



Certificate of Analysis

Oct 11, 2019 | CURALEAF FLORIDA LLC

19000 SW 192 STREET
MIAMI, FL, 33187, US

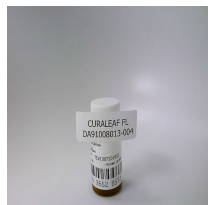


Sample: DA91008013-004
Harvest/Lot ID: HS-TSV1007201902
Cultivation Facility: Miami Cultivation
Processing Facility: Homestead Processing
Seed to Sale #0326 3652 8572 5081
Batch Date :N/A
Batch#: HS-TSV1007201902
Sample Size Received: 7.0 gram
Total Weight/Volume: 4000 gram
Retail Product Size: 0.5 ml gram
Ordered : 10/08/19
sampled : 10/08/19
Completed: 10/11/19
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

CANNABINOID RESULTS



Total THC

32.476%

THC/Container :162.38 mg



Total CBD

0.537%

CBD/Container :2.689 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
%	32.4760	ND	0.4089	0.1470	0.1350	ND	ND	ND	0.8840	ND	0.3560	32.4760	0.5370
mg/g	324.7600	ND	4.0900	1.4700	1.3500	ND	ND	ND	8.8400	ND	3.5600	324.7600	5.3700
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 PASSED

Analyzed By	Weight	Extraction date	Extracted By
584	1g	10/09/19	584
Analyte			Result
Filtration and Foreign Material			ND
Analysis Method -SOP.T.40.013			
Analytical Batch -DA007021			
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 :
64	0.1036g	10/08/19 02:10:38	574
Analysis Method	Instrument Used :		Batch Date :
-SOP.T.40.020, SOP.T.30.050			
Analytical Batch -DA006961			
Reagent	Dilution	Consums. ID	
100719.R09	400	76124-662	
100819.R05		SFM-BX-1025	
100819.R05		849CA-849AK	
100819.R04		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

10/11/19

Signed On



Certificate of Analysis

PASSED

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

Sample : DA91008013-004
Harvest/LOT ID: HS-TSV1007201902

Batch# : HS-TSV1007201902
Sampled : 10/08/19
Ordered : 10/08/19

Sample Size Received : 7.0 gram
Total Weight/Volume : 4000 gram
Completed : 10/11/19 **Expires:** 10/11/20
Sample Method : SOP Client Method

Page 2 of 5



Terpenes

TESTED

Terpenes	LOD(%)	mg/g	%	Result (%)
ALPHA-CEDRENE	0.007	ND	ND	
ALPHA-HUMULENE	0.007	ND	ND	
ALPHA-PINENE	0.007	ND	ND	
ALPHA-TERPINENE	0.007	ND	ND	
BETA-MYRCENE	0.007	ND	ND	
BETA-PINENE	0.007	ND	ND	
BORNEOL	0.013	ND	ND	
CAMPHENE	0.007	ND	ND	
CAMPHOR	0.013	ND	ND	
CARYOPHYLLENE OXIDE	0.007	ND	ND	
CEDROL	0.007	ND	ND	
ALPHA-BISABOLOL	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	ND	ND	
FENCHONE	0.007	ND	ND	
GAMMA-TERPINENE	0.007	ND	ND	
GERANIOL	0.007	ND	ND	
GERANYL ACETATE	0.007	< 0.2	< 0.020	
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	LOD(%)	mg/g	%	Result (%)
SABINENE	0.007	ND	ND	
SABINENE HYDRATE	0.007	ND	ND	
TERPINEOL	0.007	ND	ND	
TERPINOLENE	0.007	ND	ND	
TRANS-CARYOPHYLLENE	0.007	ND	ND	
TRANS-NEROLIDOL	0.007	ND	ND	
VALENCENE	0.007	ND	ND	



Terpenes

TESTED
Analyzed by 585 **Weight** 1.0873g **Extraction date** 10/08/19 03:10:34 **Extracted By** 585

Analysis Method -SOP.T.40.090
Analytical Batch -DA006943
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.



Certificate of Analysis

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


Sample : DA91008013-004
Harvest/LOT ID: HS-TSV1007201902

Batch# : HS-TSV1007201902
Sampled : 10/08/19
Ordered : 10/08/19

Sample Size Received : 7.0 gram
Total Weight/Volume : 4000 gram
Completed : 10/11/19 **Expires:** 10/11/20
Sample Method : SOP Client Method

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<div>  Pesticides </div>					<div> PASSED </div>				
Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
DIMETHOATE	0.01	ppm	0.1	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		ND	PROPOXUR	0.01	ppm	0.1	ND
ACEPHATE	0.001	ppm	0.1	ND	PYRETHRIN I	0.01	ppm	0.5	ND
DIMETHOMORPH	0.005	ppm	0.2	ND	PYRIDABEN	0.01	ppm	0.2	ND
ETHOPROPHOS	0.01	ppm	0.1	ND	SPINOSAD (SPINOSYN A)	0.01	ppm	0.1	ND
ACEQUINOCYL	0.01	ppm	0.1	ND	SPINOSAD (SPINOSYN D)	0.01	ppm	0.1	ND
ACETAMIPRID	0.01	ppm	0.1	ND	SPIROMESIFEN	0.01	ppm	0.1	ND
ETOFENPROX	0.01	ppm	0.1	ND	SPIROTETRAMAT	0.02	ppm	0.1	ND
ALDICARB	0.02	ppm	0.1	ND	SPIROXAMINE	0.01	ppm	0.1	ND
ETOXAZOLE	0.01	ppm	0.1	ND	TEBUCONAZOLE	0.01	ppm	0.1	ND
AZOXYSTROBIN	0.01	ppm	0.01	ND	THIACLOPRID	0.01	ppm	0.1	ND
FENHEXAMID	0.01	ppm	0.1	ND	THIAMETHOXAM	0.01	ppm	0.5	ND
BIFENAZATE	0.01	ppm	0.1	ND	TRIFLOXYSTROBIN	0.01	ppm	0.1	ND
FENOXYCARB	0.01	ppm	0.1	ND	<div>  Pesticides </div>				
FENPYROXIMATE	0.01	ppm	0.1	ND	<div> PASSED </div>				
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					
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					
OXAMYL	0.01	ppm	0.5	ND					
PACLOBUTRAZOL	0.01	ppm	0.1	ND					
TRANS-PERMETHRIN	0.05	ppm	0.1	ND					
PHOSMET	0.01	ppm	0.1	ND					



Pesticides

PASSED

Analyzed by 56	Weight 1.0346g	Extraction date 10/08/19 02:10:24	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 - DA006953 Instrument Used : Running On :			
		Batch Date :	
Reagent	Dilution 10	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.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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 PJLA-Testing 97164


 Signature

10/11/19

Signed On



Certificate of Analysis

PASSED

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Telephone: 7865860672
Email: erick.ramirez@curaleaf.com

Sample : DA91008013-004
Harvest/LOT ID: HS-TSV1007201902

Batch# : HS-TSV1007201902
Sampled : 10/08/19
Ordered : 10/08/19

Sample Size Received : 7.0 gram
Total Weight/Volume : 4000 gram
Completed : 10/11/19 **Expires:** 10/11/20
Sample Method : SOP Client Method

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	Residual Solvents	PASSED
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	Residual Solvents	PASSED
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Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
1,2-DICHLOROETHANE	0.2	ppm	2	PASS	ND
1,1-DICHLOROETHENE	0.2	ppm	8	PASS	ND
2-ETHOXYETHANOL	9.6	ppm		PASS	ND
2-PROPANOL	140	ppm	500	PASS	ND
ACETONE	140	ppm	750	PASS	ND
ACETONITRILE	6	ppm	60	PASS	ND
BENZENE	0.1	ppm	1	PASS	ND
BUTANES (ISO-BUTANE)	50	ppm	2000	PASS	ND
BUTANES (N-BUTANE)	50	ppm	2000	PASS	ND
CHLOROFORM	0.2	ppm	2	PASS	ND
ETHANOL	140	ppm	5000	PASS	ND
ETHYL ACETATE	140	ppm	400	PASS	ND
CYCLOHEXANE	232.8	ppm		PASS	ND
DICHLOROMETHANE	36	ppm		PASS	ND
ETHYL ETHER	140	ppm	500	PASS	ND
ETHYLENE OXIDE	0.5	ppm	5	PASS	ND
ETHYLBENZENE	130.2	ppm		PASS	ND
HEPTANE	140	ppm	500	PASS	ND
HEXANES (2,2-DIMETHYLBUTANE)	17.4	ppm	60	PASS	ND
HEXANES (2,3-DIMETHYLBUTANE)	17.4	ppm	60	PASS	ND
HEXANES (2-METHYLPENTANE)	17.4	ppm	60	PASS	ND
HEXANES (3-METHYLPENTANE)	17.4	ppm	60	PASS	ND
ISOPROPYL ACETATE	140	ppm		PASS	ND
METHYLENE CHLORIDE	1	ppm	125	PASS	ND
METHANOL	25	ppm	250	PASS	ND
N-HEXANE	17.4	ppm	60	PASS	ND
PENTANES (ISO-PENTANE)	140	ppm		PASS	ND
PENTANES (N-PENTANE)	50	ppm	750	PASS	ND
PENTANES (NEO-PENTANE)	50	ppm		PASS	ND
PROPANE	10	ppm	2100	PASS	ND
TETRAHYDROFURAN	43.2	ppm		PASS	ND
TOLUENE	15	ppm	150	PASS	ND
TOTAL XYLENES	1	ppm	150	PASS	ND
TRICHLOROETHYLENE	0.2	ppm	25	PASS	ND

Analyzed by 850	Weight 0.0294g	Extraction date 10/08/19 02:10:59	Extracted By 850
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Analysis Method -SOP.T.40.032
Analytical Batch -DA006964
Instrument Used :
Running On :
Batch Date :

Reagent	Dilution	Consums. ID
	1	00268767 160861-1 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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Jorge Segredo
 Lab Director

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


 Signature

10/11/19

Signed On



Certificate of Analysis

PASSED

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

Sample : DA91008013-004
Harvest/LOT ID: HS-TSV1007201902
Batch# : HS-TSV1007201902
Sampled : 10/08/19
Ordered : 10/08/19

Sample Size Received : 7.0 gram
Total Weight/Volume : 4000 gram
Completed : 10/11/19 **Expires:** 10/11/20
Sample Method : SOP Client Method

Page 5 of 5

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

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

Analytical Batch -DA006940 Batch Date :

Instrument Used :

Running On :

Analyzed by	Weight	Extraction date	Extracted By
513	0.9726g	10/11/19	513

Reagent	Consums. ID
100719.R10	A01
	2803018
	013
	009A
	019
	009

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.

	Mycotoxins	PASSED
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Analyte	LOD	Units	Result	Action Level (PPM)
AFLATOXIN G2	0.001	ppm	ND	0.02
AFLATOXIN G1	0.001	ppm	ND	0.02
AFLATOXIN B2	0.001	ppm	ND	0.02
AFLATOXIN B1	0.001	ppm	ND	0.02
OCHRATOXIN A+	0.001	ppm	ND	0.02

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

Analytical Batch -DA006954

Instrument Used :

Running On :

Batch Date :

Analyzed by	Weight	Extraction date	Extracted By
56	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 <20ug/Kg.

	Heavy Metals	PASSED
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Reagent	Dilution
100719.R01	50
100719.R04	
052419.01	

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.0008369 ppm		<0.002	0.2
CADMIUM	0.0022201 ppm		ND	0.2
LEAD	0.0032903 ppm		ND	0.5
MERCURY	0.0028556 ppm		ND	0.2

Analyzed by	Weight	Extraction date	Extracted By
457	0.5277g	10/08/19 03:10:53	457

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

Analytical Batch -DA006939

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.