



Certificate of Analysis

Sample: M000722017-001

Harvest/Lot ID: 20199002

Seed to Sale #N/A

Batch Date :N/A

Batch#: 20199002

Sample Size Received: 2 gram

Retail Product Size: 30

Ordered : 07/22/20

Sampled : 07/22/20

Completed: 07/24/20 Expires: 07/24/21

Sampling Method: SOP Client Method

PASSED

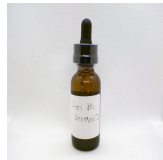
Page 1 of 4

Jul 24, 2020 | Empire Standard

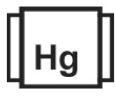
29 Industrial Park Dr.,
Binghamton, NY, 13904



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
NOT TESTED

MISC.

CANNABINOID RESULTS



Total THC
0.128%

THC/Container :35.712 mg



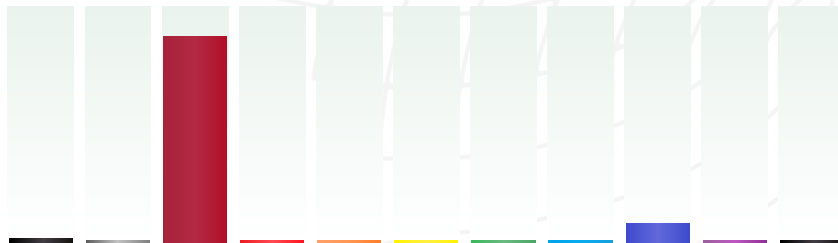
Total CBD
5.628%

CBD/Container :1570.212 mg



Total Cannabinoids
6.397%

Total Cannabinoids/Container
:1784.763 mg



D9-THC	THCA	CBD	CBDA	D8-THC	THCV	CBN	CBDV	CBC	CBG	CBGA
0.128%	ND	5.628%	ND	ND	ND	0.030%	0.015%	0.543%	0.053%	ND
1.280 mg/g	ND	56.280 mg/g	ND	ND	ND	0.300 mg/g	0.150 mg/g	5.430 mg/g	0.530 mg/g	ND
LOD 0.0001 %	0.001 %	0.0001 %	0.001 %	0.001 %	0.001 %	0.001 %	0.001 %	0.001 %	0.001 %	0.001 %



Filtration

PASSED

Analyzed By	Weight	Extraction date	LOD(ppm)	Extracted By
g	NA	NA		NA
Analysis Method -SOP.T.40.020, SOP.T.30.050		Batch Date :		
Analytical Batch -NA		Reviewed On - 07/24/20 10:44:53		
Instrument Used :				

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 use for inspection.

Cannabinoid Profile Test

Analyzed by	Weight	Extraction date :	Extracted By :
19	2.9986g	07/24/20 10:07:03	19

Analysis Method	Reviewed On	
-SOP.T.40.020, SOP.T.30.050	- 07/24/20 11:01:23	
Analytical Batch	Instrument Used	Batch Date
-M0000835POT	: HPLC Potency Analyzer	: 07/23/20 15:44:46

Reagent	Dilution	Consums. ID
	40	

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). Measurement of Uncertainty: 2.7%

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David Greene
Lab Director

State License # 19-05-02P
ISO Accreditation #
17025:2017 #97164



Signature

07/24/2020

Signed On



Certificate of Analysis

PASSED

Empire Standard

29 Industrial Park Dr.,
Binghamton, NY, 13904

Telephone: 6077617126

Email: james@empire-standard.com

Sample : M000722017-001

Harvest/LOT ID: 20199002

Batch# : 20199002

Sampled : 07/22/20


Ordered : 07/22/20

Sample Size Received : 2 gram

Completed : 07/24/20 Expires: 07/24/21

Sample Method : SOP Client Method


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Pesticides

PASSED

Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
ABAMECTIN B1A	0.020	ppm	0.5	ND	PRALLETHRIN	0.050	ppm	0.2	ND
ACEPHATE	0.010	ppm	0.5	ND	PROPICONAZOLE	0.010	ppm	0.4	ND
ACEQUINOCYL	0.02	ppm	2	ND	PROPOXUR	0.010	ppm	0.2	ND
ACETAMIPRID	0.010	ppm	0.2	ND	PYRETHRIN I	0.010	ppm	1	ND
ALDICARB	0.020	ppm	0.4	ND	PYRIDABEN	0.005	ppm	0.2	ND
AZOXYSTROBIN	0.010	ppm	0.2	ND	SPINETORAM	0.005	ppm	0.5	ND
BIFENAZATE	0.010	ppm	0.2	ND	SPINOSAD (SPINOSYN A)	0.010	ppm	0.2	ND
BIFENTHRIN	0.010	ppm	0.2	ND	SPINOSAD (SPINOSYN D)	0.010	ppm	0.2	ND
BOSCALID	0.005	ppm	0.4	ND	SPIROMESIFEN	0.010	ppm	0.2	ND
CARBARYL	0.010	ppm	0.2	ND	SPIROTETRAMAT	0.020	ppm	0.2	ND
CARBOFURAN	0.010	ppm	0.2	ND	SPIROXAMINE	0.010	ppm	0.4	ND
CHLORANTRANILIPROLE	0.010	ppm	0.2	ND	TEBUCONAZOLE	0.010	ppm	0.4	ND
CHLORPYRIFOS	0.010	ppm	0.2	ND	THIACLOPRID	0.010	ppm	0.2	ND
CLOFENTEZINE	0.010	ppm	0.2	ND	THIAMETHOXAM	0.010	ppm	0.5	ND
COUMAPHOS	0.005	ppm	0.2	ND	TRIFLOXYSTROBIN	0.010	ppm	0.2	ND
CYPERMETHRIN	0.010	ppm	1	ND					
DAMINOZIDE	0.010	ppm	1	ND					
DIAZANON	0.010	ppm	0.2	ND					
DICHLORVOS	0.050	ppm	0.1	ND					
DIMETHOATE	0.010	ppm	0.2	ND					
DIMETHOMORPH	0.005	ppm	0.1	ND					
ETHOPROPHOS	0.010	ppm	0.2	ND					
ETOFENPROX	0.010	ppm	0.4	ND					
ETOXAZOLE	0.010	ppm	0.2	ND					
FENHEXAMID	0.005	ppm	0.1	ND					
FENOXYCARB	0.010	ppm	0.2	ND					
FENPYROXIMATE	0.010	ppm	0.4	ND					
FIPRONIL	0.020	ppm	0.4	ND					
FLONICAMID	0.010	ppm	1	ND					
FLUDIOXONIL	0.010	ppm	0.4	ND					
HEXYTHIAZOX	0.010	ppm	1	ND					
IMAZALIL	0.010	ppm	0.2	ND					
IMIDACLOPRID	0.010	ppm	0.4	ND					
KRESOXIM-METHYL	0.010	ppm	0.4	ND					
MALATHION	0.010	ppm	0.2	ND					
METALAXYL	0.010	ppm	0.2	ND					
METHIOCARB	0.010	ppm	0.2	ND					
METHOMYL	0.010	ppm	0.6	ND					
MEVINPHOS	0.010	ppm	0.1	ND					
MYCLOBUTANIL	0.010	ppm	0.2	ND					
NALED	0.010	ppm	0.5	ND					
OXAMYL	0.010	ppm	1	ND					
PACLOBUTRAZOL	0.010	ppm	0.4	ND					
PERMETHRINS	0.050	ppm	1	ND					
PHOSMET	0.010	ppm	0.2	ND					
PIPERONYL BUTOXIDE	0.010	ppm	3	ND					



Pesticides

PASSED

Analyzed by 9	Weight 1g	Extraction date NA	Extracted By NA
Analysis Method - SOP.T.30.060, SOP.T.40.060 ,		Reviewed On- 07/24/20 10:44:53	
Analytical Batch - M0000838PES			
Instrument Used : LCMSMS 8060 P			
Batch Date : 07/23/20 16:12:40			

Reagent	Dilution	Consums. ID
Pesticide screen is performed using LC-MS which can screen down to below single digit ppb concentrations for regulated Pesticides. Currently we analyze for 57 Pesticides. (Method: SOP.T.30.060 Sample Preparation for Pesticides Analysis via LCMSMS and SOP.T40.060 Procedure for Pesticide Quantification Using LCMS). *		

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David Greene
Lab Director
State License # 19-05-02P
ISO Accreditation #
17025:2017 #97164



Signature

07/24/2020
Signed On



Certificate of Analysis

PASSED

Empire Standard

29 Industrial Park Dr.,
Binghamton, NY, 13904
Telephone: 6077617126
Email: james@empire-standard.com

Sample : M000722017-001
Harvest/LOT ID: 20199002

Batch# : 20199002
Sampled : 07/22/20
Ordered : 07/22/20

Sample Size Received : 2 gram
Completed : 07/24/20 **Expires:** 07/24/21
Sample Method : SOP Client Method

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Residual Solvents

PASSED

Residual Solvents

PASSED

Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
TRICHLOROETHENE	3	ppm	80	PASS	ND
CHLOROFORM	0.24	ppm	60	PASS	ND
1,2-DICHLOROETHENE	0.24	ppm	1870	PASS	ND
1,1-DICHLOROETHENE	2	ppm	8	PASS	ND
PENTANES	90	ppm	2500	PASS	ND
BUTANES (N-BUTANE)	50	ppm	5000	PASS	ND
ACETONITRILE	7.2	ppm	410	PASS	ND
ACETONE	90	ppm	5000	PASS	ND
2-PROPANOL	60	ppm	5000	PASS	ND
HEXANES	6	ppm	290	PASS	ND
XYLENES	18	ppm	2170	PASS	ND
TOLUENE	18	ppm	1068	PASS	ND
PROPANE	80	ppm	5000	PASS	ND
METHANOL	30	ppm	3000	PASS	ND
XYLENES-P (1,4-DIMETHYLBENZENE)	18	ppm	2170	PASS	ND
HEPTANE	60	ppm	5000	PASS	ND
XYLENES-M (1,3-DIMETHYLBENZENE)	18	ppm	2170	PASS	ND
ETHYLENE OXIDE	0.6	ppm	50	PASS	ND
XYLENES-O (1,2-DIMETHYLBENZENE)	18	ppm	2170	PASS	ND
ETHYL ETHER	60	ppm	5000	PASS	ND
ETHYL ACETATE	48	ppm	5000	PASS	ND
DICHLOROMETHANE	15	ppm	600	PASS	ND
ETHANOL	120	ppm	5000	PASS	ND

Analyzed by 18 **Weight** 0.032g **Extraction date** 07/23/20 09:07:42 **Extracted By** 18

Analysis Method -SOP.T.40.032
Analytical Batch -MO000830SOL **Reviewed On - 07/23/20 12:11:46**
Instrument Used : GCMS2010
Batch Date : 07/23/20 09:22:49

Reagent	Dilution	Consums. ID
Residual solvents screening is performed using GC-MS which can detect below single digit ppm concentrations. Currently we analyze for 33 Residual solvents. (Method: SOP.T.30.042 Residual Solvents Analysis via GC-MS).		

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David Greene
Lab Director

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17025:2017 #97164



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07/24/2020

Signed On



Certificate of Analysis

PASSED

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Binghamton, NY, 13904
Telephone: 6077617126
Email: james@empire-standard.com

Sample : M000722017-001
Harvest/LOT ID: 20199002

Batch# : 20199002
Sampled : 07/22/20
Ordered : 07/22/20

Sample Size Received : 2 gram
Completed : 07/24/20 **Expires:** 07/24/21
Sample Method : SOP Client Method

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Microbials
PASSED



Mycotoxins
PASSED

Analyte	Result	Analyte	LOD	Units	Result	Action Level (PPM)
ASPERGILLUS_TERREUS_1J2	not present in 1 gram.	AFLATOXIN G2	0.001	ppm	ND	0.02
ASPERGILLUS_NIGER	not present in 1 gram.	AFLATOXIN G1	0.001	ppm	ND	0.02
ASPERGILLUS_FUMIGATUS	not present in 1 gram.	AFLATOXIN B2	0.001	ppm	ND	0.02
ASPERGILLUS_FLAVUS	not present in 1 gram.	AFLATOXIN B1	0.001	ppm	ND	0.02
SALMONELLA_SPECIFIC_GENE	not present in 1 gram.	OCHRATOXIN A+	0.001	ppm	ND	0.02
ESCHERICHIA_COLI_SHIGELLA_SPP	not present in 1 gram.					

Analysis Method -SOP.T.40.043
Analytical Batch -NA Batch Date :
Instrument Used :

Analysis Method -SOP.T.30.060, SOP.T.40.060
Analytical Batch - | Reviewed On - 07/24/20 13:36:54
Instrument Used :
Batch Date :

Analyzed by	Weight	Extraction date	Extracted By
NA	NA	NA	NA

Analyzed by	Weight	Extraction date	Extracted By
NA	NA	NA	NA

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.

Aflatoxins B1, B2, G1, G2, and Ochratoxins A testing using LC-MS. (Method: SOP.T.30.060 for Sample Preparation and SOP.T40.060 Procedure for Mycotoxins Quantification Using LCMS. LOQ 1.0 ppb). Total Aflatoxins (Aflatoxin B1, B2, G1, G2) must be <20µg/Kg. Ochratoxins must be <20µg/Kg.



Heavy Metals
PASSED

Reagent

- 110119.52
- 110119.44
- 112519.01
- 110119.36

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.02	ppm	ND	10
CADMIUM	0.02	ppm	ND	4.1
LEAD	0.02	ppm	ND	10
MERCURY	0.02	ppm	ND	2

Analyzed by	Weight	Extraction date	Extracted By
18	0.509g	07/23/20 09:07:25	18

Analysis Method -SOP.T.40.050, SOP.T.30.052
Analytical Batch -M0000831HEA | Reviewed On - 07/23/20 11:19:26
Instrument Used : ICP-MS 2030
Batch Date : 07/23/20 09:24:13

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. *Action Limits based on Colorado Regulations.

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