



Certificate of Analysis

Apr 02, 2020 | CURALEAF FLORIDA LLC

19000 SW 192 STREET
MIAMI, FL, 33187, US



Sample: DA00330005-008
Harvest/Lot ID: HS-TVF0329202003
Cultivation Facility: Miami Cultivation
Processing Facility: Homestead Processing
Seed to Sale #3080 9329 7029 5522
Batch Date :03/29/20
Batch#: HS-TVF0329202003
Sample Size Received: 7 gram
Total Weight/Volume: 1258 gram
Retail Product Size: 0.5 gram gram
Ordered : 03/30/20
sampled : 03/30/20
Completed: 04/02/20
Sampling Method: SOP.T.20.010

PASSED

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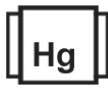
PRODUCT IMAGE



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

82.568%

THC/Container :412.840 mg



Total CBD

0.234%

CBD/Container :1.170 mg



Total Cannabinoids

88.202%

Total Cannabinoids/Container
:441.010 mg

	TOTAL CA	TOTAL CB	TOTAL TH	CBC	CBGA	CBG	THCV	D8-THC	CBDV	CBN	CBDA	CBD	D9-THC	THCA
%	88.2020	0.2340	82.5680	1.7780	ND	1.5700	1.3819	ND	ND	0.6700	ND	0.2340	82.5680	ND
mg/g	882.0200	2.3400	825.6799	17.7800	ND	15.7000	13.8200	ND	ND	6.7000	ND	2.3400	825.6799	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: 584
Analyze: 584
Filtration and Foreign Material
Analysis Method -SOP.T.40.013
Analytical Batch -DA011306FIL
Instrument Used : Filtration/Foreign Material Microscope
Extraction date: 03/30/20
Extracted By: 584
LOD: 0
Result: ND
Batch Date : 03/30/20 13:55:42
Reviewed On - 03/30/20 13:56:26
Reviewed On : 04/02/20 11:20:14
Batch Date : 04/01/20 09:15:21

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	0.1015g	04/01/20 11:04:10	965
Analysis Method -SOP.T.40.020, SOP.T.30.050		Reviewed On - 04/02/20 11:20:14	Batch Date : 04/01/20 09:15:21
Analytical Batch -DA011349POT	Instrument Used : DA-LC-003 CBD		
Reagent	Dilution	Consums. ID	
032320.11	400	180111	
033120.R19		280653964	
033120.R18		914C4-914AK	
		929C6-929H	

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

04/02/20

Signed On



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PASSED

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

Sample : DA00330005-008
Harvest/LOT ID: HS-TVF0329202003

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Completed : 04/02/20 **Expires:** 04/02/21
Sample Method : SOP.T.20.010

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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	0.426	0.042		ISOBORNEOL	0.007	ND	ND	
ALPHA-PINENE	0.007	7.770	0.777		HEXAHYDROTHYMOL	0.007	ND	ND	
ALPHA-TERPINENE	0.007	ND	ND		FENCHYL ALCOHOL	0.007	ND	ND	
BETA-MYRCENE	0.007	10.037	1.003		3-CARENE	0.007	ND	ND	
BETA-PINENE	0.007	0.357	0.035		CIS-NEROLIDOL	0.007	ND	ND	
BORNEOL	0.013	ND	ND		ISOPULEGOL	0.007	ND	ND	
CAMPHENE	0.007	< 0.2	< 0.020						
CAMPHOR	0.013	ND	ND						
CARYOPHYLLENE OXIDE	0.007	0.232	0.023						
CEDROL	0.007	ND	ND						
ALPHA-BISABOOL	0.007	5.092	0.509						
SABINENE	0.007	ND	ND						
SABINENE HYDRATE	0.007	ND	ND						
TERPINEOL	0.007	ND	ND						
TERPINOLENE	0.007	4.821	0.482						
BETA-CARYOPHYLLENE	0.007	6.705	0.670						
TRANS-NEROLIDOL	0.007	< 0.2	< 0.020						
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	13.787	1.378						
LIMONENE	0.007	16.994	1.699						
GUAJOL	0.007	0.358	0.035						
GERANYL ACETATE	0.007	ND	ND						
GERANYL	0.007	ND	ND						
GAMMA-TERPINENE	0.007	ND	ND						
FENCHONE	0.007	ND	ND						
FARNESENE	0.007	ND	ND						
Total (%)		6.658							



Terpenes

TESTED
Analyzed by 1351 **Weight** 0.9774g **Extraction date** 03/30/20 11:03:51 **Extracted By** 1351

Analysis Method -SOP.T.40.090
Analytical Batch -DA011265TER
Instrument Used : DA-GCMS-006
Running On :
Batch Date : 03/27/20 08:40:07
Reviewed On - 03/31/20 14:00:59

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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<div>  Pesticides </div>					<div> PASSED </div>				
Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
ABAMECTIN B1A	0.01	ppm	0.1	ND	OXAMYL	0.05	ppm	0.5	ND
ACEPHATE	0.01	ppm	0.1	ND	PACLOBUTRAZOL	0.01	ppm	0.1	ND
ACEQUINOCYL	0.01	ppm	0.1	ND	PHOSMET	0.01	ppm	0.1	ND
ACETAMIPRID	0.01	ppm	0.1	ND	PIPERONYL BUTOXIDE	0.1	ppm	3	ND
ALDICARB	0.01	ppm	0.1	ND	PRALLETHRIN	0.01	ppm	0.1	ND
AZOXYSTROBIN	0.01	ppm	0.1	ND	PROPICONAZOLE	0.01	ppm	0.1	ND
BIFENAZATE	0.01	ppm	0.1	ND	PROPOXUR	0.01	ppm	0.1	ND
BIFENTHRIN	0.01	ppm	0.1	ND	PYRETHRINS	0.05	ppm	0.5	ND
BOSCALID	0.01	PPM	0.1	ND	PYRIDABEN	0.02	ppm	0.2	ND
CAPTAN	0.07	ppm	0.7	ND	SPINETORAM	0.02	PPM	0.2	ND
CARBARYL	0.05	ppm	0.5	ND	SPIROMESIFEN	0.01	ppm	0.1	ND
CARBOFURAN	0.01	ppm	0.1	ND	SPIROTETRAMAT	0.01	ppm	0.1	ND
CHLORANTRANILIPROLE	0.1	ppm	1	ND	SPIROXAMINE	0.01	ppm	0.1	ND
CHLORFENAPYR	0.01	ppm	0.1	ND	TEBUCONAZOLE	0.01	ppm	0.1	ND
CHLORMEQUAT CHLORIDE	0.05	ppm	1	ND	THIACLOPRID	0.01	ppm	0.1	ND
CHLORPYRIFOS	0.01	ppm	0.1	ND	THIAMETHOXAM	0.05	ppm	0.5	ND
CLOFENTEZINE	0.02	ppm	0.2	ND	TOTAL CONTAMINANT LOAD (PESTICIDES)	0	PPM	5	ND
COUMAPHOS	0.01	ppm	0.1	ND	TOTAL PERMETHRIN	0.01	ppm	0.1	ND
CYFLUTHRIN	0.05	ppm	0.5	ND	TOTAL SPINOSAD	0.01	ppm	0.1	ND
CYPERMETHRIN	0.05	ppm	0.5	ND	TRIFLOXYSTROBIN	0.01	ppm	0.1	ND
DAMINOZIDE	0.01	ppm	0.1	ND	<div>  Pesticides PASSED </div>				
DIAZANON	0.01	ppm	0.1	ND	<div> Analyzed by 585 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 - DA011301PES Instrument Used - DA-LCMS-001_DER Running On : Reagent 032120.16 032620.811 032320.817 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. </div>				
DICHLORVOS	0.01	ppm	0.1	ND	<div> Weight 0.9331g Extraction date 03/30/20 12:03:57 Extracted By 585 Reviewed On- 03/30/20 13:56:26 Batch Date : 03/30/20 11:28:28 Dilution 10 Consums. ID 180111 280653964 </div>				
DIMETHOATE	0.01	ppm	0.1	ND					
DIMETHOMORPH	0.02	ppm	0.2	ND					
ETHOPROPHOS	0.01	ppm	0.1	ND					
ETOFENPROX	0.01	ppm	0.1	ND					
ETOXAZOLE	0.01	ppm	0.1	ND					
FENHEXAMID	0.01	ppm	0.1	ND					
FENOXYCARB	0.01	ppm	0.1	ND					
FENPYROXIMATE	0.01	ppm	0.1	ND					
FIPRONIL	0.01	ppm	0.1	ND					
FLONICAMID	0.01	ppm	0.1	ND					
FLUDIOXONIL	0.01	ppm	0.1	ND					
HEXYTHIAZOX	0.01	ppm	0.1	ND					
IMAZALIL	0.01	ppm	0.1	ND					
IMIDACLOPRID	0.04	ppm	0.4	ND					
KRESOXIM-METHYL	0.01	ppm	0.1	ND					
MALATHION	0.02	ppm	0.2	ND					
METALAXYL	0.01	ppm	0.1	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	0.1	ND					
NALED	0.025	ppm	0.25	ND					

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Jorge Segredo
 Lab Director

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 17025:2017 Accreditation
 PJLA-Testing 97164


 Signature

04/02/20

Signed On



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Sample Method : SOP.T.20.010

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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
1,1-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	ND
BENZENE	0.09	ppm	1	PASS	ND
BUTANES (N-BUTANE)	96	ppm	5000	PASS	ND
CHLOROFORM	0.18	ppm	2	PASS	ND
DICHLOROMETHANE	3.75	ppm	125	PASS	ND
ETHANOL	90	ppm	5000	PASS	ND
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 584	Weight 0.0255g	Extraction date 03/30/20 12:03:22	Extracted By 584
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Analysis Method -SOP.T.40.032 Analytical Batch -DA011305SOL Instrument Used : Headspace GCMS Running On : Batch Date : 03/30/20 12:32:55	Reviewed On - 03/31/20 14:41:40
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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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	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.	
TOTAL_YEAST_AND_MOLD		121	

Analysis Method -SOP.T.40.043 / SOP.T.40.044 / SOP.T.40.041
Analytical Batch -DA011292MIC , DA011304TYM **Batch Date :** 03/30/20, 03/30/20
Instrument Used : PathogenDX PCR_Array Scanner, PathogenDX PCR_Array Scanner
Running On :

Analyzed by	Weight	Extraction date	Extracted By
513, 513	1.0538g	03/30/20	357, 513

Reagent	Reagent	Reagent	Consums. ID	Consums. ID
012120.03	022120.286	013120.94	181019-274	50AX26219
121619.11	013120.330	013120.130	SG298A	19323
121719.85	022120.339	022120.176	205805	23819111
020420.365	013120.412	013120.142	181207119C	190611634
013120.411	013120.413	022120.95	914C4-914AK	
121719.28	022120.236	022120.144	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
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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 -DA011302MYC | **Reviewed On** - 03/31/20 20:13:37
Instrument Used : DA-LCMS-001_DER
Running On :
Batch Date : 03/30/20 11:29:50

Analyzed by	Weight	Extraction date	Extracted By
585	1g	03/30/20 12:03:58	585

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	Reagent	Dilution
032420.R06	033020.R05	50
033020.R01	033020.R04	
033020.R02	111319.02	
033020.R03		
033020.R06		
033020.R07		

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.02	PPM	ND	0.2
CADMIUM	0.02	PPM	ND	0.2
LEAD	0.05	PPM	ND	0.5
MERCURY	0.02	PPM	ND	0.2

Analyzed by	Weight	Extraction date	Extracted By
53	0.2613g	03/30/20 12:03:30	457

Analysis Method -SOP.T.40.050, SOP.T.30.052
Analytical Batch -DA011303HEA | **Reviewed On** - 03/31/20 07:56:43
Instrument Used : ICPMS-2030
Running On :
Batch Date : 03/30/20 11:35:14

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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