



Certificate of Analysis

Jan 16, 2020 | CURALEAF FLORIDA LLC

19000 SW 192 STREET
MIAMI, FL, 33187, US

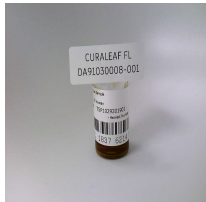


Sample: DA91030008-001
Harvest/Lot ID: HS-TSP1029201901
Cultivation Facility: Miami Cultivation
Processing Facility: Homestead Processing
Seed to Sale #5781 1837 6214 5541
Batch Date :N/A
Batch#: HS-TSP1029201901
Sample Size Received: 7.0 gram
Total Weight/Volume: 2503 gram
Retail Product Size: 0.5 ml gram
Ordered : 10/30/19
sampled : 10/30/19
Completed: 01/16/20
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

80.342%

THC/Container :401.71 mg



Total CBD

3.916%

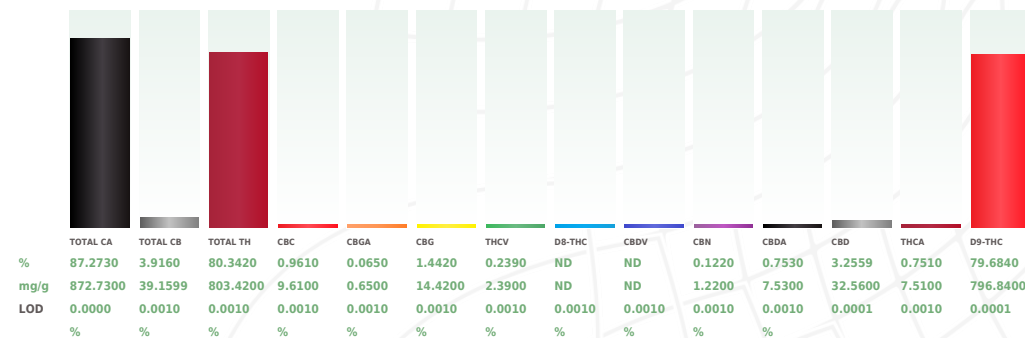
CBD/Container :39.14 mg



Total Cannabinoids

87.273%

Total Cannabinoids / Container
:0.000



Filtration PASSED

Analyzed By: 584
Analyte: Filtration and Foreign Material
Extraction date: 10/30/19
Extracted By: 584
LOD: 0
Result: ND
Batch Date: 10/30/19 15:15:54
Analysis Method: SOP.T.40.013
Analytical Batch: DA007586
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	0.1310g	10/30/19 11:10:20	965
Analysis Method -SOP.T.40.020, SOP.T.30.050	Instrument Used : DA-LC-003		Batch Date : 10/30/19 09:32:50
Analysis Batch -DA007561			

Reagent	Dilution	Consums. ID
102919.R07	40	76124-662 SPN-BX-1025 849CA-849AK 849CC-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

01/16/20

Signed On



Certificate of Analysis

PASSED

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

Sample : DA91030008-001
Harvest/LOT ID: HS-TSP1029201901

Batch# : HS-TSP1029201901
Sampled : 10/30/19
Ordered : 10/30/19

Sample Size Received : 7.0 gram
Total Weight/Volume : 2503 gram
Completed : 01/16/20 **Expires:** 01/16/21
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	ND	ND	
BETA-PINENE	0.007	ND	ND		TRANS-NEROLIDOL	0.007	< 0.2	< 0.020	
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						
CEADROL	0.007	ND	ND						
ALPHA-BISABOLOL	0.007	1.573	0.157						
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	0.825	0.082						
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 (%)		0.239							



Terpenes

TESTED
Analyzed by 585 **Weight** 0.8887g **Extraction date** 10/30/19 03:10:18 **Extracted By** 585

Analysis Method -SOP.T.40.090
Analytical Batch -DA007554
Instrument Used : Liquid Injection GCMS QP2010
Running On :
Batch Date : 10/30/19 08:15:36

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 : DA91030008-001
Harvest/LOT ID: HS-TSP1029201901

Batch# : HS-TSP1029201901
Sampled : 10/30/19
Ordered : 10/30/19

Sample Size Received : 7.0 gram
Total Weight/Volume : 2503 gram
Completed : 01/16/20 **Expires:** 01/16/21
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	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
AZOXYSTROBIN	0.01	ppm	0.01	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	0.2	ND	PROPOXUR	0.01	ppm	0.1	ND
ACEPHATE	0.001	ppm	0.1	ND	PYRETHRIN I	0.01	ppm	0.5	ND
FENOXYCARB	0.01	ppm	0.1	ND	PYRIDABEN	0.01	ppm	0.2	ND
DIMETHOMORPH	0.005	ppm	0.2	ND	SPINOSAD (SPINOSYN A)	0.01	ppm	0.1	ND
BIFENAZATE	0.01	ppm	0.1	ND	SPINOSAD (SPINOSYN D)	0.01	ppm	0.1	ND
ETHOPROPHOS	0.01	ppm	0.1	ND	SPIROMESIFEN	0.01	ppm	0.1	ND
ACEQUINOCYL	0.01	ppm	0.1	ND	SPIROTETRAMAT	0.02	ppm	0.1	ND
ACETAMIPRID	0.01	ppm	0.1	ND	SPIROXAMINE	0.01	ppm	0.1	ND
ETOFENPROX	0.01	ppm	0.1	ND	TEBUCONAZOLE	0.01	ppm	0.1	ND
BIFENTHRIN	0.01	ppm	0.1	ND	THIACLOPRID	0.01	ppm	0.1	ND
ALDICARB	0.02	ppm	0.1	ND	THIAMETHOXAM	0.01	ppm	0.5	ND
ETOXAZOLE	0.01	ppm	0.1	ND	TRIFLOXYSTROBIN	0.01	ppm	0.1	ND
FENPYROXIMATE	0.01	ppm	0.1	ND					
FIPRONIL	0.02	ppm	0.1	ND					
FENHEXAMID	0.01	ppm	0.1	ND					
CARBARYL	0.01	ppm	0.5	ND					
CARBOFURAN	0.01	ppm	0.1	ND					
FLONICAMID	0.01	ppm	0.1	ND					
FLUDIOXONIL	0.01	ppm	0.1	ND					
CHLORFENAPYR	0.01	ppm	0.1	ND					
CHLORANTRANILIPROLE	0.01	ppm	1	ND					
HEXYTHIAZOX	0.01	ppm	0.1	ND					
CHLORPYRIFOS	0.01	ppm	0.1	ND					
IMAZALIL	0.01	ppm	0.1	ND					
MALATHION	0.01	ppm	0.2	ND					
CLOFENTEZINE	0.01	ppm	0.2	ND					
DAMINOZIDE	0.02	ppm	0.1	ND					
IMIDACLOPRID	0.01	ppm	0.4	ND					
METALAXYL	0.01	ppm	0.02	ND					
DICHLORVOS	0.05	ppm	0.1	ND					
METHIOCARB	0.01	ppm	0.05	ND					
COUMAPHOS	0.005	ppm	0.1	ND					
METHOMYL	0.01	ppm	0.1	ND					
KRESOXIM-METHYL	0.01	ppm	0.1	ND					
DIAZANON	0.01	ppm	0.1	ND					
CYPERMETHRIN	0.01	ppm	0.5	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** 0.8922g **Extraction date** 10/30/19 12:10:33 **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 - DA007573

Instrument Used : LCMS E-SHI-039

Running On :

Batch Date : 10/30/19 10:01:16

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

01/16/20

Signed On



Certificate of Analysis

PASSED

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

Sample : DA91030008-001
Harvest/LOT ID: HS-TSP1029201901

Batch# : HS-TSP1029201901
Sampled : 10/30/19
Ordered : 10/30/19

Sample Size Received : 7.0 gram
Total Weight/Volume : 2503 gram
Completed : 01/16/20 **Expires:** 01/16/21
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
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	245.064
PENTANES (N-PENTANE)	67.5	ppm	750	PASS	<140.000
ETHYL ETHER	45	ppm	500	PASS	ND
ACETONE	67.5	ppm	750	PASS	<140.000
2-PROPANOL	45	ppm	500	PASS	<140.000
ACETONITRILE	5.4	ppm	60	PASS	ND
DICHLOROMETHANE	11.25	ppm	125	PASS	ND
N-HEXANE	4.5	ppm	250	PASS	<17.400
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	<130.199
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

Analyzed by 850	Weight 0.0259g	Extraction date 10/30/19 07:10:46	Extracted By 850
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Analysis Method -SOP.T.40.032
Analytical Batch -DA007587
Instrument Used : Headspace GCMS 2
Running On :
Batch Date : 10/30/19 19:07:54

Reagent	Dilution	Consums. ID
	1	

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 : DA91030008-001
Harvest/LOT ID: HS-TSP1029201901

Batch# : HS-TSP1029201901
Sampled : 10/30/19
Ordered : 10/30/19

Sample Size Received : 7.0 gram
Total Weight/Volume : 2503 gram
Completed : 01/16/20 **Expires:** 01/16/21
Sample Method : SOP Client Method

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	Microbials	PASSED
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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 - DA007556 **Batch Date :** 10/30/19
Instrument Used : PathogenDX PCR_Array Scanner
Running On :

Analyzed by	Weight	Extraction date	Extracted By
513	0.9256g	10/31/19	513

Reagent	Consums. ID	Consums. ID
102819.R18	013 2803021 A02 009D 020 011	19193

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	0.002	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 - DA007576
Instrument Used : LCMS E-SHI-039
Running On :
Batch Date : 10/30/19 10:02:52

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 <20ug/Kg.

	Heavy Metals	PASSED
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Dilution

50

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	0.5001g	10/30/19 11:10:58	457

Analysis Method - SOP.T.40.050, SOP.T.30.052
Analytical Batch - DA007555
Instrument Used : ICPMS-2030
Running On :
Batch Date : 10/30/19 08:26:40

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.