



Certificate of Analysis

Apr 28, 2020 | CURALEAF FLORIDA LLC

19000 SW 192 STREET
MIAMI, FL, 33187, US



Sample: DA00424010-009

Harvest/Lot ID: HS-TVF0424202004

Cultivation Facility: Miami Cultivation

Processing Facility: Homestead Processing

Seed to Sale #5670 6763 8741 1433

Batch Date : N/A

Batch#: HS-TVF0424202004

Sample Size Received: 7.0 gram

Total Weight/Volume: 1000 gram

Retail Product Size: 0.5 gram gram

Ordered : 04/24/20

sampled : 04/24/20

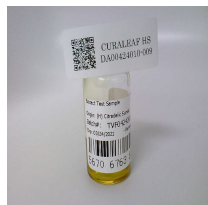
Completed: 04/28/20

Sampling Method: SOP.T.20.010

PASSED

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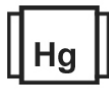
PRODUCT IMAGE



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

83.838%

THC/Container : 419.190 mg



Total CBD

1.917%

CBD/Container : 9.588 mg



Total Cannabinoids

89.841%

Total Cannabinoids/Container : 450.510 mg

	TOTAL CA	TOTAL CB	TOTAL TH	CBC	CBGA	CBG	THCV	DB-THC	CBDV	CBN	CBDA	CBD	D9-THC	THCA
%	89.8409	1.9170	83.8379	1.1500	ND	1.9060	0.6230	<0.300	ND	0.3790	0.2230	1.7220	83.8379	ND
mg/g	898.4100	19.1700	838.3790	11.5000	ND	19.0600	6.2300	<0.300	ND	3.7900	2.2300	17.2200	838.3800	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
Weight: 1g
Extraction date: 04/24/20
Extracted By: 584
Analyte: Filtration and Foreign Material
Analysis Method: SOP.T.40.013
Analytical Batch: DA011942FIL
Instrument Used: Filtration/Foreign Material Microscope
Batch Date: 04/24/20 11:51:42
Reviewed On: 04/24/20 14:07:14

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: 450
Weight: 0.1056g
Extraction date: 04/24/20 01:04:36
Analysis Method: SOP.T.40.020, SOP.T.30.050
Analytical Batch: DA011944POT
Instrument Used: DA-LC-003 CBD
Extracted By: 965
Batch Date: 04/24/20 12:15:25
Reviewed On: 04/27/20 10:43:26

Reagent: 032320.25
Dilution: 400
Consums. ID: 180111
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

04/28/20

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 : DA00424010-009
Harvest/LOT ID: HS-TVF0424202004

Batch# : HS-TVF0424202004
Sampled : 04/24/20
Ordered : 04/24/20

Sample Size Received : 7.0 gram
Total Weight/Volume : 1000 gram
Completed : 04/28/20 **Expires:** 04/28/21
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	1.295	0.129		ISOBORNEOL	0.007	ND	ND	
ALPHA-PINENE	0.007	1.818	0.181		HEXAHYDROTHYMOL	0.007	ND	ND	
ALPHA-TERPINENE	0.007	0.206	0.020		FENCHYL ALCOHOL	0.007	ND	ND	
BETA-MYRCENE	0.007	25.535	2.553		3-CARENE	0.007	< 0.2	< 0.020	
BETA-PINENE	0.007	1.570	0.157		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	< 0.2	< 0.020						
CEDROL	0.007	ND	ND						
ALPHA-BISABOOL	0.007	0.913	0.091						
SABINENE	0.007	ND	ND						
SABINENE HYDRATE	0.007	ND	ND						
TERPINEOL	0.007	0.587	0.058						
TERPINOLENE	0.007	6.960	0.696						
BETA-CARYOPHYLLENE	0.007	5.244	0.524						
TRANS-NEROLIDOL	0.007	ND	ND						
VALENCENE	0.007	ND	ND						
PULEGONE	0.007	ND	ND						
ALPHA-PHELLANDRENE	0.007	0.361	0.036						
OCIMENE	0.007	4.038	0.403						
NEROL	0.007	< 0.2	< 0.020						
LINALOOL	0.007	1.471	0.147						
LIMONENE	0.007	7.348	0.734						
GUAJOL	0.007	ND	ND						
GERANYL ACETATE	0.007	ND	ND						
GERANIOL	0.007	ND	ND						
GAMMA-TERPINENE	0.007	< 0.2	< 0.020						
FENCHONE	0.007	ND	ND						
FARNESENE	0.007	2.609	0.260						
Total (%)		5.996							



Terpenes

TESTED

Analyzed by 1351 **Weight** 0.9843g **Extraction date** 04/24/20 12:04:06 **Extracted By** 1351
Analysis Method -SOP.T.40.090
Analytical Batch -DA011888TER **Reviewed On** - 04/27/20 10:56:34
Instrument Used : DA-GCMS-005
Running On :
Batch Date : 04/23/20 08:46:08

Reagent	Dilution	Consums. ID
030620.05	10	180111
030620.08		280678841
040720.08		
012120.R13		
041020.R25		

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-TVF0424202004

Batch# : HS-
TVF0424202004
Sampled : 04/24/20
Ordered : 04/24/20

Sample Size Received : 7.0 gram
Total Weight/Volume : 1000 gram
Completed : 04/28/20 Expires: 04/28/21
Sample Method : SOP.T.20.010


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Pesticides

PASSED

Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
ABAMECTIN B1A	0.01	ppm	0.1	ND	PIPERONYL BUTOXIDE	0.1	ppm	3	ND
ACEPHATE	0.01	ppm	0.1	ND	PRALLETHRIN	0.01	ppm	0.1	ND
ACEQUINOCYL	0.01	ppm	0.1	ND	PROPICONAZOLE	0.01	ppm	0.1	ND
ACETAMIPRID	0.01	ppm	0.1	ND	PROPOXUR	0.01	ppm	0.1	ND
ALDICARB	0.01	ppm	0.1	ND	PYRETHRINS	0.05	ppm	0.5	ND
AZOXYSTROBIN	0.01	ppm	0.1	ND	PYRIDABEN	0.02	ppm	0.2	ND
BIFENAZATE	0.01	ppm	0.1	ND	SPINETORAM	0.02	PPM	0.2	ND
BIFENTHRIN	0.01	ppm	0.1	ND	SPIROMESIFEN	0.01	ppm	0.1	ND
BOSCALID	0.01	PPM	0.1	ND	SPIROTETRAMAT	0.01	ppm	0.1	ND
CARBARYL	0.05	ppm	0.5	ND	SPIROXAMINE	0.01	ppm	0.1	ND
CARBOFURAN	0.01	ppm	0.1	ND	TEBUCONAZOLE	0.01	ppm	0.1	ND
CHLORANTRANILIPROLE	0.1	ppm	1	ND	THIACLOPRID	0.01	ppm	0.1	ND
CHLORMEQUAT CHLORIDE	0.05	ppm	1	ND	THIAMETHOXAM	0.05	ppm	0.5	ND
CHLORPYRIFOS	0.01	ppm	0.1	ND	TOTAL CONTAMINANT LOAD (PESTICIDES)	0	PPM	5	0.025
CLOFENTEZINE	0.02	ppm	0.2	ND	TOTAL PERMETHRIN	0.01	ppm	0.1	ND
COUMAPHOS	0.01	ppm	0.1	ND	TOTAL SPINOSAD	0.01	ppm	0.1	<0.050
DAMINOZIDE	0.01	ppm	0.1	ND	TRIFLOXYSTROBIN	0.01	ppm	0.1	ND
DIAZANON	0.01	ppm	0.1	ND					
DICHLORVOS	0.01	ppm	0.1	ND					
CYPERMETHRIN	0.05	ppm	0.5	ND					
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					
OXAMYL	0.05	ppm	0.5	ND					
PACLOBUTRAZOL	0.01	ppm	0.1	ND					
PHOSMET	0.01	ppm	0.1	ND					



Pesticides

PASSED

Analyzed by 585 **Weight** 0.8836g **Extraction date** 04/24/20 03:04:33 **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 - DA011940PES **Reviewed On** - 04/24/20 14:07:14

Instrument Used : DA-LCMS-001_DER (PES) **Batch Date** : 04/24/20 11:48:26

Running On :

Reagent	Dilution	Consums. ID
041420.08	10	180111
042320.014		280678841
042320.015		
042320.021		
111819.03		

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

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ISO Accreditation # ISO/IEC
17025:2017 Accreditation
PJLA-Testing 97164


Signature

04/28/20

Signed On



Certificate of Analysis

PASSED

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 MIAMI, FL, 33187, US
Telephone: 7865860672
Email: erick.ramirez@curaleaf.com

Sample : DA00424010-009
Harvest/LOT ID: HS-TVF0424202004
Batch# : HS-TVF0424202004
Sampled : 04/24/20
Ordered : 04/24/20

Sample Size Received : 7.0 gram
Total Weight/Volume : 1000 gram
Completed : 04/28/20 **Expires:** 04/28/21
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	0.8	ppm	8	PASS	ND
1,2-DICHLOROETHANE	0.2	ppm	2	PASS	ND
2-PROPANOL	50	ppm	500	PASS	ND
ACETONE	75	ppm	750	PASS	ND
ACETONITRILE	6	ppm	60	PASS	ND
BENZENE	0.1	ppm	1	PASS	ND
BUTANES (N-BUTANE)	500	ppm	5000	PASS	ND
CHLOROFORM	0.2	ppm	2	PASS	ND
DICHLOROMETHANE	12.5	ppm	125	PASS	ND
ETHANOL	500	ppm	5000	PASS	ND
ETHYL ACETATE	40	ppm	400	PASS	ND
ETHYL ETHER	50	ppm	500	PASS	ND
ETHYLENE OXIDE	0.5	ppm	5	PASS	ND
HEPTANE	500	ppm	5000	PASS	ND
METHANOL	25	ppm	250	PASS	ND
N-HEXANE	25	ppm	250	PASS	ND
PENTANES (N-PENTANE)	75	ppm	750	PASS	ND
PROPANE	500	ppm	5000	PASS	ND
TOLUENE	15	ppm	150	PASS	ND
TOTAL XYLENES	15	ppm	150	PASS	ND
TRICHLOROETHYLENE	2.5	ppm	25	PASS	ND

Analyzed by	Weight	Extraction date	Extracted By
850	0.0247g	04/24/20 03:04:38	850
Analysis Method -SOP.T.40.032 Analytical Batch -DA011946SOL Instrument Used : DA-GCMS-002 Running On : Batch Date : 04/24/20 13:29:23			
Reviewed On - 04/27/20 14:12:12			
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-TVF0424202004
Batch# : HS-TVF0424202004
Sampled : 04/24/20
Ordered : 04/24/20

Sample Size Received : 7.0 gram
Total Weight/Volume : 1000 gram
Completed : 04/28/20 **Expires:** 04/28/21
Sample Method : SOP.T.20.010

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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		<100	

Analysis Method -SOP.T.40.043 / SOP.T.40.044 / SOP.T.40.041
Analytical Batch -DA011990MIC , DA011929TYM **Batch Date :** 04/27/20, 04/24/20
Instrument Used : PathogenDX PCR_Array Scanner DA-111,PathogenDX PCR_DA-171,
 PathogenDX PCR_Array Scanner DA-111
Running On :

Analyzed by	Weight	Extraction date	Extracted By
513, 513	0.9188g	04/28/20	513, 357

Reagent	Reagent	Reagent	Consums. ID	Consums. ID
082019.32	013120.383	020420.367	SG298A	19323
101619.04	022120.244	022120.227	181207119C	23819111
022120.56	022120.292	022120.228	918C4-918J	190611634
022120.26	022120.203	032720.150	914C4-914AK	
022120.51	022120.204	032720.153	929C6-929H	
022120.180	121719.92	032720.51	50AX26219	

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 -DA011943 | **Reviewed On** - 04/27/20 14:32:01
Instrument Used : DA-LCMS-001_DER (MYC)
Running On :
Batch Date : 04/24/20 11:57:13

Analyzed by	Weight	Extraction date	Extracted By
585	1g	04/24/20 06:04:11	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
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Reagent	Reagent	Dilution	Consums. ID
042220.R01	042020.R28	50	106557-04-091619
042420.R01	041320.R01		
030920.01	042220.R02		
042120.R13			
042120.R15			
041320.R03			

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	0.2676g	04/24/20 01:04:28	457

Analysis Method -SOP.T.40.050, SOP.T.30.052
Analytical Batch -DA011932HEA | **Reviewed On** - 04/27/20 07:43:55
Instrument Used : DA-ICPMS-001
Running On :
Batch Date : 04/24/20 08:47:16

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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 PJLA-Testing 97164


 Signature

04/28/20

Signed On