



Certificate of Analysis

Oct 09, 2019 | CURALEAF FLORIDA LLC

19000 SW 192 STREET
MIAMI, FL, 33187, US

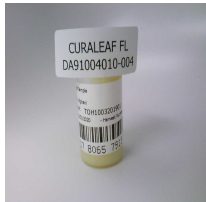


Sample: DA91004010-004
Harvest/Lot ID: HS-TOH1003201901
Cultivation Facility: Miami Cultivation
Processing Facility: Homestead Processing
Seed to Sale # 0617 8065 7913 2151
Batch Date: N/A
Batch#: HS-TOH1003201901
Sample Size Received: 8 gram
Total Weight/Volume: 45000 gram
Retail Product Size: 30 gram gram
Ordered: 10/04/19
sampled: 10/04/19
Completed: 10/09/19
Sampling Method: SOP Client Method

PASSED

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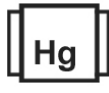
PRODUCT IMAGE



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

1.093%

THC/Container :327.90 mg



Total CBD

0.011%

CBD/Container :3.30 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
%	1.0930	ND	0.0110	ND	ND	ND	ND	ND	0.0290	ND	ND	1.0930	0.0110
mg/g	10.9300	ND	0.1100	ND	ND	ND	ND	ND	0.2900	ND	ND	10.9300	0.1090
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
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Analyzed By	Weight	Extraction date	Extracted By
s3	1g	NA	NA
Analyte			Result
Filtration and Foreign Material			ND
Analysis Method -SOP.T.40.013			
Analytical Batch -DA006908			
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	0.1072g	10/04/19 03:10:07	574
Analysis Method -SOP.T.40.020, SOP.T.30.050			Batch Date :
Analytical Batch -DA006893	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

10/09/19

Signed On



Certificate of Analysis

PASSED

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

Sample : DA91004010-004
Harvest/LOT ID: HS-TOH1003201901

Batch# : HS-
 TOH1003201901
Sampled : 10/04/19
Ordered : 10/04/19

Sample Size Received : 8 gram
Total Weight/Volume : 45000 gram
Completed : 10/09/19 **Expires:** 10/09/20
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	ND	ND		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		TRANS-CARYOPHYLLENE	0.007	ND	ND	
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	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						



Terpenes

TESTED
Analyzed by 585 **Weight** 1.0113g **Extraction date** 10/04/19 01:10:03 **Extracted By** 357

Analysis Method -SOP.T.40.090
Analytical Batch -DA006885
Instrument Used :
Running On :
Batch Date :

Reagent	Dilution	Consums. ID
100219.R01	10	180711 SFN-BX-1025 923C4-923AK 910C6 - 910H

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.

Total (%) 0.000



Certificate of Analysis

PASSED

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

Sample : DA91004010-004
Harvest/LOT ID: HS-TOH1003201901

Batch# : HS-
 TOH1003201901
Sampled : 10/04/19
Ordered : 10/04/19

Sample Size Received : 8 gram
Total Weight/Volume : 45000 gram
Completed : 10/09/19 **Expires:** 10/09/20
Sample Method : SOP Client Method

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Pesticides

PASSED

Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
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		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
ETOFENPROX	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	0.01	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					
OXAMYL	0.01	ppm	0.5	ND					
PACLOBUTRAZOL	0.01	ppm	0.1	ND					
TRANS-PERMETHRIN	0.05	ppm	1	ND					



Pesticides

PASSED

Analyzed by 357	Weight 1.0362g	Extraction date 10/04/19 05:10:50	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.T40.070 Analytical Batch - DA006901 Instrument Used : Running On :			
Reagent	Dilution 10	Batch Date : 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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 ISO Accreditation # ISO/IEC
 17025:2017 Accreditation
 PJLA-Testing 97164


 Signature

10/09/19

Signed On



Certificate of Analysis

PASSED

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

Sample : DA91004010-004
Harvest/LOT ID: HS-TOH1003201901

Batch# : HS-TOH1003201901
Sampled : 10/04/19
Ordered : 10/04/19

Sample Size Received : 8 gram
Total Weight/Volume : 45000 gram
Completed : 10/09/19 **Expires:** 10/09/20
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 0.0267g	Extraction date 10/04/19 03:10:58	Extracted By 850
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Analysis Method -SOP.T.40.032
Analytical Batch -DA006905
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).

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Jorge Segredo
 Lab Director

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


 Signature

10/09/19

Signed On



Certificate of Analysis

PASSED

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

Sample : DA91004010-004
Harvest/LOT ID: HS-TOH1003201901
Batch# : HS-TOH1003201901
Sampled : 10/04/19
Ordered : 10/04/19

Sample Size Received : 8 gram
Total Weight/Volume : 45000 gram
Completed : 10/09/19 **Expires:** 10/09/20
Sample Method : SOP Client Method

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	Microbials	PASSED
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Analyte	LOD	Result
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 -DA006880 **Batch Date :**
Instrument Used :
Running On :

Analyzed by	Weight	Extraction date	Extracted By
513	0.9389g	10/04/19	513

Reagent	Consums. ID
100119.R12	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 -DA006902
Instrument Used :
Running On :
Batch Date :

Analyzed by	Weight	Extraction date	Extracted By
357	1g	10/09/19 02:10:45	357

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	0.0008369	ppm	ND	1.5
CADMIUM	0.0022201	ppm	ND	0.5
LEAD	0.0032903	ppm	<0.009	0.5
MERCURY	0.0028556	ppm	ND	3

Analyzed by	Weight	Extraction date	Extracted By
457	0.5152g	10/04/19 02:10:02	457

Analysis Method -SOP.T.40.050, SOP.T.30.052
Analytical Batch -DA006877
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.