



# Certificate of Analysis

Sep 30, 2020 | Empire Standard LLC

1234,  
Binghamton, NY, 13905



Sample: CA00925001-003

Harvest/Lot ID: N/A

Seed to Sale #n/a

Batch Date : 09/25/20

Batch#: 20260001

Sample Size Received: 30 gram

Retail Product Size: 30 gram

Ordered : 09/25/20

Sampled : 09/25/20

Completed: 09/30/20 Expires: 09/30/21

Sampling Method: SOP Client Method

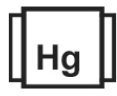
**PASSED**

Page 1 of 4

## 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  
**0.199%**

THC/Container :59.700 mg



Total CBD  
**4.624%**

CBD/Container :1387.200 mg



Total Cannabinoids  
**5.156%**

Total Cannabinoids/Container  
:1546.800 mg



Analyzed By 1048 Weight 1g Extraction date NA LOD(ppm) NA Extracted By NA

Analysis Method -SOP.T.40.013  
Analytical Batch -CA000320FIL  
Instrument Used :  
Running On :

Batch Date : 09/25/20  
13:23:36

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.

CBDV	CBD	CBG	THCV	CBDA	CBGA	CBN	D9-THC	D8-THC	CBC	THCA-A
0.042%	4.624%	0.198%	<LOQ	<LOQ	<LOQ	<LOQ	0.199%	<LOQ	0.093%	<LOQ
0.420 mg/g	46.240 mg/g	1.980 mg/g	ND	ND	ND	ND	1.990 mg/g	ND	0.930 mg/g	ND
LOD 0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
%	%	%	%	%	%	%	%	%	%	%

## Cannabinoid Profile Test

Analyzed by 1068 Weight 0.514g Extraction date : NA Extracted By : NA  
Analysis Method -SOP.T.40.020, SOP.T.30.050 Batch Date : 09/29/20 13:38:52  
Analytical Batch -CA000342POT Instrument Used : HPLC-3Dplus(MO-HPLC-01) Running On :

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 0.5 mg/L). The results of plant sample are reported on a dry weight basis.



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Harvest/LOT ID: N/A

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Sample Method : SOP Client Method

Page 2 of 4



## Pesticides

**PASSED**

Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
DAMINOZIDE	0.01314	ug/g	0.026	ND	CHLORPYRIFOS	0.01599	ug/g	0.009	ND
ACEPHATE	0.02402	ug/g	0.1	ND	HEXYTHIAZOX	0.00556	ug/g	0.1	ND
OXAMYL	0.01848	ug/g	0.5	ND	ETOXAZOLE	0.00614	ug/g	0.1	ND
FLONICAMID	0.03074	ug/g	0.1	ND	SPIROMESIFEN	0.00628	ug/g	0.1	ND
THIAMETHOXAM	0.01555	ug/g	5	ND	CYFLUTHRIN	0.1	ug/g	2	<LOQ
METHOMYL	0.024	ug/g	1	ND	CYPERMETHRIN	0.01767	ug/g	1	ND
IMIDACLOPRID	0.01533	ug/g	5	ND	FENPYROXIMATE	0.00812	ug/g	0.1	ND
ACETAMIPRID	0.01333	ug/g	0.1	ND	PYRIDABEN	0.00716	ug/g	0.1	ND
MEVINPHOS	0.02454	ug/g	0.02	ND	ABAMECTIN B1A	0.01931	ug/g	0.1	ND
DIMETHOATE	0.03074	ug/g	0.024	ND	ETOFENPROX	0.00983	ug/g	0.024	ND
THIACLOPRID	0.01922	ug/g	0.009	ND	BIFENTHRIN	0.00868	ug/g	3	ND
IMAZALIL	0.00737	ug/g	0.032	ND	ACEQUINOCYL	0.0288	ug/g	0.1	ND
ALDICARB	0.03032	ug/g	0.025	ND	SPINOSADS	0.00686	ug/g	0.1	ND
PROPOXUR	0.02322	ug/g	0.025	ND	PYRETHRINS	0.00321	ug/g	0.5	ND
DICHLORVOS	0.02786	ug/g	0.022	ND	PERMETHRINS	0.01127	ug/g	0.5	ND
CARBOFURAN	0.02749	ug/g	0.024	ND	PCNB *	0.01873	ug/g	0.1	ND
CARBARYL	0.02807	ug/g	0.5	ND	PARATHION-METHYL *	0.01356	ug/g	0.019	ND
NALED	0.02084	ug/g	0.1	ND	CAPTAN *	0.03668	ug/g	0.7	ND
CHLORANTRANILIPROLE	0.00782	ug/g	10	ND	CHLORDANE *	0.02115	ug/g	0.024	ND
METALAXYL	0.00899	ug/g	2	ND	CHLORFENAPYR *	0.01981	ug/g	0.019	ND
PHOSMET	0.02488	ug/g	0.1	ND					
AZOXYSTROBIN	0.01375	ug/g	0.1	ND					
FLUDIOXONIL	0.01198	ug/g	0.1	ND					
SPIROXAMINE	0.00695	ug/g	0.025	ND					
BOSCALID	0.01484	ug/g	0.1	ND					
METHIOCARB	0.01778	ug/g	0.008	ND					
PACLOBUTRAZOL	0.01196	ug/g	0.022	ND					
MALATHION	0.02192	ug/g	0.5	ND					
DIMETHOMORPH	0.02083	ug/g	2	ND					
MYCLOBUTANIL	0.01115	ug/g	0.1	ND					
BIFENAZATE	0.0139	ug/g	0.1	ND					
FENHEXAMID	0.01206	ug/g	0.1	ND					
SPIROTETRAMAT	0.01014	ug/g	0.1	ND					
FIPRONIL	0.00839	ug/g	0.032	ND					
ETHOPROPHOS	0.02501	ug/g	0.017	ND					
FENOXYCARB	0.01674	ug/g	0.007	ND					
KRESOXIM-METHYL	0.01591	ug/g	0.1	0.061					
TEBUCONAZOLE	0.0078	ug/g	0.1	ND					
COUMAPHOS	0.02068	ug/g	0.026	ND					
DIAZINON	0.02294	ug/g	0.1	ND					
PROPICONAZOLE	0.00747	ug/g	0.1	ND					
CLOFENTEZINE	0.0108	ug/g	0.1	ND					
SPINETORAM	0.00685	ug/g	0.1	ND					
TRIFLOXYSTROBIN	0.00643	ug/g	0.1	ND					
PRALLETHRIN	0.1376	ug/g	0.1	ND					
PIPERONYL BUTOXIDE	0.00766	ug/g	3	ND					



## Pesticides

**PASSED**

Analyzed by	Weight	Extraction date	Extracted By
1051 , 1051	1.011g	09/25/20 01:09:27	1051 , 1051
Analysis Method - SOP.T.30.060, SOP.T.40.060 , Analytical Batch - CA000318PES , CA000321VOL Instrument Used : MO-LCMS-001_DER , GCMS-TQ8050_DER(MO-GCMSTQ-01) Running On : Batch Date : 09/25/20 12:21:49			
Reagent	Dilution	Consums. ID	
041620.05	1	66022-060	
062120.03		VAV-09-1020	
092120.R01		9299-077	
092120.R02		5787599A	
072820.R02		76124-646	
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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Sample Size Received : 30 gram

Completed : 09/30/20 Expires: 09/30/21

Sample Method : SOP Client Method

Page 3 of 4

	<b>Residual Solvents</b>	<b>PASSED</b>
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	<b>Residual Solvents</b>	<b>PASSED</b>
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Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
1,2- DICHLOROETHANE	0.1119	ug/g	1	PASS	<LOQ
ACETONE	22.8676	ug/g	5000	PASS	<LOQ
ACETONITRILE	30.1498	ug/g	410	PASS	<LOQ
BENZENE	0.0897	ug/g	1	PASS	<LOQ
BUTANE	45.9810	ug/g	5000	PASS	<LOQ
CHLOROFORM	0.0760	ug/g	1	PASS	<LOQ
ETHANOL	30.1944	ug/g	5000	PASS	<LOQ
ETHYL ACETATE	36.7999	ug/g	5000	PASS	<LOQ
ETHYL ETHER	41.0580	ug/g	5000	PASS	<LOQ
ETHYLENE OXIDE	0.1547	ug/g	1	PASS	<LOQ
HEPTANE	46.7093	ug/g	5000	PASS	<LOQ
ISOPROPANOL	32.8178	ug/g	5000	PASS	<LOQ
METHANOL	27.6548	ug/g	3000	PASS	<LOQ
METHYLENE CHLORIDE	0.0585	ug/g	1	PASS	<LOQ
N-HEXANE	47.3415	ug/g	290	PASS	<LOQ
PENTANE	45.6067	ug/g	500	PASS	<LOQ
PROPANE	49.9883	ug/g	500	PASS	<LOQ
TOLUENE	44.1866	ug/g	890	PASS	<LOQ
TRICHLOROETHYLENE	0.2173	PPM	1	PASS	<LOQ
XYLENES*	48.6566	PPM	2170	PASS	<LOQ

Analyzed by 1050 Weight 0.265g Extraction date NA Extracted By NA

Analysis Method -SOP.T.40.032  
Analytical Batch -CA000332SOL  
Instrument Used : Shimadzu QP2020 HS-GC-MS (EID: 0307)  
Running On :  
Batch Date : 09/28/20 11:50:20

Reagent	Dilution	Consums. ID
082720.07		C4020-3A
081020.R21		502158
082720.09		220-97331-51
011420.01		

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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Harvest/LOT ID: N/A

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Sample Method : SOP Client Method

Page 4 of 4

	<b>Microbials</b>	<b>PASSED</b>		<b>Mycotoxins</b>	<b>PASSED</b>
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Analyte	LOD	Result	Analyte	LOD	Units	Result	Action Level (PPB)
ASPERGILLUS_FLAVUS		not present in 1 gram.	AFLATOXIN_G2	1	ug/kg	ND	0.02
ESCHERICHIA_COLI_SPECIFIC_GENE		not present in 1 gram.	AFLATOXIN_G1	0.5	ug/kg	ND	0.02
ESCHERICHIA_COLI_SHIGELLA_SPP		not present in 1 gram.	AFLATOXIN_B2	0.5	ug/kg	ND	0.02
SALMONELLA_SPECIFIC_GENE		not present in 1 gram.	AFLATOXIN_B1	0.5	ug/kg	ND	0.02
ASPERGILLUS_FUMIGATUS		not present in 1 gram.	OCHRATOXIN_A	5	ug/kg	ND	0.02
ASPERGILLUS_NIGER		not present in 1 gram.	TOTAL AFLATOXINS (SUM OF B1, B2, G1 & G2)	4	ug/kg	ND	0.02
ASPERGILLUS_TERREUS		not present in 1 gram.					

Analysis Method -SOP.T.40.043

Analytical Batch -CA000329MIC Batch Date : 09/26/20

Instrument Used : Sensovation SensoSpot Fluorescence

Running On :

Analyzed by	Weight	Extraction date	Extracted By
1069	0.9846g	NA	NA

Reagent	Consums. ID
022520.10	200103-274 18353

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.

Analysis Method -SOP.T.30.060, SOP.T.40.060

Analytical Batch -CA000322MYC | Reviewed On - 09/28/20 11:31:05

Instrument Used : MO-LCMS-001\_DER

Running On : 09/28/20 11:08:53

Batch Date : 09/25/20 13:36:32

Analyzed by	Weight	Extraction date	Extracted By
1051	1.011g	09/28/20 11:09:49	1051

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 <20ug/Kg. Ochratoxins must be <20ug/Kg.



**Heavy Metals**

**PASSED**

Reagent

012420.01  
010220.01  
030220.11  
091520.R02  
120219.01  
020320.02

Reagent

091520.R03  
120919.01

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.012	ug/g	<LOQ	0.2
CADMIUM	0.012	ug/g	<LOQ	0.2
LEAD	0.016	ug/g	0.160	0.5
MERCURY	0.018	ug/g	<LOQ	0.1

Analyzed by	Weight	Extraction date	Extracted By
1050	0.521g	NA	NA

Analysis Method -SOP.T.40.050, SOP.T.30.052

Analytical Batch -CA000319HEA

Instrument Used : ICPMS-2030(MO-ICPMS-01)

Running On :

Batch Date : 09/25/20 12:41:03

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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Haifei Yin  
Lab Director

State License # NA  
ISO Accreditation #  
L18-47-1



Signature

09/30/2020

Signed On