



Certificate of Analysis

Mar 25, 2020 | CURALEAF FLORIDA LLC

19000 SW 192 STREET
MIAMI, FL, 33187, US



Sample: DA00323010-008

Harvest/Lot ID: HS-TCF0320202001

Cultivation Facility: Miami Cultivation

Processing Facility: Homestead Processing

Seed to Sale #5203 4444 2283 0125

Batch Date : N/A

Batch#: HS-TCF0320202001

Sample Size Received: 30 units

Total Weight/Volume: 4000

Retail Product Size: 0.331 gram

Ordered : 03/23/20

sampled : 03/23/20

Completed: 03/25/20

Sampling Method: SOP.T.20.010

PASSED

Page 1 of 5

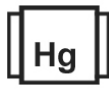
PRODUCT IMAGE



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

3.221%

THC/Capsule : 10.662 mg



Total CBD

0.000%

CBD/Capsule : 0.000 mg



Total Cannabinoids

3.350%

Total Cannabinoids/Capsule
: 11.088 mg

	TOTAL CA	TOTAL CB	TOTAL TH	CBC	CBGA	CBG	THCV	D8-THC	CBDV	CBN	CBDA	CBD	D9-THC	THCA
%	3.3500	ND	3.2210	0.0280	ND	0.0670	ND	ND	ND	0.0340	ND	ND	3.2210	ND
mg/g	33.5000	ND	32.2100	0.2800	ND	0.6700	ND	ND	ND	0.3400	ND	ND	32.2100	ND
LOD	0.0000	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0001	0.0001	0.0010
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%

Filtration PASSED

Analyzed By	Weight	Extraction date	Extracted By
584	1g	03/23/20	584
Analyte			Result
Filtration and Foreign Material			ND
Analysis Method -SOP.T.40.013		Batch Date : 03/23/20 13:35:56	
Analytical Batch -DA011154FIL		Reviewed On - 03/23/20 13:55:56	
Instrument Used : Filtration/Foreign Material Microscope			

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 :
1224	0.9856g	03/23/20 03:03:25	574
Analysis Method -SOP.T.40.020, SOP.T.30.050		Reviewed On - 03/24/20 11:49:34	Batch Date : 03/23/20 12:24:54
Analytical Batch -DA011148POT	Instrument Used : DA-LC-003 CBD		
Reagent	Dilution	Consums. ID	
030520.03	400	180111 280653964 914C4-914AK 928C6-929H	

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

03/25/20

Signed On



Certificate of Analysis

PASSED

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

Sample : DA00323010-008
Harvest/LOT ID: HS-TCF0320202001

Batch# : HS-TCF0320202001
Sampled : 03/23/20
Ordered : 03/23/20

Sample Size Received : 30 units
Total Weight/Volume : 4000
Completed : 03/25/20 **Expires:** 03/25/21
Sample Method : SOP.T.20.010

Page 2 of 5



Terpenes

TESTED

Terpenes	LOD(%)	mg/g	%	Result (%)	Terpenes	LOD(%)	mg/g	%	Result (%)
ALPHA-CEDRENE	0.007	ND	ND		EUCALYPTOL	0.007	ND	ND	
ALPHA-HUMULENE	0.007	ND	ND		ISOBORNEOL	0.007	ND	ND	
ALPHA-PINENE	0.007	ND	ND		HEXAHYDROTHYMOL	0.007	ND	ND	
ALPHA-TERPINENE	0.007	ND	ND		FENCHYL ALCOHOL	0.007	ND	ND	
BETA-MYRCENE	0.007	ND	ND		3-CARENE	0.007	ND	ND	
BETA-PINENE	0.007	ND	ND		CIS-NEROLIDOL	0.007	ND	ND	
BORNEOL	0.013	ND	ND		ISOPULEGOL	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						
SABINENE	0.007	ND	ND						
SABINENE HYDRATE	0.007	ND	ND						
TERPINEOL	0.007	ND	ND						
TERPINOLENE	0.007	ND	ND						
BETA-CARYOPHYLLENE	0.007	< 0.2	< 0.020						
TRANS-NEROLIDOL	0.007	ND	ND						
VALENCENE	0.007	ND	ND						
PULEGONE	0.007	ND	ND						
ALPHA-PHELLANDRENE	0.007	ND	ND						
OCIMENE	0.007	ND	ND						
NEROL	0.007	ND	ND						
LINALOOL	0.007	ND	ND						
LIMONENE	0.007	ND	ND						
GUAIOL	0.007	ND	ND						
GERANYL ACETATE	0.007	ND	ND						
GERANIOL	0.007	ND	ND						
GAMMA-TERPINENE	0.007	ND	ND						
FENCHONE	0.007	ND	ND						
FARNESENE	0.007	< 0.2	< 0.020						
Total (%)		0.000							



Terpenes

TESTED
Analyzed by 1351 **Weight** 0.9778g **Extraction date** 03/23/20 02:03:06 **Extracted By** 1351

Analysis Method -SOP.T.40.090
Analytical Batch -DA011144TER **Reviewed On - 03/24/20 12:25:20**
Instrument Used : GA-Triple Quad GCMS Terp
Running On :
Batch Date : 03/23/20 10:28:07

Reagent	Dilution	Consums. ID
021420.11	10	180111
012120.R13		280653964

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

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Harvest/LOT ID: HS-TCF0320202001

Batch# : HS-TCF0320202001
Sampled : 03/23/20
Ordered : 03/23/20

Sample Size Received : 30 units
Total Weight/Volume : 4000
Completed : 03/25/20 **Expires:** 03/25/21
Sample Method : SOP.T.20.010

Page 3 of 5



Pesticides

PASSED

Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
ABAMECTIN B1A	0.02	ppm	0.3	ND	OXAMYL	0.01	ppm	0.5	ND
ACEPHATE	0.001	ppm	3	ND	PACLOBUTRAZOL	0.01	ppm	0.1	ND
ACEQUINOCYL	0.01	ppm	2	ND	PHOSMET	0.01	ppm	0.2	ND
ACETAMIPRID	0.01	ppm	3	ND	PIPERONYL BUTOXIDE	0.01	ppm	3	ND
ALDICARB	0.02	ppm	0.1	ND	PRALLETHRIN	0.05	ppm	0.4	ND
AZOXYSTROBIN	0.01	ppm	3	ND	PROPICONAZOLE	0.01	ppm	1	ND
BIFENAZATE	0.01	ppm	3	ND	PROPOXUR	0.01	ppm	0.1	ND
BIFENTHRIN	0.01	ppm	0.5	ND	PYRETHRINS	0.01	ppm	1	ND
BOSCALID	0.01	PPM	3	ND	PYRIDABEN	0.01	ppm	3	ND
CAPTAN	0.07	ppm	3	ND	SPINETORAM	0.01	PPM	3	ND
CARBARYL	0.01	ppm	0.5	ND	SPIROMESIFEN	0.01	ppm	3	ND
CARBOFURAN	0.01	ppm	0.1	ND	SPIROTETRAMAT	0.02	ppm	3	ND
CHLORANTRANILIPROLE	0.01	ppm	3	ND	SPIROXAMINE	0.01	ppm	0.1	ND
CHLORFENAPYR	0.01	ppm	0.1	ND	TEBUCONAZOLE	0.01	ppm	1	ND
CHLORMEQUAT CHLORIDE	0.05	ppm	3	ND	THIACLOPRID	0.01	ppm	0.1	ND
CHLORPYRIFOS	0.01	ppm	0.1	ND	THIAMETHOXAM	0.01	ppm	1	ND
CLOFENTEZINE	0.01	ppm	0.5	ND	TOTAL CONTAMINANT LOAD (PESTICIDES)	0	PPM	20	0.131
COUMAPHOS	0.005	ppm	0.1	ND	TOTAL PERMETHRIN	1	ppm	1	ND
CYFLUTHRIN	0.05	ppm	1	ND	TOTAL SPINOSAD	0.01	ppm	3	0.131
CYPERMETHRIN	0.05	ppm	1	ND	TRIFLOXYSTROBIN	0.01	ppm	3	ND
DAMINOZIDE	0.02	ppm	0.1	ND					
DIAZANON	0.01	ppm	0.2	ND					
DICHLORVOS	0.05	ppm	0.1	ND					
DIMETHOATE	0.01	ppm	0.1	ND					
DIMETHOMORPH	0.005	ppm	3	ND					
ETHOPROPHOS	0.01	ppm	0.1	ND					
ETOFENPROX	0.01	ppm	0.1	ND					
ETOXAZOLE	0.01	ppm	1.5	ND					
FENHEXAMID	0.01	ppm	3	ND					
FENOXICARB	0.01	ppm	0.1	ND					
FENPYROXIMATE	0.01	ppm	2	ND					
FIPRONIL	0.02	ppm	0.1	ND					
FLONICAMID	0.01	ppm	2	ND					
FLUDIOXONIL	0.01	ppm	3	ND					
HEXYTHIAZOX	0.01	ppm	2	ND					
IMAZALIL	0.01	ppm	0.1	ND					
IMIDACLOPRID	0.01	ppm	3	ND					
KRESOXIM-METHYL	0.01	ppm	1	ND					
MALATHION	0.01	ppm	2	ND					
METALAXYL	0.01	ppm	3	ND					
METHIOCARB	0.01	ppm	0.1	ND					
METHOMYL	0.01	ppm	0.1	ND					
METHYL PARATHION	0.005	ppm	0.1	ND					
MEVINPHOS	0.01	ppm	0.1	ND					
MYCLOBUTANIL	0.01	ppm	3	ND					
NALED	0.01	ppm	0.5	ND					



Pesticides

PASSED

Analyzed by	Weight	Extraction date	Extracted By
NA	NA	NA	NA
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 -			Reviewed On- 03/23/20 13:55:56
Instrument Used :		Batch Date :	
Running On :			
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.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

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


 Signature

03/25/20

Signed On



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Sample Method : SOP.T.20.010

Page 4 of 5

	Residual Solvents	PASSED
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	Residual Solvents	PASSED
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Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
1,1-DICHLOROETHENE	1	ppm	8	PASS	ND
1,2-DICHLOROETHANE	0.18	ppm	2	PASS	ND
2-PROPANOL	45	ppm	500	PASS	ND
ACETONE	67.5	ppm	750	PASS	ND
ACETONITRILE	5.4	ppm	60	PASS	<24.600
BENZENE	0.09	ppm	1	PASS	ND
BUTANES (N-BUTANE)	96	ppm	5000	PASS	ND
CHLOROFORM	0.18	ppm	2	PASS	ND
DICHLROMETHANE	3.75	ppm	125	PASS	ND
ETHANOL	90	ppm	5000	PASS	1338.560
ETHYL ACETATE	36	ppm	400	PASS	ND
ETHYL ETHER	45	ppm	500	PASS	ND
ETHYLENE OXIDE	0.6	ppm	5	PASS	ND
HEPTANE	45	ppm	5000	PASS	ND
METHANOL	22.5	ppm	250	PASS	ND
N-HEXANE	4.5	ppm	250	PASS	ND
PENTANES (N-PENTANE)	67.5	ppm	750	PASS	ND
PROPANE	120	ppm	5000	PASS	ND
TOLUENE	13.5	ppm	150	PASS	ND
TOTAL XYLENES	13.5	ppm	150	PASS	ND
TRICHLOROETHYLENE	2.25	ppm	25	PASS	ND

Analyzed by	Weight	Extraction date	Extracted By
850	0.0295g	03/23/20 03:03:58	850
Analysis Method -SOP.T.40.032 Analytical Batch -DA011157SOL Instrument Used : Headspace GCMS Running On : Batch Date : 03/23/20 15:18:09			
Reviewed On - 03/24/20 11:33:24			
Reagent	Dilution	Consums. ID	
	1	00279984	
		161291-1	
		24154107	

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-TCF0320202001

Batch# : HS-TCF0320202001
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Sample Method : SOP.T.20.010

Page 5 of 5


Microbials

PASSED

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.	
TOTAL_YEAST_AND_MOLD		<100	

Analysis Method -SOP.T.40.043 / SOP.T.40.044 / SOP.T.40.041
Analytical Batch -DA011127MIC , DA011130TYM **Batch Date :** 03/23/20, 03/23/20
Instrument Used : PathogenDX PCR_Array Scanner,PathogenDX PCR_DA-013,
 PathogenDX PCR_Array Scanner
Running On :

Analyzed by	Weight	Extraction date	Extracted By
513, 513	1.0741g	03/23/20	1082, 513

Reagent	Reagent	Reagent	Consums. ID	Consums. ID
121619.17	122719.130	013120.321	181019-274	50AX26219
121619.11	013120.97	013120.420	SG298A	19323
013120.332	122719.32	121719.18	181207119C	23819111
020420.361	013120.125	022120.84	918C4-918J	190611634
013120.393	013120.223	022120.134	914C4-914AK	
121719.28	020320.63	022120.135	929C6-929H	

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

Analyte	LOD	Units	Result	Action Level (PPM)
AFLATOXIN G2	0.002	ppm	ND	0.02
AFLATOXIN G1	0.002	ppm	ND	0.02
AFLATOXIN B2	0.002	ppm	ND	0.02
AFLATOXIN B1	0.002	ppm	ND	0.02
OCHRATOXIN A+	0.002	ppm	ND	0.02

Analysis Method -SOP.T.30.065, SOP.T.40.065
Analytical Batch -DA011153 | **Reviewed On** - 03/24/20 12:43:23
Instrument Used : DA-LCMS-001_DER
Running On :
Batch Date : 03/23/20 13:26:43

Analyzed by	Weight	Extraction date	Extracted By
585	1g	03/23/20 03:03:01	585

Aflatoxins B1, B2, G1, G2, and Ochratoxins A testing using LC-MS. (Method: SOP.T.30.065 for Sample Preparation and SOP.T40.065 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

Dilution
 50

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.02	PPM	ND	1.5
CADMIUM	0.02	PPM	ND	0.5
LEAD	0.02	PPM	ND	0.5
MERCURY	0.02	PPM	ND	3

Analyzed by	Weight	Extraction date	Extracted By
53	0.2626g	03/24/20 08:03:59	457

Analysis Method -SOP.T.40.050, SOP.T.30.052
Analytical Batch -DA011151HEA | **Reviewed On** - 03/25/20 08:04:48
Instrument Used : ICPMS-2030
Running On :
Batch Date : 03/23/20 13:12:21

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.