



Certificate of Analysis

Oct 22, 2019 | CURALEAF FLORIDA LLC

19000 SW 192 STREET
MIAMI, FL, 33187, US

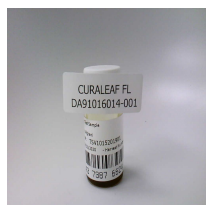


Sample: DA91016014-001
Harvest/Lot ID: HS-TSV1015201901
Cultivation Facility: Miami Cultivation
Processing Facility: Homestead Processing
Seed to Sale #6843 7387 6624 8313
Batch Date : N/A
Batch#: HS-TSV1015201901
Sample Size Received: 8.0 gram
Total Weight/Volume: 1000 gram
Retail Product Size: 0.5 ml gram
Ordered : 10/16/19
sampled : 10/16/19
Completed: 10/22/19
Sampling Method: SOP Client Method

PASSED

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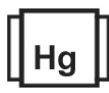
PRODUCT IMAGE



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

30.817%

THC/Container :154.08 mg



Total CBD

0.362%

CBD/Container :1.81 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
30.8170	ND	0.2310	0.1500	0.1739	ND	0.0200	ND	1.0700	0.1000	0.3310	30.8170	0.3620
mg/g	308.1700	ND	2.3100	1.5000	1.7400	ND	0.2000	10.7000	1.0000	3.3100	308.1700	3.6200
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
%	%	%	%	%	%	%	%	%	%	%	%	%

Filtration	PASSED
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Analyzed By	Weight	Extraction date	Extracted By
584	1g	10/16/19	584
Analyte	LOD	Result	Batch Date
Filtration and Foreign Material	0	ND	
Analysis Method -SOP.T.40.013			
Analytical Batch -DA007216			
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	0.1130g	10/16/19 02:10:29	574
Analysis Method	Instrument Used :	Batch Date :	
-SOP.T.40.020, SOP.T.30.050			
Analytical Batch -DA007218			

Reagent	Dilution	Consums. ID
	400	

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

10/22/19

Signed On



Certificate of Analysis

PASSED

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

Sample : DA91016014-001
Harvest/LOT ID: HS-TSV1015201901

Batch# : HS-TSV1015201901
Sampled : 10/16/19
Ordered : 10/16/19

Sample Size Received : 8.0 gram
Total Weight/Volume : 1000 gram
Completed : 10/22/19 **Expires:** 10/22/20
Sample Method : SOP Client Method

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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	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	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 1.0156g	Extraction date 10/16/19 05:10:20	Extracted By 585
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Analysis Method -SOP.T.40.090
Analytical Batch -DA007192
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

PASSED

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

Sample : DA91016014-001
Harvest/LOT ID: HS-TSV1015201901

Batch# : HS-
 TSV1015201901
Sampled : 10/16/19
Ordered : 10/16/19

Sample Size Received : 8.0 gram
Total Weight/Volume : 1000 gram
Completed : 10/22/19 **Expires:** 10/22/20
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		ND	PACLOBUTRAZOL	0.01	ppm		ND
CAPTAN	0.05	ppm		ND	TRANS-PERMETHRIN	0.05	ppm		ND
DIMETHOATE	0.01	ppm		ND	PHOSMET	0.01	ppm		ND
ABAMECTIN B1A	0.02	ppm		ND	PIPERONYL BUTOXIDE	0.01	ppm		ND
CIS-PERMETHRIN	0.05	ppm		ND	PRALLETHRIN	0.05	ppm		ND
SPINETORAM	0.01	PPM		ND	PROPICONAZOLE	0.01	ppm		ND
ACEPHATE	0.001	ppm		ND	PROPOXUR	0.01	ppm		ND
DIMETHOMORPH	0.005	ppm		ND	PYRETHRIN I	0.01	ppm		ND
ETHOPROPHOS	0.01	ppm		ND	PYRIDABEN	0.01	ppm		ND
ACEQUINOCYL	0.01	ppm		ND	SPINOSAD (SPINOSYN A)	0.01	ppm		ND
ACETAMIPRID	0.01	ppm		ND	SPINOSAD (SPINOSYN D)	0.01	ppm		ND
ETOFENPROX	0.01	ppm		ND	SPIROMESIFEN	0.01	ppm		ND
ALDICARB	0.02	ppm		ND	SPIROTETRAMAT	0.02	ppm		ND
ETOXAZOLE	0.01	ppm		ND	SPIROXAMINE	0.01	ppm		ND
AZOXYSTROBIN	0.01	ppm		ND	TEBUCONAZOLE	0.01	ppm		ND
FENHEXAMID	0.01	ppm		ND	THIACLOPRID	0.01	ppm		ND
BIFENAZATE	0.01	ppm		ND	THIAMETHOXAM	0.01	ppm		ND
FENOXYCARB	0.01	ppm		ND	TRIFLOXYSTROBIN	0.01	ppm		ND
FENPYROXIMATE	0.01	ppm		ND					
BIFENTHRIN	0.01	ppm		ND					
CARBARYL	0.01	ppm		ND					
FIPRONIL	0.02	ppm		ND					
FLONICAMID	0.01	ppm		ND					
CARBOFURAN	0.01	ppm		ND					
CHLORANTRANILIPROLE	0.01	ppm		ND					
FLUDIOXONIL	0.01	ppm		ND					
HEXYTHIAZOX	0.01	ppm		ND					
CHLORFENAPYR	0.01	ppm		ND					
IMAZALIL	0.01	ppm		ND					
CHLORPYRIFOS	0.01	ppm		ND					
IMIDACLOPRID	0.01	ppm		ND					
CLOFENTEZINE	0.01	ppm		ND					
KRESOXIM-METHYL	0.01	ppm		ND					
COUMAPHOS	0.005	ppm		ND					
MALATHION	0.01	ppm		ND					
CYPERMETHRIN	0.01	ppm		ND					
DAMINOZIDE	0.01	ppm		ND					
METALAXYL	0.01	ppm		ND					
DICHLORVOS	0.05	ppm		ND					
METHIOCARB	0.01	ppm		ND					
METHOMYL	0.01	ppm		ND					
DIAZANON	0.01	ppm		ND					
MEVINPHOS	0.01	ppm		ND					
MYCLOBUTANIL	0.01	ppm		ND					
NALED	0.01	ppm		ND					
OXAMYL	0.01	ppm		ND					



Pesticides

PASSED

Analyzed by 795	Weight 1.0521g	Extraction date 10/16/19 02:10:16	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.T40.070 Analytical Batch - DA007194 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.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

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Signature

10/22/19

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Certificate of Analysis

PASSED

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

Sample : DA91016014-001
Harvest/LOT ID: HS-TSV1015201901

Batch# : HS-
 TSV1015201901
Sampled : 10/16/19
Ordered : 10/16/19

Sample Size Received : 8.0 gram
Total Weight/Volume : 1000 gram
Completed : 10/22/19 **Expires:** 10/22/20
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
PROPANE	10	ppm		PASS	ND
BUTANES (N-BUTANE)	50	ppm		PASS	ND
ETHYLENE OXIDE	0.5	ppm		PASS	ND
METHANOL	25	ppm		PASS	ND
ETHANOL	140	ppm		PASS	ND
PENTANES (N-PENTANE)	50	ppm		PASS	ND
ETHYL ETHER	140	ppm		PASS	ND
ACETONE	140	ppm		PASS	ND
2-PROPANOL	140	ppm		PASS	ND
ACETONITRILE	6	ppm		PASS	ND
METHYLENE CHLORIDE	36	ppm		PASS	ND
N-HEXANE	17.4	ppm		PASS	ND
ETHYL ACETATE	140	ppm		PASS	ND
BENZENE	0.1	ppm		PASS	0.229
HEPTANE	140	ppm		PASS	ND
TOLUENE	15	ppm		PASS	ND
CHLOROFORM	0.2	ppm		PASS	ND
1,2-DICHLOROETHANE	0.2	ppm		PASS	ND
TRICHLOROETHYLENE	0.2	ppm		PASS	ND
1,1-DICHLOROETHENE	0.2	ppm		PASS	ND
TOTAL XYLENES	1	ppm		PASS	ND

Analyzed by 850	Weight 0.0268g	Extraction date 10/16/19 04:10:04	Extracted By 850
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Analysis Method -SOP.T.40.032
Analytical Batch -DA007223
Instrument Used :
Running On :
Batch Date :

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).



Certificate of Analysis

PASSED

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Email: erick.ramirez@curaleaf.com

Sample : DA91016014-001
Harvest/LOT ID: HS-TSV1015201901

Batch# : HS-
 TSV1015201901
Sampled : 10/16/19
Ordered : 10/16/19

Sample Size Received : 8.0 gram
Total Weight/Volume : 1000 gram
Completed : 10/22/19 **Expires:** 10/22/20
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 -DA007206 Batch Date :

Instrument Used :

Running On :

Analyzed by	Weight	Extraction date	Extracted By
513	1.0241g	10/16/19	357

Reagent	Consums. ID
101119.R02	013
	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.

	Mycotoxins	PASSED
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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	
TOTAL AFLATOXINS	0.0005	PPM	0.000	

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

Analytical Batch -DA007196

Instrument Used :

Running On :

Batch Date :

Analyzed by	Weight	Extraction date	Extracted By
795	1g	10/17/19 03:10:03	795

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.

	Heavy Metals	PASSED
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Reagent

 101619.R02
 101719.R01
 100919.R02
 100719.R04
 100919.R03
 052419.01

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.01	PPM	ND	
CADMIUM	0.01	PPM	ND	
LEAD	0.01	PPM	ND	
MERCURY	0.01	PPM	ND	

Analyzed by	Weight	Extraction date	Extracted By
457	0.5185g	10/17/19 09:10:53	457

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

Analytical Batch -DA007205

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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 Lab Director

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