



# Certificate of Analysis

Nov 04, 2019 | CURALEAF FLORIDA LLC

19000 SW 192 STREET  
MIAMI, FL, 33187, US

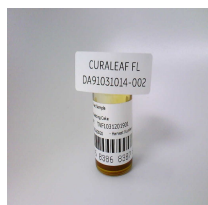


Sample: DA91031014-002  
Harvest/Lot ID: HS-TVF1031201901  
Cultivation Facility: Miami Cultivation  
Processing Facility : Homestead Processing  
Seed to Sale #5385 8386 8387 6271  
Batch Date : N/A  
Batch#: HS-TVF1031201901  
Sample Size Received: 7 gram  
Total Weight/Volume: 1237 gram  
Retail Product Size: 0.5 ml gram  
Ordered : 10/31/19  
sampled : 10/31/19  
Completed: 11/04/19  
Sampling Method: SOP Client Method

**PASSED**

Page 1 of 5

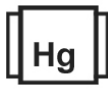
## PRODUCT IMAGE



## 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

**86.481%**

THC/Container :432.41 mg



Total CBD

**0.381%**

CBD/Container :1.91 mg



Total Cannabinoids

**0.000%**

Total Cannabinoids / Container  
:0.000

	D9-THC	THCA	CBD	CBDA	CBN	CBDV	D8-THC	THCV	CBG	CBGA	CBC	TOTAL TH	TOTAL CB
%	86.4810	ND	0.3670	0.0170	0.1940	ND	0.1019	0.3060	1.6460	0.2050	0.9930	86.4810	0.3810
mg/g	864.8100	ND	3.6700	0.1700	1.9400	ND	1.0200	3.0600	16.4600	2.0500	9.9300	864.8100	3.8100
LOD	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
%	%	%	%	%	%	%	%	%	%	%	%		

	Filtration	
	<b>PASSED</b>	

Analyzed By	Weight	Extraction date	Extracted By
584	1g	10/31/19	584
Analyte			Result
Filtration and Foreign Material			ND
Analysis Method -SOP.T.40.013			
Analytical Batch -DA007619			
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 :
450	0.1123g	10/31/19 12:10:13	574
Analysis Method	SOP.T.40.020, SOP.T.30.050		Batch Date :
Analytical Batch -DA007594	Instrument Used :		

Reagent	Dilution	Consums. ID
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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

11/04/19

Signed On



# Certificate of Analysis

**PASSED**

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

**Sample :** DA91031014-002  
**Harvest/LOT ID:** HS-TVF1031201901

**Batch# :** HS-TVF1031201901  
**Sampled :** 10/31/19  
**Ordered :** 10/31/19

**Sample Size Received :** 7 gram  
**Total Weight/Volume :** 1237 gram  
**Completed :** 11/04/19 **Expires:** 11/04/20  
**Sample Method :** SOP Client Method

Page 2 of 5



## 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	2.059	0.205		SABINENE HYDRATE	0.007	< 0.2	< 0.020	
ALPHA-PINENE	0.007	5.061	0.506		TERPINEOL	0.007	ND	ND	
ALPHA-TERPINENE	0.007	ND	ND		TERPINOLENE	0.007	16.461	1.646	
BETA-MYRCENE	0.007	34.367	3.436		TRANS-CARYOPHYLLENE	0.007	6.548	0.654	
BETA-PINENE	0.007	3.840	0.384		TRANS-NEROLIDOL	0.007	< 0.2	< 0.020	
BORNEOL	0.013	ND	ND		VALENCENE	0.007	ND	ND	
CAMPHENE	0.007	< 0.2	< 0.020						
CAMPHOR	0.013	ND	ND						
CARYOPHYLLENE OXIDE	0.007	0.213	0.021						
CEDROL	0.007	ND	ND						
ALPHA-BISABOOL	0.007	3.542	0.354						
ISOPULEGOL	0.007	ND	ND						
CIS-NEROLIDOL	0.007	ND	ND						
3-CARENE	0.007	< 0.2	< 0.020						
FENCHYL ALCOHOL	0.007	ND	ND						
HEXAHYDROTHYMOL	0.007	ND	ND						
EUCALYPTOL	0.007	0.831	0.083						
ISOBORNEOL	0.007	ND	ND						
FARNESENE	0.007	ND	ND						
FENCHONE	0.007	ND	ND						
GAMMA-TERPINENE	0.007	< 0.2	< 0.020						
GERANIOL	0.007	ND	ND						
GERANYL ACETATE	0.007	ND	ND						
GUAJOL	0.007	ND	ND						
LIMONENE	0.007	17.633	1.763						
LINALOOL	0.007	ND	ND						
NEROL	0.007	ND	ND						
OCIMENE	0.007	ND	ND						
ALPHA-PHELLANDRENE	0.007	< 0.2	< 0.020						
PULEGONE	0.007	ND	ND						
<b>Total (%)</b>		9.055							



## Terpenes

**TESTED**
**Analyzed by** 585 **Weight** 1.1145g **Extraction date** 10/31/19 03:10:39 **Extracted By** 585

**Analysis Method -SOP.T.40.090**  
**Analytical Batch -DA007598**  
**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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**Completed :** 11/04/19 **Expires:** 11/04/20  
**Sample Method :** SOP Client Method

Page 3 of 5



## 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	100	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		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	0.01	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**
**Analyzed by** 585 **Weight** 1.0440g **Extraction date** 10/31/19 02:10:53 **Extracted By** 1082

**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** - DA007608

**Instrument Used** :

**Running On** :

**Batch Date** :

Reagent	Dilution	Consums. ID
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

11/04/19

Signed On





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

**Sample :** DA91031014-002  
**Harvest/LOT ID:** HS-TVF1031201901  
**Batch# :** HS-TVF1031201901  
**Sampled :** 10/31/19  
**Ordered :** 10/31/19

**Sample Size Received :** 7 gram  
**Total Weight/Volume :** 1237 gram  
**Completed :** 11/04/19 **Expires:** 11/04/20  
**Sample Method :** SOP Client Method

Page 4 of 5

	<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	10	ppm	2100	PASS	ND
BUTANES (N-BUTANE)	50	ppm	2000	PASS	ND
ETHYLENE OXIDE	0.5	ppm	5	PASS	ND
METHANOL	25	ppm	250	PASS	<140.000
ETHANOL	140	ppm	5000	PASS	254.575
PENTANES (N-PENTANE)	50	ppm	750	PASS	ND
ETHYL ETHER	140	ppm	500	PASS	ND
ACETONE	140	ppm	750	PASS	ND
2-PROPANOL	140	ppm	500	PASS	ND
ACETONITRILE	6	ppm	60	PASS	ND
METHYLENE CHLORIDE	36	ppm	125	PASS	ND
N-HEXANE	17.4	ppm	250	PASS	ND
ETHYL ACETATE	140	ppm	400	PASS	ND
BENZENE	0.1	ppm	1	PASS	ND
HEPTANE	140	ppm	500	PASS	ND
TOLUENE	15	ppm	150	PASS	ND
CHLOROFORM	0.2	ppm	2	PASS	ND
1,2-DICHLOROETHANE	0.2	ppm	2	PASS	ND
TRICHLOROETHYLENE	0.2	ppm	25	PASS	ND
1,1-DICHLOROETHENE	0.2	ppm	8	PASS	ND
TOTAL XYLENES	1	ppm	150	PASS	ND

<b>Analyzed by</b> 850	<b>Weight</b> 0.0232g	<b>Extraction date</b> 10/31/19 01:10:50	<b>Extracted By</b> 850
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**Analysis Method -SOP.T.40.032**  
**Analytical Batch -DA007602**  
**Instrument Used :**  
**Running On :**  
**Batch Date :**

Reagent	Dilution	Consums. ID
	1	00268767 161040-1 24151941

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-TVF1031201901  
**Batch# :** HS-TVF1031201901  
**Sampled :** 10/31/19  
**Ordered :** 10/31/19

**Sample Size Received :** 7 gram  
**Total Weight/Volume :** 1237 gram  
**Completed :** 11/04/19 **Expires:** 11/04/20  
**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.	

Analysis Method -SOP.T.40.043 / SOP.T.40.044 / SOP.T.40.041

Analytical Batch -DA007591 Batch Date :

Instrument Used :

Running On :

Analyzed by	Weight	Extraction date	Extracted By
513	1.0183g	11/01/19	513

Reagent	Consums. ID	Consums. ID
102819.R18	013	19193
	2803021	
	A02	
	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	0.001	ppm	ND	
AFLATOXIN G1	0.0005	ppm	ND	
AFLATOXIN B2	0.0005	ppm	ND	
AFLATOXIN B1	0.0005	ppm	ND	
OCHRATOXIN A+	0.0005	ppm	ND	0.02
TOTAL AFLATOXINS	0.0005	PPM	0.000	0.02

Analysis Method -SOP.T.30.065, SOP.T.40.065

Analytical Batch -DA007609

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	Dilution
102919.R02	50
102819.R04	
103119.R02	
102919.R05	
102119.R03	
052419.01	

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
457	05193g	10/31/19 04:10:56	457

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

Analytical Batch -DA007599

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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 PJLA-Testing 97164

  
 Signature

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