
Retail Product Size: 10 mg gram  
Ordered : 12/23/19  
sampled : 12/23/19  
Completed: 12/30/19  
Sampling Method: SOP Client Method

**PASSED**

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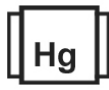
## PRODUCT IMAGE



## 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

**3.254%**

THC/Capsule : 10.74 mg



Total CBD

**0.000%**

CBD/Capsule : 0.00 mg



Total Cannabinoids

**3.459%**

Total Cannabinoids / Container  
: 0.000

	TOTAL CA	TOTAL CB	TOTAL TH	CBC	CBGA	CBG	THCV	D8-THC	CBDV	CBN	CBDA	CBD	THCA	D9-THC
%	3.4590	ND	3.2540	0.0390	ND	0.0880	0.0160	0.0200	ND	0.0420	ND	ND	<0.010	3.2540
mg/g	34.5900	ND	32.5400	0.3900	ND	0.8800	0.1600	0.2000	ND	0.4200	ND	ND	<0.010	32.5400
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	12/23/19	584
Analyte	LOD	Result	Batch Date
Filtration and Foreign Material	0	ND	
Analysis Method -SOP.T.40.013			
Analytical Batch -DA008942FIL			
Instrument Used :			

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	Weight	Extraction date :	Extracted By :
1224	0.9500g	12/26/19 03:12:05	574
Analysis Method	Instrument Used :	Batch Date :	
-SOP.T.40.020, SOP.T.30.050			
Analytical Batch -DA008995POT			
Reagent	Dilution	Consums. ID	
122319.R05	400	76124-662	
121819.R05		SFN-BX-1025	
		849C4-849AK	
		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

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 :** DA91223022-004  
**Harvest/LOT ID:** HS-TCF1223201901

**Batch# :** HS-TCF1223201901  
**Sampled :** 12/23/19  
**Ordered :** 12/23/19

**Sample Size Received :** 30 units  
**Total Weight/Volume :** 7011 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	ND	ND		SABINENE HYDRATE	0.007	ND	ND	
ALPHA-PINENE	0.007	ND	ND		TERPINEOL	0.007	ND	ND	
ALPHA-TERPINENE	0.007	ND	ND		TERPINOLENE	0.007	ND	ND	
BETA-MYRCENE	0.007	ND	ND		BETA-CARYOPHYLLENE	0.007	ND	ND	
BETA-PINENE	0.007	ND	ND		TRANS-NEROLIDOL	0.007	ND	ND	
BORNEOL	0.013	ND	ND		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	ND	ND						
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	ND	ND						
LINALOOL	0.007	ND	ND						
NEROL	0.007	ND	ND						
OCIMENE	0.007	ND	ND						
ALPHA-PHELLANDRENE	0.007	ND	ND						
PULEGONE	0.007	ND	ND						
Total (%)	0.000								



## Terpenes

**TESTED**
**Analyzed by** 1118 **Weight** 0.9621g **Extraction date** 12/23/19 02:12:42 **Extracted By** 1118

**Analysis Method -SOP.T.40.090**  
**Analytical Batch -DA008949TER**  
**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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**Harvest/LOT ID:** HS-TCF1223201901

**Batch# :** HS-TCF1223201901  
**Sampled :** 12/23/19  
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**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	3	ND	PACLOBUTRAZOL	0.01	ppm	0.1	ND
BOSCALID	0.01	PPM	3	ND	TRANS-PERMETHRIN	0.05	ppm	1	ND
DIMETHOATE	0.01	ppm	0.1	ND	PHOSMET	0.01	ppm	0.2	ND
ABAMECTIN B1A	0.02	ppm	0.3	ND	PIPERONYL BUTOXIDE	0.01	ppm	3	ND
CIS-PERMETHRIN	0.05	ppm	1	ND	PRALLETHRIN	0.05	ppm	0.4	ND
SPINETORAM	0.01	PPM	3	ND	PROPICONAZOLE	0.01	ppm	1	ND
ACEPHATE	0.001	ppm	3	ND	PROPOXUR	0.01	ppm	0.1	ND
DIMETHOMORPH	0.005	ppm	3	ND	PYRETHRIN I	0.01	ppm	1	ND
ETHOPROPHOS	0.01	ppm	0.1	ND	PYRIDABEN	0.01	ppm	3	ND
ACEQUINOCYL	0.01	ppm	2	ND	SPINOSAD (SPINOSYN A)	0.01	ppm	3	ND
ACETAMIPRID	0.01	ppm	3	ND	SPINOSAD (SPINOSYN D)	0.01	ppm	3	ND
ETOXENPROX	0.01	ppm	0.1	ND	SPIROMESIFEN	0.01	ppm	3	ND
ALDICARB	0.02	ppm	0.1	ND	SPIROTETRAMAT	0.02	ppm	3	ND
ETOXAZOLE	0.01	ppm	1.5	ND	SPIROXAMINE	0.01	ppm	0.1	ND
AZOXYSTROBIN	0.01	ppm	3	ND	TEBUCONAZOLE	0.01	ppm	1	ND
FENHEXAMID	0.01	ppm	3	ND	THIACLOPRID	0.01	ppm	0.1	ND
BIFENAZATE	0.01	ppm	3	ND	THIAMETHOXAM	0.01	ppm	1	ND
FENOXYCARB	0.01	ppm	0.1	ND	TRIFLOXYSTROBIN	0.01	ppm	3	ND
FENPYROXIMATE	0.01	ppm	2	ND					
BIFENTHRIN	0.01	ppm	0.5	ND					
CARBARYL	0.01	ppm	0.5	ND					
FIPRONIL	0.02	ppm	0.1	ND					
FLONICAMID	0.01	ppm	2	ND					
CARBOFURAN	0.01	ppm	0.1	ND					
CHLORANTRANILIPROLE	0.01	ppm	3	ND					
FLUDIOXONIL	0.01	ppm	3	ND					
HEXYTHIAZOX	0.01	ppm	2	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	3	ND					
CLOFENTEZINE	0.01	ppm	0.5	ND					
KRESOXIM-METHYL	0.01	ppm	1	ND					
COUMAPHOS	0.005	ppm	0.1	ND					
MALATHION	0.01	ppm	2	ND					
CYPERMETHRIN	0.01	ppm	1	ND					
DAMINOZIDE	0.02	ppm	0.1	ND					
METALAXYL	0.01	ppm	3	ND					
DICHLORVOS	0.05	ppm	0.1	ND					
METHIOCARB	0.01	ppm	0.1	ND					
METHOMYL	0.01	ppm	0.1	ND					
DIAZANON	0.01	ppm	0.2	ND					
MEVINPHOS	0.01	ppm	0.1	ND					
MYCLOBUTANIL	0.01	ppm	3	ND					
NALED	0.01	ppm	0.5	ND					



## Pesticides

**PASSED**

Analyzed by	Weight	Extraction date	Extracted By
585	1.0389g	NA	NA
Analysis Method - SOP.T.30.065, SOP.T.40.065, SOP.T.40.066, SOP.T.40.070, SOP.T.30.065, SOP.T40.070			
Analytical Batch - DA008954PES			
Instrument Used :			
Running On :		Batch Date :	
Reagent	Dilution	Consums. ID	
112119.32		180711	
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.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.			

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**Jorge Segredo**  
Lab Director

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**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	<100.000
ETHANOL	90	ppm	5000	PASS	1565.056
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> 0.0228g	<b>Extraction date</b> 12/23/19 04:12:14	<b>Extracted By</b> 850
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**Analysis Method -SOP.T.40.032**  
**Analytical Batch -DA008959SOL**  
**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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**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 -DA008952MIC Batch Date :

Instrument Used :

Running On :

Analyzed by	Weight	Extraction date	Extracted By
513,	1.0985g	12/23/19	513,

Reagent	Consums. ID	Consums. ID
121819.R08	2802012	19193
	2803022	
	A02	
	010A	
	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 -DA008955MYC

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.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
121019.R02	111319.01	50
122319.R02		
121919.R01		
121319.R05		
121219.R08		
120419.R02		

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.01	PPM	0.039	1.5
CADMIUM	0.01	PPM	ND	0.5
LEAD	0.01	PPM	ND	0.5
MERCURY	0.01	PPM	ND	3

Analyzed by	Weight	Extraction date	Extracted By
53	0.2618g	12/23/19 02:12:41	457

Analysis Method -SOP.T.40.050, SOP.T.30.052

Analytical Batch -DA008951HEA

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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