



Certificate of Analysis

Feb 18, 2020 | CURALEAF FLORIDA LLC

19000 SW 192 STREET
MIAMI, FL, 33187, US



Sample: DA00214016-001
Harvest/Lot ID: HS-TVF0213202001
Cultivation Facility: Miami Cultivation
Processing Facility: Homestead Processing
Seed to Sale #1889 7124 3052 7818
Batch Date :02/13/20
Batch#: HS-TVF0213202001
Sample Size Received: 7.0 gram
Total Weight/Volume: 2000 gram
Retail Product Size: 0.5 gram gram
Ordered : 02/14/20
sampled : 02/14/20
Completed: 02/18/20
Sampling Method: SOP.T.20.010

PASSED

Page 1 of 5

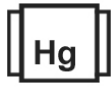
PRODUCT IMAGE



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

CANNABINOID RESULTS



Total THC

77.389%

THC/Container :386.95 mg



Total CBD

0.646%

CBD/Container :3.23 mg



Total Cannabinoids

82.456%

Total Cannabinoids / Container
:0.000

	TOTAL CA	TOTAL CB	TOTAL TH	CBC	CBGA	CBG	THCV	D8-THC	CBDV	CBN	CBDA	CBD	D9-THC	THCA
%	82.4560	0.6460	77.3890	1.0060	ND	1.8870	0.5400	0.1670	ND	0.8020	0.1390	0.5250	77.3890	ND
mg/g	824.5599	6.4600	773.8900	10.0600	ND	18.8700	5.4000	1.6700	ND	8.0200	1.3899	5.2500	773.8900	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: -DA010267FIL
Instrument Used:
Extraction date: 02/14/20
Extracted By: 584
LOD: 0
Result: ND
Batch Date: 02/14/20 11:49:39
Reviewed On: 02/14/20 13:32:48

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	0.1029g	02/14/20 12:02:44	965
Analysis Method -SOP.T.40.020, SOP.T.30.050		Reviewed On - 02/17/20 11:24:36	Batch Date : 02/14/20 09:31:17
Analysical Batch -DA010244POT	Instrument Used : DA-LC-003		
Reagent	Dilution	Consums. ID	
123019.R09	400	181205 SFN-8X-1025 849CA-849AK 840CG-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	LOD	Units	Result
THC/SERVING	10000	mg	77.389

PASSED

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Jorge Segredo
Lab Director

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


Signature

02/18/20

Signed On



Certificate of Analysis

PASSED

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

Sample : DA00214016-001
Harvest/LOT ID: HS-TVF0213202001
Batch# : HS-TVF0213202001
Sampled : 02/14/20
Ordered : 02/14/20

Sample Size Received : 7.0 gram
Total Weight/Volume : 2000 gram
Completed : 02/18/20 **Expires:** 02/18/21
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	3.250	0.325		ISOBORNEOL	0.007	ND	ND	
ALPHA-PINENE	0.007	1.778	0.177		HEXAHYDROTHYMOL	0.007	ND	ND	
ALPHA-TERPINENE	0.007	ND	ND		FENCHYL ALCOHOL	0.007	ND	ND	
BETA-MYRCENE	0.007	13.094	1.309		3-CARENE	0.007	ND	ND	
BETA-PINENE	0.007	2.012	0.201		CIS-NEROLIDOL	0.007	ND	ND	
BORNEOL	0.013	0.412	0.041		ISOPULEGOL	0.007	ND	ND	
CAMPHENE	0.007	0.639	0.063						
CAMPHOR	0.013	ND	ND						
CARYOPHYLLENE OXIDE	0.007	0.691	0.069						
CEDROL	0.007	ND	ND						
ALPHA-BISABOOL	0.007	< 0.2	< 0.020						
SABINENE	0.007	ND	ND						
SABINENE HYDRATE	0.007	ND	ND						
TERPINEOL	0.007	3.104	0.310						
TERPINOLENE	0.007	0.603	0.060						
BETA-CARYOPHYLLENE	0.007	9.820	0.982						
TRANS-NEROLIDOL	0.007	0.265	0.026						
VALENCENE	0.007	ND	ND						
PULEGONE	0.007	ND	ND						
ALPHA-PHELLANDRENE	0.007	0.618	0.061						
OCIMENE	0.007	ND	ND						
NEROL	0.007	0.274	0.027						
LINALOOL	0.007	3.138	0.313						
LIMONENE	0.007	11.529	1.152						
GUAJOL	0.007	ND	ND						
GERANYL ACETATE	0.007	ND	ND						
GERANIOL	0.007	0.645	0.064						
GAMMA-TERPINENE	0.007	ND	ND						
FENCHONE	0.007	ND	ND						
FARNESENE	0.007	< 0.2	< 0.020						
Total (%)		5.188							



Terpenes

TESTED
Analyzed by 1351 **Weight** 0.9898g **Extraction date** 02/14/20 12:02:10 **Extracted By** 1351

Analysis Method -SOP.T.40.090
Analytical Batch -DA010172TER **Reviewed On - 02/17/20 16:30:35**
Instrument Used : Liquid Injection GCMS QP2020 (E-SHI-128)
Running On :
Batch Date : 02/12/20 09:29:06

Reagent	Dilution	Consums. ID
052119.04	10	180711 280650306

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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Harvest/LOT ID: HS-TVF0213202001

Batch# : HS-TVF0213202001
Sampled : 02/14/20
Ordered : 02/14/20

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Total Weight/Volume : 2000 gram
Completed : 02/18/20 **Expires:** 02/18/21
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	0.1	ND	PROPOXUR	0.01	ppm	0.1	ND
ACEPHATE	0.001	ppm	0.1	ND	PYRETHRINS	0.01	ppm	0.5	ND
ACEQUINOCYL	0.01	ppm	0.1	ND	PYRIDABEN	0.01	ppm	0.2	ND
ACETAMIPRID	0.01	ppm	0.1	ND	SPINETORAM	0.01	PPM	0.2	ND
ALDICARB	0.02	ppm	0.1	ND	SPIROMESIFEN	0.01	ppm	0.1	ND
AZOXYSTROBIN	0.01	ppm	0.1	ND	SPIROTETRAMAT	0.02	ppm	0.1	ND
BIFENAZATE	0.01	ppm	0.1	ND	SPIROXAMINE	0.01	ppm	0.1	ND
BIFENTHRIN	0.01	ppm	0.1	ND	TEBUCONAZOLE	0.01	ppm	0.1	ND
BOSCALID	0.01	PPM	0.1	ND	THIACLOPRID	0.01	ppm	0.1	ND
CARBARYL	0.01	ppm	0.5	ND	THIAMETHOXAM	0.01	ppm	0.5	ND
CARBOFURAN	0.01	ppm	1	ND	TOTAL CONTAMINANT LOAD (PESTICIDES)	0.1	PPM	5	ND
CHLORANTRANILIPROLE	0.01	ppm	1	ND	TOTAL PERMETHRIN	1	ppm	0.1	ND
CHLORPYRIFOS	0.01	ppm	0.1	ND	TOTAL SPINOSAD	1	ppm	0.1	ND
CLOFENTEZINE	0.01	ppm	0.2	ND	TRIFLOXYSTROBIN	0.01	ppm	0.1	ND
COUMAPHOS	0.005	ppm	0.1	ND					
DAMINOZIDE	0.02	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					
PRALLETHRIN	0.05	ppm	0.1	ND					
PROPICONAZOLE	0.01	ppm	0.1	ND					



Pesticides

PASSED
Analyzed by 56 **Weight** 1.0001g **Extraction date** 02/14/20 01:02:22 **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 - DA010261PES

Reviewed On- 02/14/20 13:32:48

Instrument Used : LCMS E-SHI-039
Running On :

Batch Date : 02/14/20 11:47:17

Reagent 020120.25 021420.802 021420.803 **Dilution** 10 **Consums. ID** 846C7-8323

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

02/18/20

Signed On



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Sample : DA00214016-001
Harvest/LOT ID: HS-TVF0213202001
Batch# : HS-TVF0213202001
Sampled : 02/14/20
Ordered : 02/14/20

Sample Size Received : 7.0 gram
Total Weight/Volume : 2000 gram
Completed : 02/18/20 **Expires:** 02/18/21
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
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	ND
ETHYL ACETATE	36	ppm	400	PASS	<140.000
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	<140.000
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 850	Weight 0.0211g	Extraction date 02/14/20 02:02:53	Extracted By 850
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Analysis Method -SOP.T.40.032
Analytical Batch -DA010276SOL
Instrument Used : Headspace GCMS
Running On :
Batch Date : 02/14/20 14:34:18

Reviewed On - 02/17/20 14:49:37

Reagent	Dilution	Consums. ID
	1	00268767 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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Email: erick.ramirez@curaleaf.com

Sample : DA00214016-001
Harvest/LOT ID: HS-TVF0213202001
Batch# : HS-TVF0213202001
Sampled : 02/14/20
Ordered : 02/14/20

Sample Size Received : 7.0 gram
Total Weight/Volume : 2000 gram
Completed : 02/18/20 Expires: 02/18/21
Sample Method : SOP.T.20.010

Page 5 of 5

	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 -DA010247MIC Batch Date : 02/14/20, 02/14/20
Instrument Used : PathogenDX PCR Array Scanner,PathogenDX PCR_119, PathogenDX PCR Array Scanner
Running On :

Analyzed by	Weight	Extraction date	Extracted By
513,	1.0965g	02/14/20	513,

Reagent	Reagent	Reagent	Consums. ID	Consums. ID
021320.R13	122719.65	122719.85	181019-274	50AX26219
121619.08	122719.66		SG298A	19323
013120.38	013120.63		181207119C	23819111
020420.371	013120.66		918C4	190611634
020420.377	013120.301		923C4-923AK	
122719.60	122719.21		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 -DA010262 | Reviewed On - 02/17/20 17:12:36
Instrument Used : LCMS E-SHI-039
Running On :
Batch Date : 02/14/20 11:47:23

Analyzed by	Weight	Extraction date	Extracted By
56	1g	NA	NA

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
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Reagent	Dilution
021320.R12	50
021220.R17	
021220.R15	
021020.R10	
012920.R03	
020520.R01	

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

Analyzed by	Weight	Extraction date	Extracted By
53	0.2587g	02/14/20 01:02:39	457

Analysis Method -SOP.T.40.050, SOP.T.30.052
Analytical Batch -DA010237HEA | Reviewed On - 02/17/20 14:46:37
Instrument Used : ICPMS-2030 B
Running On :
Batch Date : 02/14/20 08:32:51

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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