



# Certificate of Analysis

Jan 10, 2020 | CURALEAF FLORIDA LLC

19000 SW 192 STREET  
MIAMI, FL, 33187, US



Sample: DA00108010-001  
Harvest/Lot ID: HS-TCF0107202001  
Cultivation Facility: Miami Cultivation  
Processing Facility: Homestead Processing  
Seed to Sale #0290 3036 4057 3232  
Batch Date : N/A  
Batch#: HS-TCF0107202001  
Sample Size Received: 30  
Total Weight/Volume: 2000  
Retail Product Size: 3.0 gram  
Ordered : 01/08/20  
sampled : 01/08/20  
Completed: 01/10/20  
Sampling Method: SOP Client Method

**PASSED**

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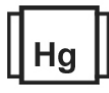
## PRODUCT IMAGE



## 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

**3.270%**

THC/Capsule : 10.37 mg



Total CBD

**0.000%**

CBD/Capsule : 0.00 mg



Total Cannabinoids

**3.457%**

Total Cannabinoids / Container  
: 0.000

	TOTAL CA	TOTAL CB	TOTAL TH	CBC	CBGA	CBG	THCV	DB-THC	CBDV	CBN	CBDA	CBD	THCA	D9-THC
%	3.4570	ND	3.2700	0.0330	0.0160	0.1050	0.0120	ND	ND	0.0170	ND	ND	0.0300	3.2440
mg/g	34.5700	ND	32.7000	0.3300	0.1600	1.0500	0.1200	ND	ND	0.1700	ND	ND	0.3000	32.4390
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	01/08/20	584
Analyte			Result
Filtration and Foreign Material			ND
			Batch Date : 01/08/20
			12:58:37

Analysis Method -SOP.T.40.013  
Analytical Batch -DA009245FIL  
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	0.9372g	01/08/20 04:01:18	965
Analysis Method -SOP.T.40.020, SOP.T.30.050			Batch Date : 01/08/20 09:26:13
Analytical Batch -DA009220POT	Instrument Used : DA-LC-003		

Reagent	Dilution	Consums. ID
123019.R09		76124-662
070219.R15		SPN-BX-1025
010320.R05		849CA-849AK
010320.R04		849CB-849AH

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

01/10/20

Signed On



# Certificate of Analysis

**PASSED**

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

**Sample :** DA00108010-001  
**Harvest/LOT ID:** HS-TCF0107202001

**Batch# :** HS-TCF0107202001  
**Sampled :** 01/08/20  
**Ordered :** 01/08/20

**Sample Size Received :** 30  
**Total Weight/Volume :** 2000  
**Completed :** 01/10/20 **Expires:** 01/10/21  
**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	< 0.2	< 0.020		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	< 0.2	< 0.020	
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	< 0.2	< 0.020						
CEDROL	0.007	ND	ND						
ALPHA-BISABOOL	0.007	< 0.2	< 0.020						
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	< 0.2	< 0.020						
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						
<b>Total (%)</b>		0.000							



## Terpenes

**TESTED**
**Analyzed by** 1118 **Weight** 0.9550g **Extraction date** 01/08/20 01:01:45 **Extracted By** 1118

**Analysis Method -SOP.T.40.090**  
**Analytical Batch -DA009247TER**  
**Instrument Used : Liquid Injection GCMS QP2020 (E-SHI-128)**  
**Running On :**  
**Batch Date : 01/08/20 13:02:08**

Reagent	Dilution	Consums. ID
052119.04	10	76124-662 280630187

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-TCF0107202001

**Batch# :** HS-TCF0107202001  
**Sampled :** 01/08/20  
**Ordered :** 01/08/20

**Sample Size Received :** 30  
**Total Weight/Volume :** 2000  
**Completed :** 01/10/20 **Expires:** 01/10/21  
**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**  
585

**Weight**  
0.9376g

**Extraction date**  
NA

**Extracted By**  
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** - DA009227PES

**Instrument Used** : LCMS E-SHI-039

**Running On** :

**Batch Date** : 01/08/20 09:32:15

**Reagent**
**Dilution**
**Consums. ID**

101519.04

010220.805

010220.806

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.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

01/10/20

Signed On





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**Telephone:** 7865860672  
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**Sample :** DA00108010-001  
**Harvest/LOT ID:** HS-TCF0107202001

**Batch# :** HS-TCF0107202001  
**Sampled :** 01/08/20  
**Ordered :** 01/08/20

**Sample Size Received :** 30  
**Total Weight/Volume :** 2000  
**Completed :** 01/10/20 **Expires:** 01/10/21  
**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	<100.000
ETHANOL	90	ppm	5000	PASS	2173.942
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> 0.0209g	<b>Extraction date</b> 01/08/20 03:01:43	<b>Extracted By</b> 850
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**Analysis Method -SOP.T.40.032**  
**Analytical Batch -DA009255SOL**  
**Instrument Used : Headspace GCMS**  
**Running On :**  
**Batch Date : 01/08/20 14:27:45**

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

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Harvest/LOT ID: HS-TCF0107202001  
Batch# : HS-TCF0107202001  
Sampled : 01/08/20  
Ordered : 01/08/20

Sample Size Received : 30  
Total Weight/Volume : 2000  
Completed : 01/10/20 Expires: 01/10/21  
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 -DA009236MIC Batch Date : 01/08/20, 01/08/20  
Instrument Used : PathogenDX PCR Array Scanner, PathogenDX PCR Array Scanner  
Running On :

Analyzed by	Weight	Extraction date	Extracted By
513,	1.0289g	01/08/20	513,

Reagent	Consums. ID	Consums. ID
010620.R01	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 -DA009228  
Instrument Used : LCMS E-SHI-039  
Running On :  
Batch Date : 01/08/20 09:32:59

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	111319.01	50
010620.R03		
010620.R02		
121319.R05		
010320.R03		
010220.R04		

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.01	PPM	ND	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
457	0.2503g	01/08/20 12:01:17	457

Analysis Method -SOP.T.40.050, SOP.T.30.052  
Analytical Batch -DA009212HEA  
Instrument Used : ICPMS-2030  
Running On :  
Batch Date : 01/08/20 08:18:39

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

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

  
Signature

01/10/20

Signed On