



Empire Hemp Co

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 888-895-9032
 License #: OCM-AUCP-22-000015

Certificate of Analysis

Final

Date Released: 2/28/2023 5:26:40PM

Report #: 489

THC Gummies 100mg Pack - Orange

Sample #: 253, Weight: 45.00g, Unit Count:
 Order #: X230219-0001

Category/Type: Ingestible, Gummy

Date Collected: 2/19/2023 10:51:21AM

Date Received: 2/19/2023 11:07:51AM

Date Analyzed: 2/22/2023 2:10:34PM

Regulator Sample ID: 4641463367344369

Regulator Source Package ID: 0

Regulator Batch ID: 0



Total Cannabinoids
 8.9 mg/svg
 2.054 mg/g



Total THC
 8.2 mg/svg
 1.919 mg/g



Total CBD
 ND mg/svg
 ND mg/g



Heavy Metals
 PASS



Microbials
 PASS



Residual Solvents
 PASS



Pesticides
 PASS



Mycotoxins
 PASS



Water Activity
 PASS

Potency Analysis by HPLC

Total Cannabinoids: **8.9 mg/svg - 2.054 mg/g**

Total THC: **8.2 mg/svg - 1.919 mg/g**

Total CBD: **ND mg/svg - ND mg/g**

Date Completed: 02/22/2023 9:13AM

Compound	CAS#	LOQ (mg/svg)	mg/svg	mg/g	Relative Concentration
d9-THC	1972-08-3	0.1	8.2	1.919	94%
CBC	20675-51-8	0.1	0.2	0.036	2%
CBG	25654-31-3	0.1	0.2	0.049	2%
CBN	521-35-7	0.1	0.2	0.035	2%
THCV	31262-37-0	0.1	0.1	0.015	1%
THCa	23978-85-0	0.1	ND	ND	0%
d8-THC	5957-75-5	0.1	ND	ND	0%
d10-THC	95543-62-7	0.1	ND	ND	0%
CBD	13956-29-1	0.1	ND	ND	0%
CBDa	1244-58-2	0.1	ND	ND	0%
CBDV	24274-48-4	0.1	ND	ND	0%
CBGa	25555-57-1	0.1	ND	ND	0%

Test Comment: Cannabinoids analyzed by HPLC using P-NY100. The reported result is based on a sample weight using moisture content for flower samples unless moisture is listed as zero or ND. Unless otherwise stated all QC passed.

Total THC = d9-THC + d8-THC + d10-THC + (0.877*THCa)

Total CBD = CBD + (0.877*CBDa)

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If sampled by Keystone State Testing, sampling followed SOP-P-NY500 at the client facility listed above.



Keystone State Testing of New York

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Kelly N Greenland

Dr. Kelly Greenland, Lab Director

2/28/2023 5:29:34PM





Sample #: 253

THC Gummies 100mg Pack - Orange

Water Activity by Meter

Pass

Date Completed: 02/22/2023 12:19 pm

Compound	LOQ (Aw)	Limits (Aw)	Result (Aw)	Status
Water Activity	0.05	0.85	0.71	Pass

Comment: Physical chemistry was tested using moisture analyzer, water activity meter using P-NY 160. Unless otherwise stated, all QC passed.

Pesticides by LCMSMS

Pass

Date Completed: 02/22/2023 10:35 am

Compound	LOQ (µg/g)	Limits (µg/g)	Result (µg/g)	Status
Abamectin	0.01	0.5	ND	Pass
Acephate	0.01	0.4	ND	Pass
Acequinocyl	0.01	2	ND	Pass
Acetamiprid	0.01	0.2	ND	Pass
Aldicarb	0.01	0.4	ND	Pass
Azadirachtin	0.01	1	ND	Pass
Azoxystrobin	0.01	0.2	ND	Pass
Bifenazate	0.01	0.2	ND	Pass
Bifenthrin	0.01	0.2	ND	Pass
Boscalid	0.01	0.4	ND	Pass
Carbaryl	0.01	0.2	ND	Pass
Carbofuran	0.01	0.2	ND	Pass
Chlorantraniliprole	0.01	0.2	ND	Pass
Chloromequat Chloride	0.01	1	ND	Pass
Chlorpyrifos	0.01	0.2	ND	Pass
Clofentezine	0.01	0.2	ND	Pass
Coumaphos	0.01	1	ND	Pass
Cyfluthrin	0.01	1	ND	Pass
Cypermethrin	0.01	1	ND	Pass
Daminozide	0.01	1	ND	Pass
Diazinon	0.01	0.2	ND	Pass

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Kelly N. Greenland

Dr. Kelly Greenland, Lab Director
2/28/2023 5:29:34PM





Sample #: 253

THC Gummies 100mg Pack - Orange

Pesticides by LCMSMS

Pass

Date Completed: 02/22/2023 10:35 am

Compound	LOQ (µg/g)	Limits (µg/g)	Result (µg/g)	Status
Dichlorvos	0.01	1	ND	Pass
Dimethoate	0.01	0.2	ND	Pass
Dimethomorph	0.01	1	ND	Pass
Ethoprophos	0.01	0.2	ND	Pass
Etofenprox	0.01	0.4	ND	Pass
Etoxazole	0.01	0.2	ND	Pass
Fenhexamid	0.01	1	ND	Pass
Fenoxycarb	0.01	0.2	ND	Pass
Fenpyroximate	0.01	0.4	ND	Pass
Fipronil	0.01	0.4	ND	Pass
Flonicamid	0.01	1	ND	Pass
Fludioxonil	0.01	0.4	ND	Pass
Hexythiazox	0.01	1	ND	Pass
Imazalil	0.01	0.2	ND	Pass
Imidacloprid	0.01	0.4	ND	Pass
Indolebutyric Acid	0.01	1	ND	Pass
Kresoxim-methyl	0.01	0.4	ND	Pass
Malathion	0.01	0.2	ND	Pass
Metaxalyl	0.01	0.2	ND	Pass
Methiocarb	0.01	0.2	ND	Pass
Mevinphos	0.01	1	ND	Pass
Myclobutanil	0.01	0.2	ND	Pass
Naled	0.01	0.5	ND	Pass
Oxamyl	0.01	1	ND	Pass
Paclobutrazol	0.01	0.4	ND	Pass
Permethrin	0.01	0.2	ND	Pass

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Dr. Kelly Greenland, Lab Director
2/28/2023 5:29:34PM





Sample #: 253

THC Gummies 100mg Pack - Orange

Pesticides by LCMSMS

Pass

Date Completed: 02/22/2023 10:35 am

Compound	LOQ (µg/g)	Limits (µg/g)	Result (µg/g)	Status
Phosmet	0.01	0.2	ND	Pass
Piperonyl Butoxide	0.01	2	ND	Pass
Prallethrin	0.01	0.2	ND	Pass
Propiconazole	0.01	0.4	ND	Pass
Propoxur	0.01	0.2	ND	Pass
Pyrethrins Total	0.01	1	ND	Pass
Pyridaben	0.01	0.2	ND	Pass
Spinetoram	0.01	1	ND	Pass
Spinosad Total	0.01	.2	ND	Pass
Spiromesifen	0.01	0.2	ND	Pass
Spirotetramat	0.01	0.2	ND	Pass
Spiroxamine	0.01	0.2	ND	Pass
Tebuconazole	0.01	0.4	ND	Pass
Thiacloprid	0.01	0.2	ND	Pass
Thiamethoxam	0.01	0.2	ND	Pass
Trifloxystrobin	0.01	0.2	ND	Pass

Comment: Pesticides tested by LCMSMS by using P-NY150. Unless otherwise stated, all QC passed.

Residual Solvents by HS-GC-MS

Pass

Date Completed: 02/22/2023 12:23 pm

Compound	LOQ (ppm)	Limits (ppm)	Result (ppm)	Status
1,4-Dioxane	50	380	ND	Pass
2-Butanol	50	5000	ND	Pass
2-Ethoxyethanol	50	160	ND	Pass
3-Methylpentane	10		ND	Pass
Acetone	50	5000	ND	Pass
Acetonitrile	50	410	ND	Pass

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2/28/2023 5:29:34PM





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THC Gummies 100mg Pack - Orange

Residual Solvents by HS-GC-MS

Pass

Date Completed: 02/22/2023 12:23 pm

Compound	LOQ (ppm)	Limits (ppm)	Result (ppm)	Status
Benzene	0.5	2	ND	Pass
Butanes ppm	25	5000	ND	Pass
Cumene	50	70	ND	Pass
Cyclohexane	50	3880	ND	Pass
Ethanol	50	5000	217	Pass
Ethyl acetate	50	5000	ND	Pass
Ethyl ether	50	5000	ND	Pass
Ethylbenzene	12.5		ND	Pass
Ethylene glycol	50	620	ND	Pass
Ethylene oxide	50	50	ND	Pass
Heptane	50	5000	ND	Pass
Hexane	10		ND	Pass
Isopropanol	50	5000	ND	Pass
Isopropyl acetate	50	5000	ND	Pass
Methanol	50	3000	ND	Pass
Methylene chloride	50	600	ND	Pass
Pentanes Total	16.7	5000	ND	Pass
Propane	50	5000	ND	Pass
Tetrahydrofuran	50	720	ND	Pass
Toluene	50	890	ND	Pass
Total xylenes	25	2170	ND	Pass

Comment: Residual Solvents tested by GCMS using P-NY170. Unless otherwise stated, all QC passed.

Mycotoxins by LCMSMS

Pass

Date Completed: 02/22/2023 10:35 am

Compound	LOQ (µg/g)	Limits (µg/g)	Result (µg/g)	Status
Aflatoxin B1	0.005	0.020	ND	Pass

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Mycotoxins by LCMSMS

Pass

Date Completed: 02/22/2023 10:35 am

Compound	LOQ (µg/g)	Limits (µg/g)	Result (µg/g)	Status
Aflatoxin B2	0.005	0.020	ND	Pass
Aflatoxin G1	0.005	0.020	ND	Pass
Aflatoxin G2	0.005	0.020	ND	Pass
Ochratoxin A	0.005	0.020	ND	Pass
Total Aflatoxin	0.005	0.020	ND	Pass

Comment: Mycotoxin contamination tested by LCMSMS using P-NY125. Unless otherwise stated, all QC passed.

Heavy Metals by ICPMS

Pass

Date Completed: 02/22/2023 10:21 am

Compound	LOQ (µg/g)	Limits (µg/g)	Result (µg/g)	Status
Antimony		120	0.0	Pass
Arsenic		1.5	0.0	Pass
Cadmium		0.5	0.0	Pass
Chromium		1100	0.0	Pass
Copper		300	0.0	Pass
Lead		0.5	0.0	Pass
Mercury		3	0.0	Pass
Nickel		20	0.0	Pass

Comment: Heavy Metal contamination tested by ICPMS using P-NY140. Unless otherwise stated, all QC passed.

Micro by Petri & qPCR

Pass

Date Completed: 02/22/2023 2:10 pm

Compound	LOQ (CFU/g)	Limits (CFU/g)	Result (CFU/g)	Status
Aspergillus flavus Qualitative	0	0	Not Detected	Pass
Aspergillus fumigatus Qualitative	0	0	Not Detected	Pass
Aspergillus niger Qualitative	0	0	Not Detected	Pass
Aspergillus terreus Qualitative	0	0	Not Detected	Pass
Salmonella Qualitative	0	0	Not Detected	Pass

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Final

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Micro by Petri & qPCR

Pass

Date Completed: 02/22/2023 2:10 pm

Compound	LOQ (CFU/g)	Limits (CFU/g)	Result (CFU/g)	Status
Shiga Toxin-Producing E. coli Qualitative	0	0	Not Detected	Pass
Total Aerobic Bacteria	10		80	Pass
Total Yeast & Mold	10		ND	Pass

Comment: Microbial contamination tested by Petrifilm plates and qPCR using P-NY120. Unless otherwise stated, all QC passed. Due to COA validation limitations: "Not Detected" = "Absent" and "Detected" = "Presumptive Presence". Acceptance Limits: "0" = "Absence" and "1" = "Presence".

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