



# Certificate of Analysis

Sample: KN10521013-004  
Harvest/Lot ID: P-H-03010-05  
Cultivation Facility: N/A  
Processing Facility: HEMP-P-000102  
Seed to Sale #11111  
Batch Date : 05/18/21  
Batch#: HSG0521Caps  
Sample Size Received: 8 mg  
Total Weight/Volume: 2500 mg  
Retail Product Size: 2.5 gram  
Ordered : 05/18/21  
sampled : 05/18/21  
Completed: 05/27/21 Expires: 05/27/22  
Sampling Method: SOP.T.20.010

May 27, 2021 | Hempire State Growers Inc

1637 Rte 9W  
Milton, NY, 12547, US



**PASSED**

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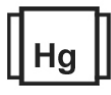
PRODUCT IMAGE



SAFETY RESULTS



Pesticides  
**PASSED**



Heavy Metals  
**PASSED**



Microbials  
**PASSED**



Mycotoxins  
**PASSED**



Residuals Solvents  
**PASSED**



Filtration  
**PASSED**



Water Activity  
NOT TESTED



Moisture  
NOT TESTED



Terpenes  
NOT TESTED

MISC.

CANNABINOID RESULTS



Total THC  
**0.125%**



Total CBD  
**4.401%**



Total Cannabinoids  
**4.742%**

**Filtration PASSED**

Analyzed By	Weight	Extraction date	Extracted By
142	0.2320g	NA	946
Analyte		LOD	Result
Filtration and Foreign Material		0.3	ND
Analysis Method	-SOP.T.40.013	Batch Date	: 05/24/21 09:53:46
Analytical Batch	-KN000912FIL	Reviewed On	- 05/24/21 10:10:34
Instrument Used	E-AMS-138 Microscope		

This includes but is not limited to hair, insects, feces, packaging contaminants, and manufacturing waste and by-products. A 5W-2T13 Stereo Microscope is used for inspection.

	CBDV	CBDA	CBGA	CBG	CBD	THCV	CBN	D9-THC	D8-THC	CBC	THCA
%	<0.010	ND	<0.010	0.0670	4.4010	<0.010	0.0230	0.1250	ND	0.1230	<0.010
mg/g	<0.010	ND	<0.010	0.6700	44.0100	<0.010	0.2300	1.2500	ND	1.2300	<0.010
LOD	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 :
113	0.6236g	05/25/21 09:05:16	946
Analysis Method -Expanded Measurement of Uncertainty: Flower Matrix d9-THC:12.7%, THCa: 9.5%, TOTAL THC 11.1%. These uncertainties represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor k=2 for a normal distribution.		Reviewed On -	Batch Date : 05/25/21 09:46:23
Analytical Batch -KN000916POT		Instrument Used : HPLC E-SHI-008	

Reagent	Dilution	Consums. ID
120320.R02	40	94789291.217
052921.R01		200331059
050521.R04		

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.). \*Based on FL action limits.

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Lab Director  
State License # n/a  
ISO Accreditation #  
17025:2017

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05/27/21  
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# Certificate of Analysis

**PASSED**

1637 Rte 9W  
Milton, NY, 12547, US  
Telephone: 9145899512  
Email: dianed@hsgcbd.com

Sample : KN10521013-004  
Harvest/LOT ID: P-H-03010-05

Batch# : HSG0521Caps Sample Size Received : 8 mg  
Sampled : 05/18/21 Total Weight/Volume : 2500 mg  
Ordered : 05/18/21 Completed : 05/27/21 Expires: 05/27/22  
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	0.3	ND	PIPERONYL BUTOXIDE	0.01	ppm	3	ND
ACEPHATE	0.01	ppm	3	ND	PRALLETHRIN	0.01	ppm	0.4	0.132
ACEQUINOXYL	0.01	ppm	2	ND	PROPICONAZOLE	0.01	ppm	1	ND
ACETAMIPRID	0.01	ppm	3	ND	PROPOXUR	0.01	ppm	0.1	ND
ALDICARB	0.01	ppm	0.1	ND	PYRETHRINS	0.01	ppm	1	ND
AZOXYSTROBIN	0.01	ppm	3	ND	PYRIDABEN	0.01	ppm	3	ND
BIFENAZATE	0.01	ppm	3	ND	SPINETORAM	0.01	ppm	3	ND
BIFENTHRIN	0.01	ppm	0.5	ND	SPIROMESIFEN	0.01	ppm	3	ND
BOSCALID	0.01	ppm	3	ND	SPIROTETRAMAT	0.01	ppm	3	ND
CARBARYL	0.01	ppm	0.5	ND	SPIROXAMINE	0.01	ppm	0.1	ND
CARBOFURAN	0.01	ppm	0.1	ND	TEBUCONAZOLE	0.01	ppm	1	ND
CHLORANTRANILIPROLE	0.01	ppm	3	ND	THIACLOPRID	0.01	ppm	0.1	ND
CHLORMEQUAT CHLORIDE	0.01	ppm	3	ND	THIAMETHOXAM	0.01	ppm	1	ND
CHLORPYRIFOS	0.01	ppm	0.1	ND	TOTAL SPINOSAD	0.01	ppm	3	ND
CLOFENTEZINE	0.01	ppm	0.5	ND	TRIFLOXYSTROBIN	0.01	ppm	3	ND
COUMAPHOS	0.01	ppm	0.1	ND					
CYPERMETHRIN	0.01	ppm	1	ND					
DAMINOZIDE	0.01	ppm	0.1	ND					
DIAZANON	0.01	ppm	0.2	ND					
DICHLORVOS	0.01	ppm	0.1	ND					
DIMETHOATE	0.01	ppm	0.1	ND					
DIMETHOMORPH	0.01	ppm	3	ND					
ETHOPROPHOS	0.01	ppm	0.1	ND					
ETOFENPROX	0.01	ppm	0.1	ND					
ETOXAZOLE	0.01	ppm	1.5	ND					
FENHEXAMID	0.01	ppm	3	ND					
FENOXYCARB	0.01	ppm	0.1	ND					
FENPYROXIMATE	0.01	ppm	2	ND					
FIPRONIL	0.01	ppm	0.1	ND					
FLONICAMID	0.01	ppm	2	ND					
FLUDIOXONIL	0.01	ppm	3	ND					
HEXYTHIAZOX	0.01	ppm	2	ND					
IMAZALIL	0.01	ppm	0.1	ND					
IMIDACLOPRID	0.01	ppm	3	ND					
KRESOXIM-METHYL	0.01	ppm	1	ND					
MALATHION	0.01	ppm	2	ND					
METALAXYL	0.01	ppm	3	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	3	ND					
NALED	0.01	ppm	0.5	ND					
OXAMYL	0.01	ppm	0.5	ND					
PACLOBUTRAZOL	0.01	ppm	0.1	ND					
PERMETHRINS	0.01	ppm	1	ND					
PHOSMET	0.01	ppm	0.2	ND					



### Pesticides

# PASSED

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<b>Analyzed by</b> 143	<b>Weight</b> 0.6169g	<b>Extraction date</b> 05/24/21 10:05:50	<b>Extracted By</b> 143
<b>Analysis Method</b> - SOP.T.30.060, SOP.T.40.060 ,		<b>Reviewed On</b> - 05/24/21 10:10:34	
<b>Analytical Batch</b> - KN000909PES		<b>Batch Date</b> : 05/24/21 08:46:04	
<b>Instrument Used</b> : E-SHI-125 Pesticides			
<b>Running On</b> : 05/24/21 12:28:28			
<b>Reagent</b>	<b>Dilution</b>	<b>Consums. ID</b>	
112420.02 042021.R01 052021.R01 052021.R02 052021.R03	5	200618634 94789291.217	

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). Analytes ISO pending. \*Based on FL action limits. \*

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**Sue Ferguson**  
Lab Director  
State License # n/a  
ISO Accreditation #  
17025:2017

*Sue Ferguson*  
Signature

05/27/21  
Signed On



# Certificate of Analysis

**PASSED**

1637 Rte 9W  
Milton, NY, 12547, US  
Telephone: 9145899512  
Email: dianed@hsgcbd.com

Sample : KN10521013-004  
Harvest/LOT ID: P-H-03010-05

Batch# : HSG0521Caps Sample Size Received : 8 mg  
Sampled : 05/18/21 Total Weight/Volume : 2500 mg  
Ordered : 05/18/21 Completed : 05/27/21 Expires: 05/27/22  
Sample Method : SOP.T.20.010

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	<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
PROPANE	500	ppm	2100	PASS	ND
BUTANES (N-BUTANE)	500	ppm	2000	PASS	ND
METHANOL	25	ppm	3000	PASS	ND
ETHYLENE OXIDE	0.5	ppm	5	PASS	ND
PENTANES (N-PENTANE)	75	ppm	5000	PASS	ND
ETHANOL	500	ppm	5000	PASS	ND
ETHYL ETHER	50	ppm	5000	PASS	ND
1,1-DICHLOROETHENE	0.8	ppm	8	PASS	ND
ACETONE	75	ppm	5000	PASS	ND
2-PROPANOL	50	ppm	500	PASS	ND
ACETONITRILE	6	ppm	410	PASS	ND
DICHLOROMETHANE	12.5	ppm	600	PASS	ND
N-HEXANE	25	ppm	290	PASS	ND
ETHYL ACETATE	40	ppm	5000	PASS	ND
CHLOROFORM	0.2	ppm	60	PASS	ND
BENZENE	0.1	ppm	2	PASS	ND
1,2-DICHLOROETHANE	0.2	ppm	5	PASS	ND
HEPTANE	500	ppm	5000	PASS	ND
TRICHLOROETHYLENE	2.5	ppm	80	PASS	ND
TOLUENE	15	ppm	890	PASS	ND
TOTAL XYLENES - M, P & O - DIMETHYLBENZENE	15	ppm		PASS	ND

Analyzed by	Weight	Extraction date	Extracted By
138	0.02639g	05/24/21 09:05:52	138
<b>Analysis Method -SOP.T.40.032</b>			
<b>Analytical Batch -KN000906SOL</b>		<b>Reviewed On - 05/25/21 18:34:49</b>	
<b>Instrument Used : E-SHI-106 Residual Solvents</b>			
<b>Running On : 05/24/21 15:05:35</b>			
<b>Batch Date : 05/21/21 14:04:18</b>			

Reagent	Dilution	Consums. ID
		1065518282V1393

Residual solvents screening is performed using GC-MS which can detect below single digit ppm concentrations. Currently we analyze for 22 residual solvents. (Method: SOP.T.40.032 Residual Solvents Analysis via GC-MS). Analytes ISO pending. \*Based on FL action limits.

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Milton, NY, 12547, US  
Telephone: 9145899512  
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Sample : KN10521013-004  
Harvest/LOT ID: P-H-03010-05

Batch# : HSG0521Caps Sample Size Received : 8 mg  
Sampled : 05/18/21 Total Weight/Volume : 2500 mg  
Ordered : 05/18/21 Completed : 05/27/21 Expires: 05/27/22  
Sample Method : SOP.T.20.010

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**Microbials**
PASSED



**Mycotoxins**
PASSED

Analyte	LOD	Result
ESCHERICHIA_COLI_SHIGELLA_SPP		not present in 1 gram.
SALMONELLA_SPECIFIC_GENE		not present in 1 gram.
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.

Analysis Method -SOP.T.40.043  
Analytical Batch -KN000915MIC Batch Date : 05/24/21  
Instrument Used : Micro E-HEW-069  
Running On : 05/25/21

Analyzed by	Weight	Extraction date	Extracted By
142	0.9665g	NA	NA

**Reagent**

042321.01  
041621.04  
112020.04

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.

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
TOTAL MYCOTOXINS		ppm	0.000	

Analysis Method -SOP.T.30.060, SOP.T.40.060  
Analytical Batch -KN000910MYC | Reviewed On - 05/25/21 09:51:12  
Instrument Used : E-SHI-125 Mycotoxins  
Running On : 05/24/21 12:29:37  
Batch Date : 05/24/21 08:46:23

Analyzed by	Weight	Extraction date	Extracted By
143	0.6169g	05/24/21 12:05:13	143

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. Analytes ISO pending. \*Based on FL action limits.



**Heavy Metals**
PASSED

Reagent	Dilution	Consums. ID
052021.R19	50	7226/0030021
040521.R03		190428060
040521.R04		

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC-AS	0.02	ppm	ND	1.5
CADMIUM-CD	0.02	ppm	ND	0.5
MERCURY-HG	0.02	ppm	ND	3
LEAD-PB	0.02	ppm	ND	0.5

Analyzed by	Weight	Extraction date	Extracted By
12	0.2678g	05/25/21 12:05:20	12

Analysis Method -SOP.T.40.050, SOP.T.30.052  
Analytical Batch -KN000917HEA | Reviewed On - 05/27/21 13:24:27  
Instrument Used : Metals ICP/MS  
Running On :  
Batch Date : 05/25/21 10:02:31

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. Analytes ISO Pending. \*Based on FL action limits.

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