



Certificate of Analysis

Feb 14, 2020 | CURALEAF FLORIDA LLC

19000 SW 192 STREET
MIAMI, FL, 33187, US

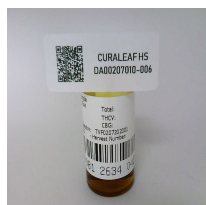


Sample: DA00207010-006
Harvest/Lot ID: HS-TVF0207202001
Cultivation Facility: Miami Cultivation
Processing Facility : Homestead Processing
Seed to Sale #6870 0081 2634 0428
Batch Date : 02/07/20
Batch#: HS-TVF0207202001
Sample Size Received: 7.0 gram
Total Weight/Volume: 535.5 gram
Retail Product Size: 0.5 gram gram
Ordered : 02/07/20
sampled : 02/07/20
Completed: 02/14/20
Sampling Method: SOP Client Method

PASSED

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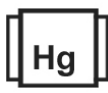
PRODUCT IMAGE



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

84.455%

THC/Container : 422.28 mg



Total CBD

0.620%

CBD/Container : 3.10 mg



Total Cannabinoids

89.393%

Total Cannabinoids / Container
: 0.000

	TOTAL CA	TOTAL CB	TOTAL TH	CBC	CBGA	CBG	THCV	DB-THC	CBDV	CBN	CBDA	CBD	DB-THC	THCA
%	89.3930	0.6200	84.4550	1.0770	0.3860	1.8940	0.4610	ND	ND	0.5000	ND	0.6200	84.4550	ND
mg/g	893.9300	6.2000	844.5500	10.7700	3.8600	18.9400	4.6100	ND	ND	5.0000	ND	6.2000	844.5500	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
Analyte: Filtration and Foreign Material
Weight: 1g
Extraction date: 02/07/20
Extracted By: 584
LOD: 0
Result: ND
Batch Date: 02/07/20 10:02:23

Analysis Method -SOP.T.40.013
Analytical Batch -DA010070FIL
Instrument Used :

This includes but is not limited to hair, insects, feces, packaging contaminants, and manufacturing waste and by-products. An SH-2B/T Stereomicroscope is used for inspection.

Cannabinoid Profile Test

Analyzed by: 1224
Weight: 0.1050g
Extraction date: 02/07/20 04:02:55
Extracted By: 574
Analysis Method -SOP.T.40.020, SOP.T.30.050
Instrument Used: DA-LC-003
Batch Date: 02/07/20 09:32:33

Reagent	Dilution	Consums. ID
020420.R14 020420.R12 020420.R10 020420.R11	400	76124-662 SFN-8X-1025 849C4-849AK 840C6-840H

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. LOD for all cannabinoids is 1 mg/L).

Label Claim

Analyte: THC/SERVING
LOD: 10000
Units: mg
Result: 84.455
PASSED

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Jorge Segredo
Lab Director

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


Signature

02/14/20

Signed On



Certificate of Analysis

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

Sample : DA00207010-006
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Batch# : HS-TVF0207202001
Sampled : 02/07/20
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Completed : 02/14/20 **Expires:** 02/14/21
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		EUCALYPTOL	0.007	ND	ND	
ALPHA-HUMULENE	0.007	1.043	0.104		ISOBORNEOL	0.007	< 0.2	< 0.020	
ALPHA-PINENE	0.007	0.812	0.081		HEXAHYDROTHYMOL	0.007	< 0.2	< 0.020	
ALPHA-TERPINENE	0.007	0.516	0.051		FENCHYL ALCOHOL	0.007	ND	ND	
BETA-MYRCENE	0.007	11.480	1.148		3-CARENE	0.007	ND	ND	
BETA-PINENE	0.007	0.697	0.069		CIS-NEROLIDOL	0.007	ND	ND	
BORNEOL	0.013	ND	ND		ISOPULEGOL	0.007	< 0.2	< 0.020	
CAMPHENE	0.007	0.258	0.025						
CAMPHOR	0.013	ND	ND						
CARYOPHYLLENE OXIDE	0.007	< 0.2	< 0.020						
CEDROL	0.007	ND	ND						
ALPHA-BISABOOL	0.007	0.317	0.031						
SABINENE	0.007	ND	ND						
SABINENE HYDRATE	0.007	ND	ND						
TERPINEOL	0.007	1.151	0.115						
TERPINOLENE	0.007	9.379	0.937						
BETA-CARYOPHYLLENE	0.007	4.535	0.453						
TRANS-NEROLIDOL	0.007	0.295	0.029						
VALENCENE	0.007	ND	ND						
PULEGONE	0.007	< 0.2	< 0.020						
ALPHA-PHELLANDRENE	0.007	2.880	0.288						
OCIMENE	0.007	ND	ND						
NEROL	0.007	< 0.2	< 0.020						
LINALOOL	0.007	2.113	0.211						
LIMONENE	0.007	1.649	0.164						
GUAJOL	0.007	ND	ND						
GERANYL ACETATE	0.007	< 0.2	< 0.020						
GERANIOL	0.007	< 0.2	< 0.020						
GAMMA-TERPINENE	0.007	< 0.2	< 0.020						
FENCHONE	0.007	ND	ND						
FARNESENE	0.007	ND	ND						
Total (%)		3.536							



Terpenes

TESTED
Analyzed by 1351 **Weight** 0.9958g **Extraction date** 02/07/20 12:02:00 **Extracted By** 1351

Analysis Method -SOP.T.40.090
Analytical Batch -DA010062TER
Instrument Used : Liquid Injection GCMS QP2010
Running On :
Batch Date : 02/07/20 08:48:55

Reagent	Dilution	Consums. ID
052119.04	10	180711 280630187

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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Pesticides

PASSED

Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
ABAMECTIN B1A	0.02	ppm	0.1	ND	PRALLETHRIN	0.05	ppm	0.1	ND
ACEPHATE	0.001	ppm	0.1	ND	PROPICONAZOLE	0.01	ppm	0.1	ND
ACEQUINOCYL	0.01	ppm	0.1	ND	PROPOXUR	0.01	ppm	0.1	ND
ACETAMIPRID	0.01	ppm	0.1	ND	PYRETHRINS	0.01	ppm	0.5	ND
ALDICARB	0.02	ppm	0.1	ND	PYRIDABEN	0.01	ppm	0.2	ND
AZOXYSTROBIN	0.01	ppm	0.1	ND	SPINETORAM	0.01	PPM	0.2	ND
BIFENAZATE	0.01	ppm	0.1	ND	SPIROMESIFEN	0.01	ppm	0.1	ND
BIFENTHRIN	0.01	ppm	0.1	ND	SPIROTETRAMAT	0.02	ppm	0.1	ND
BOSCALID	0.01	PPM	0.1	ND	SPIROXAMINE	0.01	ppm	0.1	ND
CARBARYL	0.01	ppm	0.5	ND	TEBUCONAZOLE	0.01	ppm	0.1	ND
CARBOFURAN	0.01	ppm	0.1	ND	THIACLOPRID	0.01	ppm	0.1	ND
CHLORANTRANILIPROLE	0.01	ppm	1	ND	THIAMETHOXAM	0.01	ppm	0.5	ND
CHLORFENAPYR	0.01	ppm	0.1	ND	TOTAL CONTAMINANT LOAD (PESTICIDES)	0.1	PPM	5	ND
CHLORPYRIFOS	0.01	ppm	0.1	ND	TOTAL PERMETHRIN	1	ppm	0.1	ND
CLOFENTEZINE	0.01	ppm	0.2	ND	TOTAL SPINOSAD	1	ppm	0.1	ND
COUMAPHOS	0.005	ppm	0.1	ND	TRIFLOXYSTROBIN	0.01	ppm	0.1	ND
CYPERMETHRIN	0.01	ppm	0.5	ND	CAPTAN *	0.005	ppm	0.7	ND
DAMINOZIDE	0.02	ppm	0.1	ND	CHLORDANE *	0.005	ppm	0.1	ND
DIAZANON	0.01	ppm	0.1	ND					
DICHLORVOS	0.05	ppm	0.1	ND					
DIMETHOATE	0.01	ppm	0.1	ND					
DIMETHOMORPH	0.005	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	0.02	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	0.01	ppm	0.4	ND					
KRESOXIM-METHYL	0.01	ppm	0.1	ND					
MALATHION	0.01	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					
MEVINPHOS	0.01	ppm	0.1	ND					
MYCLOBUTANIL	0.01	ppm	0.1	ND					
NALED	0.01	ppm	0.25	ND					
OXAMYL	0.01	ppm	0.5	ND					
PACLOBUTRAZOL	0.01	ppm	0.1	ND					
PHOSMET	0.01	ppm	0.1	ND					
PIPERONYL BUTOXIDE	0.01	ppm	3	ND					



Pesticides

PASSED
Analyzed by 56 , **Weight** 0.9905g **Extraction date** 02/07/20 03:02:35 **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 : DA010064PES

Instrument Used : LCMS E-SHI-039

Running On :
Batch Date : 02/07/20 09:30:10

Reagent

 111219-30
 020520-809
 020726-801

Dilution

10

Consums. ID

180711

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

02/14/20

Signed On



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Sample : DA00207010-006
Harvest/LOT ID: HS-TVF0207202001

Batch# : HS-
 TVF0207202001
Sampled : 02/07/20
Ordered : 02/07/20

Sample Size Received : 7.0 gram
Total Weight/Volume : 535.5 gram
Completed : 02/14/20 **Expires:** 02/14/21
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
BUTANES (N-BUTANE)	96	ppm	5000	PASS	ND
CHLOROFORM	0.18	ppm	2	PASS	ND
1,2-DICHLOROETHANE	0.18	ppm	2	PASS	ND
1,1-DICHLOROETHENE	1	ppm	8	PASS	ND
DICHLOROMETHANE	3.75	ppm	125	PASS	ND
ETHANOL	90	ppm	5000	PASS	2888.307
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
ACETONE	67.5	ppm	750	PASS	<140.000
PROPANE	120	ppm	5000	PASS	ND
ACETONITRILE	5.4	ppm	60	PASS	ND
TOLUENE	13.5	ppm	150	PASS	ND
BENZENE	0.09	ppm	1	PASS	ND
TOTAL XYLENES	13.5	ppm	150	PASS	ND
2-PROPANOL	45	ppm	500	PASS	ND
TRICHLOROETHYLENE	2.25	ppm	25	PASS	ND

Analyzed by	Weight	Extraction date	Extracted By
850	0.0215g	02/07/20 02:02:18	850

Analysis Method -SOP.T.40.032
Analytical Batch -DA010084SOL
Instrument Used : Headspace GCMS 2
Running On :
Batch Date : 02/07/20 13:42:41

Reagent	Dilution	Consums. ID
	1	00276446 161040-1 24152436

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 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.	
TOTAL_YEAST_AND_MOLD		not present in 1 gram.	

Analysis Method -SOP.T.40.043 / SOP.T.40.044 / SOP.T.40.041
Analytical Batch -DA010063MIC Batch Date : 02/07/20, 02/07/20
Instrument Used : PathogenDX PCR_Array Scanner, PathogenDX PCR_Array Scanner
Running On :

Analyzed by	Weight	Extraction date	Extracted By
513,	1.0745g	02/07/20	1082,

Reagent	Consums. ID	Consums. ID
020620.R10	181019-274	50AX26219
	SG298A	190611634
	181207119C	19323
	918C4	23819111
	923C4-923AK	
	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 -DA010066
Instrument Used : LCMS E-SHI-039
Running On :
Batch Date : 02/07/20 09:39:54

Analyzed by	Weight	Extraction date	Extracted By
56	1g	02/07/20 03:02:20	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
020320.R22	012920.R03	50
020620.R09	020520.R01	
012920.R05		
020620.R01		
020520.R10		
020620.R02		

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	<0.030	0.5
MERCURY	0.01	PPM	ND	0.2

Analyzed by	Weight	Extraction date	Extracted By
53	0.2506g	02/07/20 01:02:19	457

Analysis Method -SOP.T.40.050, SOP.T.30.052
Analytical Batch -DA010061HEA
Instrument Used : ICPMS-2030 B
Running On :
Batch Date : 02/07/20 08:20:09

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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