



Certificate of Analysis

Sample: DA91031014-002
Harvest/Lot ID: HS-TVF1031201901
Cultivation Facility: Miami Cultivation
Processing Facility : Homestead Processing
Seed to Sale #5385 8386 8387 6271
Batch Date :N/A
Batch#: HS-TVF1031201901
Sample Size Received: 7 gram
Total Weight/Volume: 1237 gram
Retail Product Size: 0.5 ml gram
Ordered : 10/31/19
sampled : 10/31/19
Completed: 11/04/19
Sampling Method: SOP Client Method

PASSED

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Nov 04, 2019 | CURALEAF FLORIDA LLC

19000 SW 192 STREET
MIAMI, FL, 33187, US



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
86.481%
THC/Container :432.41 mg



Total CBD
0.381%
CBD/Container :1.91 mg



Total Cannabinoids
0.000%
Total Cannabinoids / Container :0.000



Filtration PASSED

Analyzed By	Weight	Extraction date	Extracted By
584	1g	10/31/19	584
Analyte			Result
Filtration and Foreign Material			ND
Analysis Method -SOP.T.40.013			LOD
Analytical Batch -DA007619			0
Instrument Used :			Batch Date :

This includes but is not limited to hair, insects, feces, packaging contaminants, and manufacturing waste and by-products. An SH-26/T Stereo Microscope is used for inspection.

	D9-THC	THCA	CBD	CBDA	CBN	CBDV	D8-THC	THCV	CBG	CBGA	CBC	TOTAL TH	TOTAL CB
%	86.4810	ND	0.3670	0.0170	0.1940	ND	0.1019	0.3060	1.6460	0.2050	0.9930	86.4810	0.3810
mg/g	864.8100	ND	3.6700	0.1700	1.9400	ND	1.0200	3.0600	16.4600	2.0500	9.9300	864.8100	3.8100
LOD	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
%	%	%	%	%	%	%	%	%	%	%	%	%	%

Cannabinoid Profile Test

Analyzed by	Weight	Extraction date :	Extracted By :
450	0.1123g	10/31/19 12:10:13	574
Analysis Method -SOP.T.40.020, SOP.T.30.050			Batch Date :
Analytical Batch -DA007594	Instrument Used :		

Reagent	Dilution	Consums. ID

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

11/04/19

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 : DA91031014-002
Harvest/LOT ID: HS-TVF1031201901
Batch# : HS-TVF1031201901
Sampled : 10/31/19
Ordered : 10/31/19

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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		SABINENE	0.007	ND	ND	
ALPHA-HUMULENE	0.007	2.059	0.205		SABINENE HYDRATE	0.007	< 0.2	< 0.020	
ALPHA-PINENE	0.007	5.061	0.506		TERPINEOL	0.007	ND	ND	
ALPHA-TERPINENE	0.007	ND	ND		TERPINOLENE	0.007	16.461	1.646	
BETA-MYRCENE	0.007	34.367	3.436		TRANS-CARYOPHYLLENE	0.007	6.548	0.654	
BETA-PINENE	0.007	3.840	0.384		TRANS-NEROLIDOL	0.007	< 0.2	< 0.020	
BORNEOL	0.013	ND	ND		VALENCENE	0.007	ND	ND	
CAMPHENE	0.007	< 0.2	< 0.020						
CAMPHOR	0.013	ND	ND						
CARYOPHYLLENE OXIDE	0.007	0.213	0.021						
CEDROL	0.007	ND	ND						
ALPHA-BISABOLOL	0.007	3.542	0.354						
ISOPULEGOL	0.007	ND	ND						
CIS-NEROLIDOL	0.007	ND	ND						
3-CARENE	0.007	< 0.2	< 0.020						
FENCHYL ALCOHOL	0.007	ND	ND						
HEXAHYDROTHYMOL	0.007	ND	ND						
EUCALYPTOL	0.007	0.831	0.083						
ISOBORNEOL	0.007	ND	ND						
FARNESENE	0.007	ND	ND						
FENCHONE	0.007	ND	ND						
GAMMA-TERPINENE	0.007	< 0.2	< 0.020						
GERANIOL	0.007	ND	ND						
GERANYL ACETATE	0.007	ND	ND						
GUAJOL	0.007	ND	ND						
LIMONENE	0.007	17.633	1.763						
LINALOOL	0.007	ND	ND						
NEROL	0.007	ND	ND						
OCIMENE	0.007	ND	ND						
ALPHA-PHELLANDRENE	0.007	< 0.2	< 0.020						
PULEGONE	0.007	ND	ND						
Total (%)		9.055							



Terpenes

TESTED

Analyzed by 585 Weight 1.1145g Extraction date 10/31/19 03:10:39 Extracted By 585

Analysis Method -SOP.T.40.090
Analytical Batch -DA007598
Instrument Used :
Running On :
Batch Date :

Reagent	Dilution	Consums. ID
	10	

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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Jorge Segredo
Lab Director



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11/04/19

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

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Harvest/LOT ID: HS-TVF1031201901
Batch# : HS-TVF1031201901
Sampled : 10/31/19
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Sample Method : SOP Client Method

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Pesticides

PASSED

Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
CHLORDANE	0.005	ppm	0.1	ND	OXAMYL	0.01	ppm	0.5	ND
CAPTAN	0.05	ppm	0.7	ND	PACLOBUTRAZOL	0.01	ppm	0.1	ND
BOSCALID	0.01	PPM	100	ND	TRANS-PERMETHRIN	0.05	ppm	0.1	ND
DIMETHOATE	0.01	ppm	0.1	ND	PHOSMET	0.01	ppm	0.1	ND
ABAMECTIN B1A	0.02	ppm	0.1	ND	PIPERONYL BUTOXIDE	0.01	ppm	3	ND
CIS-PERMETHRIN	0.05	ppm	0.1	ND	PRALLETHRIN	0.05	ppm	0.1	ND
SPINETORAM	0.01	PPM		ND	PROPICONAZOLE	0.01	ppm	0.1	ND
ACEPHATE	0.001	ppm	0.1	ND	PROPOXUR	0.01	ppm	0.1	ND
DIMETHOMORPH	0.005	ppm	0.2	ND	PYRETHRIN I	0.01	ppm	0.5	ND
ETHOPROPHOS	0.01	ppm	0.1	ND	PYRIDABEN	0.01	ppm	0.2	ND
ACEQUINOCYL	0.01	ppm	0.1	ND	SPINOSAD (SPINOSYN A)	0.01	ppm	0.1	ND
ACETAMIPRID	0.01	ppm	0.1	ND	SPINOSAD (SPINOSYN D)	0.01	ppm	0.1	ND
ETOFENPROX	0.01	ppm	0.1	ND	SPIROMESIFEN	0.01	ppm	0.1	ND
ALDICARB	0.02	ppm	0.1	ND	SPIROTETRAMAT	0.02	ppm	0.1	ND
ETOXAZOLE	0.01	ppm	0.1	ND	SPIROXAMINE	0.01	ppm	0.1	ND
AZOXYSTROBIN	0.01	ppm	0.01	ND	TEBUCONAZOLE	0.01	ppm	0.1	ND
FENHEXAMID	0.01	ppm	0.1	ND	THIACLOPRID	0.01	ppm	0.1	ND
BIFENAZATE	0.01	ppm	0.1	ND	THIAMETHOXAM	0.01	ppm	0.5	ND
FENOXYCARB	0.01	ppm	0.1	ND	TRIFLOXYSTROBIN	0.01	ppm	0.1	ND
FENPYROXIMATE	0.01	ppm	0.1	ND					
BIFENTHRIN	0.01	ppm	0.1	ND					
CARBARYL	0.01	ppm	0.5	ND					
FIPRONIL	0.02	ppm	0.1	ND					
FLONICAMID	0.01	ppm	0.1	ND					
CARBOFURAN	0.01	ppm	0.1	ND					
CHLORANTRANILIPROLE	0.01	ppm	1	ND					
FLUDIOXONIL	0.01	ppm	0.1	ND					
HEXYTHIAZOX	0.01	ppm	0.1	ND					
CHLORFENAPYR	0.01	ppm	0.1	ND					
IMAZALIL	0.01	ppm	0.1	ND					
CHLORPYRIFOS	0.01	ppm	0.1	ND					
IMIDACLOPRID	0.01	ppm	0.4	ND					
CLOFENTEZINE	0.01	ppm	0.2	ND					
KRESOXIM-METHYL	0.01	ppm	0.1	ND					
COUMAPHOS	0.005	ppm	0.1	ND					
MALATHION	0.01	ppm	0.2	ND					
CYPERMETHRIN	0.01	ppm	0.5	ND					
DAMINOZIDE	0.01	ppm	0.1	ND					
METALAXYL	0.01	ppm	0.02	ND					
DICHLORVOS	0.05	ppm	0.1	ND					
METHIOCARB	0.01	ppm	0.05	ND					
METHOMYL	0.01	ppm	0.1	ND					
DIAZANON	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					



Pesticides

PASSED

Analyzed by 585	Weight 1.0440g	Extraction date 10/31/19 02:10:53	Extracted By 1082
<small>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</small>			
<small>Analytical Batch - DA007608</small>			
<small>Running On :</small>		<small>Batch Date :</small>	
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



Signature

11/04/19

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Telephone: 7865860672
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Sample : DA91031014-002
Harvest/LOT ID: HS-TVF1031201901
Batch# : HS-TVF1031201901
Sample Size Received : 7 gram
Total Weight/Volume : 1237 gram
Completed : 11/04/19 **Expires:** 11/04/20
Ordered : 10/31/19 **Sample Method :** SOP Client Method

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Residual Solvents **PASSED**

Residual Solvents **PASSED**

Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
PROPANE	10	ppm	2100	PASS	ND
BUTANES (N-BUTANE)	50	ppm	2000	PASS	ND
ETHYLENE OXIDE	0.5	ppm	5	PASS	ND
METHANOL	25	ppm	250	PASS	<140.000
ETHANOL	140	ppm	5000	PASS	254.575
PENTANES (N-PENTANE)	50	ppm	750	PASS	ND
ETHYL ETHER	140	ppm	500	PASS	ND
ACETONE	140	ppm	750	PASS	ND
2-PROPANOL	140	ppm	500	PASS	ND
ACETONITRILE	6	ppm	60	PASS	ND
METHYLENE CHLORIDE	36	ppm	125	PASS	ND
N-HEXANE	17.4	ppm	250	PASS	ND
ETHYL ACETATE	140	ppm	400	PASS	ND
BENZENE	0.1	ppm	1	PASS	ND
HEPTANE	140	ppm	500	PASS	ND
TOLUENE	15	ppm	150	PASS	ND
CHLOROFORM	0.2	ppm	2	PASS	ND
1,2-DICHLOROETHANE	0.2	ppm	2	PASS	ND
TRICHLOROETHYLENE	0.2	ppm	25	PASS	ND
1,1-DICHLOROETHENE	0.2	ppm	8	PASS	ND
TOTAL XYLENES	1	ppm	150	PASS	ND

Analyzed by	Weight	Extraction date	Extracted By
850	0.0232g	10/31/19 01:10:50	850
Analysis Method -SOP.T.40.032			
Analytical Batch -DA007602			
Instrument Used :			
Running On :			
Batch Date :			
Reagent	Dilution	Consums. ID	
	1	00268767 161040-1 24151941	

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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Jorge Segredo
 Lab Director

Signature

11/04/19

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Certificate of Analysis

PASSED

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

Sample : DA91031014-002
Harvest/LOT ID: HS-TVF1031201901
Batch# : HS-TVF1031201901
Sampled : 10/31/19
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Sample Size Received : 7 gram
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Completed : 11/04/19 Expires: 11/04/20
Sample Method : SOP Client Method

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Microbials

PASSED



Mycotoxins

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.	

Analysis Method -SOP.T.40.043 / SOP.T.40.044 / SOP.T.40.041
Analytical Batch -DA007591 Batch Date :
Instrument Used :
Running On :

Analyzed by	Weight	Extraction date	Extracted By
513	1.0183g	11/01/19	513

Reagent	Consums. ID	Consums. ID
102819.R18	013	19193
	2803021	
	A02	
	009D	
	020	
	011	

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.

Analyte	LOD	Units	Result	Action Level (PPM)
AFLATOXIN G2	0.001	ppm	ND	
AFLATOXIN G1	0.0005	ppm	ND	
AFLATOXIN B2	0.0005	ppm	ND	
AFLATOXIN B1	0.0005	ppm	ND	
OCHRATOXIN A+	0.0005	ppm	ND	0.02
TOTAL AFLATOXINS	0.0005	PPM	0.000	0.02

Analysis Method -SOP.T.30.065, SOP.T.40.065
Analytical Batch -DA007609
Instrument Used :
Running On :
Batch Date :

Analyzed by	Weight	Extraction date	Extracted By
585	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 <20µg/Kg.



Heavy Metals

PASSED

Reagent	Dilution
102919.R02	50
102819.R04	
103119.R02	
102919.R05	
102119.R03	
052419.01	

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	ND	0.5
MERCURY	0.01	PPM	ND	0.1

Analyzed by	Weight	Extraction date	Extracted By
457	05193g	10/31/19 04:10:56	457

Analysis Method -SOP.T.40.050, SOP.T.30.052
Analytical Batch -DA007599
Instrument Used :
Running On :
Batch Date :

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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